IBM IMS Extended Terminal Option Support for z/OS 3.2

User's Guide



# Note: Before using this information and the product it supports, read the information in "Notices" on page 469.

### Fourth Edition (October 2021)

This edition applies to Version 3.2 of IBM IMS Extended Terminal Option Support for z/OS (program number 5655-L61) and to all subsequent releases and modifications until otherwise indicated in new editions.

This edition replaces SC19-3982-02.

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# **About this information**

IBM® IMS Extended Terminal Option Support for z/OS® (also referred to as IMS ETO Support) is an IMS Tools product that provides a front-end for customization and control of IMS Extended Terminal Option (ETO). With IMS ETO Support, you can manage all settings for IMS ETO, set global options for the entire user community, and override options for specific terminals or user IDs.

These topics provide instructions for installing, configuring, and using IMS ETO Support.

To use these instructions, you must have already installed IMS ETO Support by completing the instructions in the *Program Directory for IBM IMS Extended Terminal Option Support for z/OS* (GI10-8547), which is included with the product media and is also available on the IMS Tools Product Documentation page.

These topics are designed to help database administrators, system programmers, application programmers, and system operators perform the following tasks:

- Understand the capabilities of the functions that are associated with IMS ETO Support
- · Install and operate IMS ETO Support
- Customize your IMS ETO Support environment
- Diagnose and recover from IMS ETO Support problems
- Use IMS ETO Support with other IMS products

To use these topics, you should have a working knowledge of:

- The z/OS operating system
- ISPF
- SMP/E
- IMS

Always refer to the IMS Tools Product Documentation web page for complete product documentation resources:

https://www.ibm.com/support/pages/node/712955

The IMS Tools Product Documentation web page includes:

- Links to IBM Documentation for the user guides ("HTML")
- PDF versions of the user guides ("PDF")
- Program Directories for IMS Tools products
- Recent updates to the user guides, referred to as "Tech docs" ("See updates to this information!")
- Technical notes from IBM Software Support, referred to as "Tech notes"
- White papers that describe product business scenarios and solutions

# Part 1. IMS ETO Support overview

IBM IMS ETO Support for z/OS (also referred to as IMS ETO Support) is an IMS tool that provides a front-end interface for customization and control of IMS Extended Terminal Option (ETO).

The topics in this section provide you with an overview of IMS ETO Support:

### **Topics:**

- Chapter 1, "IMS ETO Support overview," on page 3
- Chapter 2, "Migrating to IMS ETO Support 3.2," on page 13

# **Chapter 1. IMS ETO Support overview**

IBM IMS ETO Support for z/OS (also referred to as IMS ETO Support) is an IMS tool that provides a front-end interface for customization and control of IMS Extended Terminal Option (ETO).

IMS ETO Support simplifies and speeds up the process of implementing IMS ETO. With IMS ETO Support, you can grasp the full power of IMS ETO and benefit from new functions that provide flexibility and ease-of-use in your environment.

### **Topics:**

- "What's new in IMS ETO Support" on page 3
- "What does IMS ETO Support do?" on page 6
- "Hardware and software prerequisites" on page 7
- "Managing the IMS ETO environment" on page 8
- "Service updates and support information" on page 11
- · "Product documentation and updates" on page 11
- "Accessibility features" on page 12

# What's new in IMS ETO Support

This topic summarizes the technical changes for this edition.

New and changed information is indicated by a vertical bar (I) to the left of a change. Editorial changes that have no technical significance are not noted.

Revision markers follow these general conventions:

- Only technical changes are marked; style and grammatical changes are not marked.
- If part of an element, such as a paragraph, syntax diagram, list item, task step, or figure is changed, the entire element is marked with revision markers, even though only part of the element might have changed.
- If a topic is changed by more than 50%, the entire topic is marked with revision markers (so it might seem to be a new topic, even though it is not).

Revision markers do not necessarily indicate all the changes made to the information because deleted text and graphics cannot be marked with revision markers.

### SC19-3982-03 - October 2021

The following updates have been made for this edition:

Description	Related APARs
In this enhancement, IMS ETO Support provides a new option that enables you	PH22311
to remap the destination LTERM names of IMS messages to different names.	
New and updated topics include:	

- "IMS ETO Support configuration overview" on page 25
- "Remapping printer LTERM names" on page 66
- "Adding, changing, and deleting LTERM names" on page 129
- "LTERM lookup" on page 152
- "ZP LTERM record control statements" on page 166
- New messages: IZT1016E, IZT1017I, and IZT4430I

Description	Related APARs
This enhancement enables you to activate the new signon panel through either the IMS ETO Support user interface panel or the batch update utility. New and updated topics include:	PH11903
• "Step 5: Generating IMS ETO Support signon panels" on page 30	
• "SLU2/3270 devices" on page 44	
• "Setting global signon options" on page 75	
• "Device options for the SLU2/3270 device (panel 1 of 2)" on page 90	
• "Setting LUNAME options for the SLU2/3270 device" on page 103	
• "ZN - LUNAME record control statements" on page 170	
• "ZG - Global options control statements (dynamic refresh)" on page 176	
• "ZD - Default device control statements (SLU2 / 3270)" on page 182	
<ul> <li>New messages: IZT3167I, IZT3168I, IZT3367I, IZT3368I, IZT4667I, IZT4668I, and IZT8201E</li> </ul>	
IMS ETO Support has been modified to load and use customer-supplied DFSCTRN1 in addition to DFSCTRN0. New and updated topics include:	PH00106
• "IMS ETO Support user exits" on page 9	
"IMS ETO Support Enhanced Transaction Verification" on page 52	
This enhancement enables you to restrict LU 6.1 sessions to be connected by specifying a list of allowed LU names. New and updated topics include:	PI94090
• "Considerations for LU 6.1 (ISC) sessions" on page 47	
• "Device options for LU 6.1 (ISC)" on page 99	
• "Setting LUNAME-specific options" on page 100	
• "Setting LUNAME options for the LU 6.1 device" on page 111	
• "LU 6.1 translation lookup" on page 155	
• "Z6 - Default device control statements for LU 6.1" on page 195	
• "Z7 - LU 6.1 LUNAME record control statements" on page 196	
• Chapter 11, "Listing the options data set (batch list utility)," on page 215	
New message: IZT3122E	
This enhancement adds a new auto signon option to IMS ETO Support. New and updated topics include:	PI71728 (for IMS 13) PH01637 (for IMS 14
	1 1 1 0 1 0 3 / (101 1113 14
• "SLU2/3270 devices" on page 41	and later) `

• <u>"ZN - LUNAME record control statements" on page 170</u>

Description Related APARs

This enhancement provides several updates to IMS ETO Support. Documentation PI12330 changes related to settings of exit routines of refreshable exit routine types are:

- "Step 8: Implementing the IMS ETO Support Partner Product user exit" on page 33
- "Step 9: Implementing the IMS ETO Support Non-Discardable Messages user exit (NDMX)" on page 34
- "Step 10: Implementing the IMS ETO Support OTMA Destination Resolution user exit (OTMAYPRX)" on page 34
- "Step 12: Preparing OTMA connections for IMS ETO Support" on page 35
- "Open Transaction Manager Access (OTMA) options" on page 65
- "Abend message routing options" on page 69

In addition, the following topic has been changed:

Chapter 9, "Reloading IMS exits," on page 161

This enhancement adds functionality to prevent the creation of control blocks for PM50570 specific LTERM names. The following topic has been added:

• "Preventing control block creation for specific LTERM names" on page 67

This enhancement also provides an IMS ETO Support version of IMS Build Security Environment user exit (DFSBSEX0). New and updated topics include:

- "Step 11: Preparing an IMS ETO Support version of the Build Security Environment user exit (BSEX)" on page 35
- "Managing the IMS dependent region security environment (DFSBSEX0)" on page 67
- "Updating the transaction/return code table (DFSBSEX0)" on page 144
- "Updating the PSB/return code table (DFSBSEX0)" on page 145
- "TX transaction/return code statements (DFSBSEX0)" on page 212
- "PS PSB/return code statements (DFSBSEX0)" on page 213
- Chapter 11, "Listing the options data set (batch list utility)," on page 215
- New messages: IZT7186E, IZT8202E through IZT8399E

As a result of this APAR, the following messages have been added or changed: PM34021

- New message: IZT3184I
- Changed messages: IZT4500E, IZT9001E

This enhancement allows you to specify an IMS application identification (VTAM® PM26223 APPLID) value in message DFS2002. New and updated topics include:

- "Specifying IMS application identification (VTAM APPLID) value in message DFS2002" on page 50
- Changed message: IZT3348E

Other documentation changes:

N/A

- "Hardware and software prerequisites" on page 7
- "Device options for the SLU2/3270 device (panel 2 of 2)" on page 94
- "Defining security profiles for command authorization" on page 126
- "ZD Default device control statements (SLU2 / 3270)" on page 182

### SC19-3982-02 - September 2016

The following updates have been made for this edition:

- Maintenance roll-up
- Packaged for inclusion in IBM IMS System Management for z/OS

# What does IMS ETO Support do?

IMS ETO Support provides a front-end for customization and control of IMS Extended Terminal Option (ETO). With IMS ETO Support you can manage all settings for IMS ETO, set global options for the entire user community, and override options for specific terminals or user IDs.

IMS ETO allows IMS terminals, printers, and LTERMS to be created dynamically, which reduces the need for IMSGENs and improves IMS availability.

To get the full benefit of IMS ETO, you must create and modify descriptors and code user exits. This process can be time-consuming and expensive. IMS ETO Support streamlines this process and gives you control over every aspect of IMS ETO.

# **IMS ETO Support features and benefits**

IMS ETO Support helps you implement IMS ETO by providing a front-end to help with implementation, customization, and control. With IMS ETO Support, you can set global options for the entire user community and override options for specific terminals or user IDs.

The following IMS ETO Support features and benefits allow you to:

- · Support multiple versions of IMS
- Support SLU1 console, SLU1 printer, SLU2/3270, SLUP/3600/FINANCE, and LU 6.1 (ISC) sessions
- Select from one of several supplied sign-on (DFS3649) screens/processes or customize the signon process to meet your requirements
- Select from one of several supplied signon completed (DFS3650I) screens/processes or customize the signon completed process to meet your requirements, including specifying the inputting of a transaction
- Perform auto signon by building the user/LTERM control blocks without forcing you to enter an IMS / SIGN command
- Perform automatic RACF<sup>®</sup> signon for SLU1 console and SLUP/3600/FINANCE devices
- Allows for a WTO message when a SLU1 console, SLU2/3270, and SLUP/3600/Finance device does an auto-signon
- Share RACF user IDs by either using a user ID suffixing routine or supplying a specific user/LTERM name for a specific terminal
- Supply a user/LTERM name for a specific terminal

You can specify up to 8 LTERMs for each SLU2/3270, SLU1 console, or SLUP/3600/FINANCE device.

· Supply an LTERM name for a specific user ID

You can specify up to 8 LTERMs for each user ID.

- Determine device screen size rather than using the terminal's network-defined screen size
- Set ASOT (auto signoff) or ALOT (auto logoff) values down to the specific terminal level
- Set ASOT values down to the specific user ID level
- · Clean up conversations, reset terminal status, and dequeue messages at sign-off time
- Select ETO logon descriptors for specific terminals
- Do command authorization functions previously provided by SMU (Security Maintenance Utility)
- Provide command authorization at the command plus keyword level when using either RACF CIMS CLASS or the IMS ETO Support tables

- Set response and MSGDEL options at the terminal or user ID level
- Define LTERM names for dynamic terminals/printers
- · Change options without restarting IMS
- Specify your own version of most IMS ETO exits for specific terminals, user IDs, or LTERMS
- Dynamically load new versions of most IMS ETO exits, without requiring a restart of IMS
- Automatically put every SLU2/3270, SLU1, SLUP/3600/FINANCE, or LU 6.1 (ISC) device into /TEST MFS mode after signon
- Use mask characters to construct ETO structure names and use wildcards in printer LTERM names
- Allow only specified users to sign on to IMS
- Optionally, create an IMS log record containing pertinent information when a user signon fails because the user is not in the IMS ETO Support table
- Specify how VTAM user data is to be processed
- · Restrict logon/signon to specific time-of-day ranges
- · Define LTERM names for OTMA sessions
- Specify message disposition for abended transactions
- Perform transaction/LTERM and transaction/password authorization previously provided by the IMS Security Maintenance Utility (SMU)
- Of all messages that are sent by IMS, remap the destination LTERM names of the messages addressed to certain printer LTERMs
- Use an IMS ETO Support version of IMS Build Security Environment user exit (DFSBSEX0)
- Reject specific LTERM names from being created dynamically

# Hardware and software prerequisites

IMS ETO Support is installed by using SMP/E and standard RECEIVE, APPLY, and ACCEPT processing.

Complete information about installation requirements, prerequisites, and procedures for IMS ETO Support is located in the *Program Directory for IBM IMS Extended Terminal Option Support for z/OS*, GI10-8547.

Before you install and configure IMS ETO Support, make sure that your environment meets the following minimum hardware and software requirements.

### Hardware prerequisites

IMS ETO Support is designed to operate on any hardware configuration that supports the required versions of z/OS and IMS.

### **Software prerequisites**

IMS ETO Support is designed to operate with any version of z/OS that supports the version of IMS that you are running. All supported releases of IMS are supported by IMS ETO Support.

**Note:** If you perform IMS ETO Support setup/customization using either the online transaction (IZTRAN) or the batch update utility (IZTUD1U0), the 3270 emulator on your PC must be set to use the US code page. This is because other code pages use different hexadecimal values for wildcards from the US code page.

### **IMS Extended Terminal Option (ETO) feature:**

The IMS Extended Terminal Option (ETO) feature of IMS is required by IMS ETO Support.

# Security, auditability, and control

IMS ETO Support uses the security and auditability features of the supported IMS and MVS™ systems.

You must evaluate, select, and implement security features, administrative procedures, and appropriate controls in application systems and communication facilities.

# **Managing the IMS ETO environment**

IMS ETO Support manages the IMS ETO environment through E/CSA tables that contain the customization options that you have specified.

These tables are stored in either an IMS SHISAM database or a plain VSAM KSDS data set that is loaded into E/CSA either at IMS startup or on demand dynamically.

In this documentation, the term *options data set* refers to either the database or the VSAM KSDS, whichever one you use.

You can dynamically refresh the tables using the IMS ETO Support batch or online refresh program.

Any number of IMS systems running in a shared DASD environment can share the options data set. Any IMS regions that share the options data set and run on the same MVS image share the same E/CSA tables. This lets you minimize tailoring and reduce E/CSA usage requirements.

At IMS startup, the IMS ETO Support Initialization exit (DFSINTX0) reads the options data set. It then searches E/CSA to determine whether IMS ETO Support tables exist. If not, the exit reads the options data set and loads its contents into E/CSA. If tables do exist, the exit checks to see whether any updates have been made to the options data set since the tables were last loaded. If so, the exit refreshes the E/CSA tables.

After the IMS ETO Support options data set is initially loaded, it can be modified either by the IMS ETO Support online transaction program (IZTRAN) or batch update program (IZTUD1U0). If the IMS ETO Support options data set is not available at IMS startup, IMS ETO Support deactivates ETO.

# Choosing the access method for the options data set

The IMS ETO Support options data set is allocated as a VSAM KSDS.

However, you can choose to maintain the data set as either an IMS database or a VSAM KSDS. The recommended access method for the options data set depends upon your IMS installation.

- If your IMS installation includes IMS/DB, maintaining the options data set as an IMS database is the recommended approach.
- If your IMS installation does not include IMS/DB, you must maintain the options data set as a VSAM KSDS.

Even though the options data set is defined in the same way for both access methods and could theoretically be maintained as either an IMS database or a VSAM KSDS, it is strongly recommended that you use only one access method for maintaining the options data set. You should not maintain it sometimes as an IMS database and other times as a VSAM KSDS.

# Backing up the options data set

The IMS ETO Support options data set is a critical resource and should be backed up frequently.

There are different backup options available depending on whether you maintain the options data set as an IMS database or a VSAM KSDS.

When maintaining the options data set as an IMS database, you can use either IMS or MVS backup and recovery utilities. If you use the IMS utilities and all image copy and log data sets that are available, you can recover all updates performed on the database (standard IMS forward recovery).

You can use the MVS backup and recovery utilities when you update the options data set as an IMS database. However, when maintaining the options data set as a VSAM KSDS, you must use MVS backup and recovery utilities. The MVS utilities that you can use include IDCAMS and any other DASD backup and restore programs.

# **IMS ETO Support user exits**

If you require special processing not provided by IMS ETO Support, you can call one of your own ETO exits.

IMS ETO Support's initialization exit attempts to load the following user exits at IMS startup:

- DFSINTX1 (Initialization user exit)
- DFSGMSG1 (Greetings Messages user exit)
- DFSCCMD1 (Command Authorization user exit)
- DFSINSX1 (Destination Creation user exit)
- DFSSGFX1 (Signoff user exit)
- DFSSGNX1 (Signon user exit)
- DFSSGNX2 (Signon user exit always called)
- DFSLGNX1 (Logon user exit)
- DFSLGNX2 (Logon user exit always called, unless other logon user exits DFSLGNX0 or DFSLGNX1 reject the logon)
- DFSINSX2 (Destination Creation user exit called when exit DFSINSX0 ends with a return code of 0)
- DFSCTRN1 (Transaction Authorization user exit)

If user exit DFSINTX1 is found at startup, the IMS ETO Support initialization exit passes control to it. This user exit is allowed to perform all functions normally, as if IMS ETO Support was not installed. If user exit DFSINTX1 returns the address of a user table, IMS ETO Support stores this address in its own work area.

The table address is passed to the exits listed above as if IMS ETO Support was not involved. If exits other than those listed above require access to this table, review the information in <a href="Chapter 18">Chapter 18</a>, "Creating user tables at IMS initialization (SCDINTXP)," on page 247.

# Signon user exit processing

You can call both versions of the signon exits (DFSSGNX1 and DFSSGNX2). You can use either, neither, or both of the exits.

DFSSGNX1 processing is performed as follows:

- It is called only when specified in the user tables
- It is called instead of IMS ETO Support's Signon exit
- It is called before signoff cleanup processing
- It is passed the unchanged IMS parameter list

DFSSGNX2 processing is performed as follows:

- It is always called, if present
- It is called after the IMS ETO Support or DFSSGNX1 signon exit
- · It is called after signoff cleanup processing
- It is passed the updated IMS parameter list (if updated by either IMS ETO Support's Signon exit or DFSSGNX1)

### Logon user exit processing

You can call both versions of the Logon exits (DFSLGNX1 and DFSLGNX2). You can use either, neither, or both of the exits.

DFSLGNX1 processing is performed as follows:

- It is called only when specified in the user tables
- It is called instead of IMS ETO Support's logon exit, unless the node fails time-of-day logon verification

• It is passed the unchanged IMS parameter list

DFSLGNX2 processing is performed as follows:

- It is always called unless the logon is rejected by either the IMS ETO Support or DFSLGNX1 logon exit. (IMS ETO Support will reject a logon attempt only when time-of-day processing is active and a terminal is not allowed to logon at a specific time.)
- It is called after the IMS ETO Support or DFSLGNX1 logon exit.
- It is passed the updated parameter list (if updated by either IMS ETO Support's logon exit or DFSLGNX1)

# **Destination Creation user exit processing**

You can call your own version of the Destination Creation user exit (DFSINSX1 or DFSINSX2). Only one of these exits can be called.

DFSINSX1 processing is performed as follows:

- The exit is called only when specified in the user tables
- The exit is called instead of IMS ETO Support's Destination Creation user exit
- The exit is passed the unchanged IMS parameter list

DFSINSX2 processing is performed as follows:

- The exit is called after IMS ETO Support's Destination Creation user exit, and only when it ends with a return code of 0
- The exit is passed the updated parameter list (if updated by DFSINSX0)

## **User exit requirements**

In order for your ETO exits (other than DFSSGNX2, DFSLGNX2, or DFSINSX2) to be invoked, they must meet the following requirements:

- They must be link-edited using the number 1 as a suffix.
- They must have the user tables customized to indicate which device, LUNAME, or user ID should use the user exit. (Customization can be performed using the Batch Update utility IZTUD1U0, or the online IMS transaction program IZTRAN).

In order to be invoked, module DFSINTX1 must be loaded at IMS startup. Except for DFSINTX1, IMS ETO Support allows all modules listed above to be dynamically loaded/reloaded.

When a user exit reload is requested, IMS ETO Support executes an MVS LOAD. It does not issue a DELETE for the old module.

### **Important:**

- Because DFSSGNX2 is called after the other signon exits, be careful not to change any parameter list values supplied by the other exits.
- Because DFSLGNX2 is called after the other logon exits, be careful not to change any parameter list values supplied by the other exits.
- Because DFSINSX2 is called after DFSINSX0, be careful not to change any parameter list values set by the other exit.
- To avoid problems when loading new copies of user exits, avoid taking extents on the library where the exits reside.
- To avoid possible storage shortage problems, make sure enough storage is available in the IMS address space for the modules you are loading.

### **IMS** command authorization

IMS ETO Support provides several options for how to secure IMS commands.

You can choose to use either RACF (or SMU), your own Command Authorization exit (DFSCCMD1), or use IMS ETO Support security profiles.

# **Service updates and support information**

Service updates and support information for this product, including software fix packs, PTFs, frequently asked questions (FAQs), technical notes, troubleshooting information, and downloads, are available from the web.

To find service updates and support information, see the following website:

IBM Support: IMS Extended Terminal Option Support for z/OS

# **Product documentation and updates**

IMS Tools information is available at multiple places on the web. You can receive updates to IMS Tools information automatically by registering with the IBM My Notifications service.

### Information on the web

Always refer to the IMS Tools Product Documentation web page for complete product documentation resources:

https://www.ibm.com/support/pages/node/712955

The IMS Tools Product Documentation web page includes:

- Links to IBM Documentation for the user guides ("HTML")
- PDF versions of the user guides ("PDF")
- Program Directories for IMS Tools products
- Recent updates to the user guides, referred to as "Tech docs" ("See updates to this information!")
- Technical notes from IBM Software Support, referred to as "Tech notes"
- White papers that describe product business scenarios and solutions

IBM Redbooks® publications that cover IMS Tools are available from the following web page:

http://www.redbooks.ibm.com

The IBM Information Management System website shows how IT organizations can maximize their investment in IMS databases while staying ahead of today's top data management challenges:

https://www.ibm.com/software/data/ims/

# Receiving documentation updates automatically

To automatically receive emails that notify you when new technote documents are released, when existing product documentation is updated, and when new product documentation is available, you can register with the IBM My Notifications service. You can customize the service so that you receive information about only those IBM products that you specify.

To register with the My Notifications service:

- 1. Go to http://www.ibm.com/support/mysupport
- 2. Enter your IBM ID and password, or create one by clicking **register now**.
- When the My Notifications page is displayed, click Subscribe to select those products that you want to receive information updates about. The IMS Tools option is located under Software > Information Management.

- 4. Click **Continue** to specify the types of updates that you want to receive.
- 5. Click **Submit** to save your profile.

### **How to send your comments**

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# **Accessibility features**

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use a software product successfully.

The major accessibility features in this product enable users to perform the following activities:

- Use assistive technologies such as screen readers and screen magnifier software. Consult the assistive technology documentation for specific information when using it to access z/OS interfaces.
- Customize display attributes such as color, contrast, and font size.
- Operate specific or equivalent features by using only the keyboard. Refer to the following publications for information about accessing ISPF interfaces:
  - z/OS ISPF User's Guide, Volume 1
  - z/OS TSO/E Primer
  - z/OS TSO/E User's Guide

These guides describe how to use the ISPF interface, including the use of keyboard shortcuts or function keys (PF keys), include the default settings for the PF keys, and explain how to modify their functions.

# **Chapter 2. Migrating to IMS ETO Support 3.2**

The following topics provide important information about the task of migrating from versions 1 and 2 of IMS ETO Support to version 3 of IMS ETO Support.

### **Topics:**

- "Options data set compatibility" on page 13
- "Migration scenarios" on page 13
- "Special conditions for IMS ETO Support migration" on page 15

# **Options data set compatibility**

The IMS ETO Support options data set from prior versions is fully compatible with version 3.2.

If you are migrating from version 1 of IMS ETO Support:

- New record types are written in the options data set that are not compatible with version 1 of IMS ETO Support. After the options data set has been updated by version 3.2, it can no longer be used by version 1.
- The options data set can be shared between version 1 and version 3.2 as long as all updates are performed using the version 1 modules.

If you are migrating from version 2 of IMS ETO Support:

- New flags are kept in existing records in the options data set. However, the new flags are not used by version 2, so the options data set is downward compatible with version 2.
- The options data set can be shared between version 2 and version 3.2. If you plan on using a shared options data set, it is recommended that you perform all updates with version 3.2 modules.

# **Migration scenarios**

The following topic shows three different scenarios for migrating from prior versions to version 3.2.

Each scenario shows an installation strategy and a fallback strategy.

# Options data set is not shared

If the options data set is not shared, follow these steps for installation and fallback.

### **Installation**

- 1. Back up the options data set.
- 2. Shut down IMS.
- 3. Install IMS ETO Support 3.2 modules.
- 4. Restart IMS.

### **Fallback**

- 1. Shut down IMS.
- 2. Restore the options data set from back up.
- 3. Install IMS ETO Support modules from the version of the product you were previously using.
- 4. Restart IMS.

# Options data set is shared and ETO/S can be installed in all IMS regions

If the options data set is shared and you can install IMS ETO Support 3.2 in all IMS regions, follow these steps for installation and fallback.

### **Installation**

- 1. Back up the options data set.
- 2. Shut down all IMS regions.
- 3. Install IMS ETO Support 3.2 modules.
- 4. Restart all IMS regions.

### **Fallback**

- 1. Shut down all IMS.
- 2. Restore the options data set from back up.
- 3. Install IMS ETO Support modules from the version of the product you were previously using.
- 4. Restart all IMS regions.

# Options data set is shared and ETO/S implementation is staggered

If the options data set is shared but you cannot install IMS ETO Support 3.2 in all IMS regions at the same time, follow these steps for installation and fallback.

### **Installation**

- 1. Back up the options data set.
- 2. Shut down the selected IMS region.
- 3. Install IMS ETO Support 3.2 modules in the selected IMS region.
- 4. Restart the selected IMS region.
- 5. Perform updates according to the version you are migrating from:
  - a. If migrating from version 1, perform any updates using only version 1 modules (this includes online and batch modules IZTRAN, IZTUD1U0, SIZTLINK, and IZTUD1IO).
  - b. If migrating from version 2, perform any updates using only version 3.2 modules (this includes online and batch modules IZTRAN, IZTUD1U0, SIZTLINK, and IZTUD1IO).
- 6. Shut down the next IMS region.
- 7. Install IMS ETO Support 3.2 modules.
- 8. Restart the next IMS region.
- 9. Repeat steps "6" on page 14 through "8" on page 14 until all regions are converted.
- 10. Use IMS ETO Support 3.2 modules to perform all updates.

### **Fallback**

- 1. Shut down selected IMS region.
- 2. Restore the options data set from back up.
- 3. Install IMS ETO Support modules from the version of the product you were previously using.
- 4. Restart the selected IMS region.
- 5. Do any options data set updates using only prior version modules.
- 6. Shut down the next IMS region.
- 7. Install IMS ETO Support modules from the version of the product you were previously using.

- 8. Restart the next IMS region.
- 9. Repeat steps "6" on page 14 through "8" on page 15 as needed.

# **Special conditions for IMS ETO Support migration**

The following topics explain special conditions that apply when migrating to version 3 of IMS ETO Support.

# Signon user exits (DFSSGNX1 and DFSSGNX2)

With this latest version of IMS ETO Support, control is now passed to exit DFSSGNX1 for static SLU2/3270 terminal sign on.

If you were using exit DFSSGNX1 with prior IMS ETO Support versions, ensure that the exit handles SLU2/3270 static terminal signon properly before you implement this new version.

DFSSGNX2 is a signon user exit that, if present in your IMS system, is always called.

**Note:** Before migration, make sure that there are no old versions of DFSSGNX2 in the IMS system.

## Logon user exit (DFSLGNX2)

DFSLGNX2 is a logon user exit that, if present in your IMS system, is always called.

**Note:** Before migration, make sure that there are no old versions of DFSLGNX2 in the IMS system.

### **Destination Creation user exit (DFSINSX2)**

DFSINSX2 is a Destination Creation user exit that, if present in your IMS system, is called after DFSINSX0 ends with a return code of 0.

Note: Before migration, make sure that there are no old versions of DFSINSX2 in the IMS system.

# Part 2. Configuring IMS ETO Support

The topics in this section provide detailed information on setting up and configuring IMS ETO Support.

### **Topics:**

- Chapter 3, "Sharing the options data set," on page 19
- Chapter 4, "Configuring IMS ETO Support," on page 25
- Chapter 5, "Choosing IMS ETO Support options," on page 41

# Chapter 3. Sharing the options data set

IMS ETO Support is designed to allow multiple IMS systems to share the same IMS ETO Support options data set.

IMS ETO Support lets IMS systems with the same IMS ETO Support options and tables use a single options data set and (when running on the same MVS image) the same E/CSA tables.

Sharing the IMS ETO Support options data set can reduce:

- E/CSA utilization
- · Options data set maintenance
- · Disk utilization

Note that sharing of the options data set is optional. If you prefer, each IMS system can have its own dedicated IMS ETO Support options data set.

To use a shared options data set, the DASD on which the options data set resides must be available to all IMS systems sharing the options data set.

The type of sharing that is available depends on whether the options data set is accessed as an IMS database or a VSAM KSDS. When the options data set is accessed as an IMS database, there are two scenarios under which the database can be shared (scenario 1 and 2 below). When the options data set is accessed as a VSAM KSDS, there is only one scenario (scenario 3 below).

### **Topics:**

- "Scenario 1: Options data set accessed as an IMS database (multiple updates)" on page 19
- "Scenario 2: Options data set accessed as an IMS database (single system updates)" on page 19
- "Scenario 3: Options data set accessed as a VSAM KSDS" on page 20
- "E/CSA table sharing" on page 20
- "Defining IMS ETO Support cross-system transactions using MSC" on page 21

# Scenario 1: Options data set accessed as an IMS database (multiple updates)

If the IMS systems currently use IMS database block level sharing (IRLM), standard IMS facilities are used to ensure database integrity.

You can perform updates to the IMS ETO Support options data set from any IMS systems in the data sharing group. Updates are active when the E/CSA tables are reloaded on each MVS image. Use the standard documented procedures to enable block level sharing for an IMS database.

Note that you must specify VSAM share options in the IDCAMS control cards appropriate to whichever scenario you use. For scenario 1 shared environments you must specify SHAREOPTIONS (3,3).

# Scenario 2: Options data set accessed as an IMS database (single system updates)

You can share the IMS ETO Support options data set by designating one IMS system as the update mode IMS.

Other IMS systems are then read only mode IMS systems. Set the IMS system definitions to reflect the appropriate access on the DATABASE macro (ACCESS=UP on the update mode IMS system, and ACCESS=RO on each read-only mode IMS system).

Note that you must specify the VSAM share options in the IDCAMS control cards appropriately for whichever scenario you use. In nonshared or scenario 2 shared environments, your share options must allow for a single updater and multiple readers, so you must specify SHAREOPTIONS(2,3).

# Scenario 3: Options data set accessed as a VSAM KSDS

When the options data set is accessed as a VSAM KSDS, it can be shared by any number of systems.

To ensure data set integrity, IMS ETO Support issues MVS ENQ/DEQ services to serialize updates to the data set.

Note that you must have specified the appropriate VSAM share options in the IDCAMS control cards to share the data set. In order to share the data set, you must define it with SHAREOPTIONS (3,3).

# E/CSA table sharing

When using an IMS ETO Support shared options data set, the active tables in E/CSA are also shared by each IMS system on an MVS image.

In the following figure, IMSA and IMSB are running on MVS1, and IMSC and IMST are running on MVS2. IMSA, IMSB, and IMSC share the PROD.DBIZT1 options data set, and IMST uses the TEST.DBIZT1 options data set.

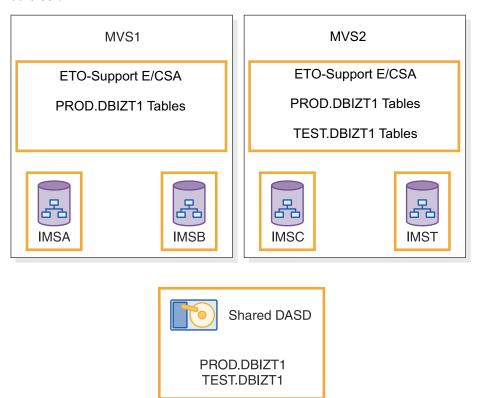


Figure 1. Sharing tables in E/CSA

Because IMSA and IMSB both use the same IMS ETO Support options data set (PROD.DBIZT1), they also share the same E/CSA tables. IMS ETO Support only loads one set of E/CSA tables for an IMS ETO Support options data set on each MVS image. Because the E/CSA tables cannot be shared between MVS images, there is another copy of the PROD.DBIZT1 E/CSA tables on MVS2 for use by IMSC. On MVS2, there are also E/CSA tables for TEST.DBIZT1 for use by IMST.

Because the E/CSA tables on MVS1 are shared, any time the PROD.DBIZT1 options data set tables are refreshed on MVS1, both IMSA and IMSB use the refreshed tables. This situation applies whether the tables are refreshed online or by using the batch refresh process, which you can do by using member IZTREFRE in the SIZTSAMP library.

# **Defining IMS ETO Support cross-system transactions using MSC**

The IMS ETO Support transaction (IZTRAN) can be enabled for MSC support if multiple IMS systems are coupled using the MSC feature of IMS.

The definition of MSC-enabled transactions is optional.

Note that MSC support is NOT related to the online table refresh process in which multiple systems can be specified. The online table refresh function uses APPC to route refresh information across multiple MVS images.

# Using MSC when options data set accessed as IMS database

The following topic discusses using MSC when the options data set is accessed as an IMS database.

The IMS ETO Support online program has three functions:

- 1. Read the E/CSA tables
- 2. Do online refresh
- 3. Update the options data set

For functions 1 and 2, the online transaction name (IZTRAN) can be changed to meet any customer naming conventions. IMS ETO Support has no requirements for the transaction name.

For function 3, IMS ETO Support allows the online transaction name (IZTRAN) to be changed to meet any customer naming conventions as long as the options data set is available and is defined with ACCESS=UP. However, if the options data set is not available or is not defined with ACCESS=UP, IMS ETO Support attempts a message switch to transaction IZTRAN.

IMS ETO Support assumes that transaction IZTRAN is routed by MSC to the IMS system where the options data set is available and defined with ACCESS=UP. If transaction IZTRAN is not defined, the online program displays an indicative error message.

In scenario 1, you can name the IMS ETO Support transaction (IZTRAN) anything you want and perform functions 1, 2, and 3 on any IMS where you log on. If you want to perform any of these functions on a remote IMS system, you should add alias transactions with the proper MSC SYSID specifications.

In scenario 2, you can name the IMS ETO Support transaction (IZTRAN) anything you want and perform functions 1 and 2 on any IMS system where you log on. If you want to perform either of these functions on a remote system, you should add alias transactions with the proper MSC SYSID specifications.

With scenario 2, you can also perform function 3 as long as the transaction runs only where the options data set is defined with ACCESS=UP. You must either log on to the IMS where the options data set is defined correctly, or use MSC to route the transaction to the IMS system where the options data set is defined with ACCESS=UP.

System definitions for cross-system implementation (scenario 2 environment - no IRLM) shows IMS system definitions for a full cross-system implementation on IMSA, IMSB, and IMSC in a scenario 2 environment. IMSA is the update-mode IMS system, and IMSB and IMSC are in read-only mode for the IMS ETO Support database. In the following figure, IMSA has local SYSID 10, IMSB has local SYSID 11, and IMSC has local SYSID 12.

```
IMSA SYSGEN Definitions for Enabling MSC
           APPLCTN PSB=IZTRAN, PGMTYPE=(TP,,1)
* ETO-SUPPORT UPDATE TRAN - LOCAL ON IMSA
           TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1),
* IMSA ETO-SUPPORT LOCAL TRAN
TRANSACT CODE=IZTRAN, HIGHT L= (SNGLSEG, NESPONSE, 1),
                                                                                        Χ
                  MODE=SNGL, INQUIRY=(NO, RECOVER)
* IMSB ETO-SUPPORT REMOTE TRAN
TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                        Χ
                  MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(11,10)
* IMSC ETO-SUPPORT REMOTE TRAN
TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                        Χ
                  MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12, 10)
**************************
IMSB SYSGEN Definitions for Enabling MSC
APPLCTN PSB=IZTRAN, PGMTYPE=(TP,,1)

* ETO-SUPPORT UPDATE TRAN - REMOTE (TO IMSA)
TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE,1),
                                                                                         Χ
MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(10,11)

* IMSA ETO-SUPPORT REMOTE TRÂN

TRANSACT CODE=IZTRANA,MSGTYPE=(SNGLSEG,RESPONSE,1),
MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(10,11)

* IMSB ETO-SUPPORT LOCAL TRAN
TRANSACT_CODE=IZTRANB,MSGTYPE=(SNGLSEG,RESPONSE,1),
                                                                                         Χ
                   MODE=SNGL, INQUIRY=(NO, RECOVER)
* IMSC ETO-SUPPORT REMOTE TRAN
            TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                         Χ
                    MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12,11)
IMSC SYSGEN Definitions for Enabling MSC
APPLCTN PSB=IZTRAN,PGMTYPE=(TP,,1)
* ETO-SUPPORT UPDATE TRAN - REMOTE (TO IMSA)
            TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1)
                                                                                         Χ
MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(10,12)
* IMSA ETO-SUPPORT REMOTE TRAN
            TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                         Χ
                   MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10,12)
* IMSB ETO-SUPPORT REMOTE TRAN
            TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                         Χ
                   MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11,12)
* IMSC ETO-SUPPORT LOCAL TRAN
TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                         Χ
                   MODE=SNGL,INQUIRY=(NO,RECOVER)
```

Figure 2. System definitions for cross-system implementation (scenario 2 environment - no IRLM)

System definitions for cross-system implementation (scenario 1 environment - IRLM used) shows IMS system definitions for a full cross-system implementation on IMSA, IMSB, and IMSC in an IRLM block-level sharing environment (scenario 1). In the following figure, IMSA has local SYSID 10, IMSB has local SYSID 11, and IMSC has local SYSID 12.

```
IMSA SYSGEN Definitions for Enabling MSC
          APPLCTN PSB=IZTRAN, PGMTYPE=(TP,,1)
* ETO-SUPPORT UPDATE TRAN - LOCAL
         TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                 MODE=SNGL,INQUIRY=(NO,RECOVER)
* IMSA ETO-SUPPORT LOCAL TRAN
TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                  Χ
                 MODE=SNGL, INQUIRY=(NO, RECOVER)
* IMSB ETO-SUPPORT REMOTE TRAN
TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                 MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11, 10)
* IMSC ETO-SUPPORT REMOTE TRAN
TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                 MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12, 10)
*************************
IMSB SYSGEN Definitions for Enabling MSC
            APPLCTN PSB=IZTRAN, PGMTYPE=(TP,,1)
* ETO-SUPPORT UPDATE TRAN - LOCAL
           TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                   Χ
          MODE=SNGL,INQUIRY=(NO,RÈCOVER)
TO-SUPPORT REMOTE TRÀN
TRANSACT CODE=IZTRANA,MSGTYPE=(SNGLSEG,RESPONSE,1),
* IMSA ETO-SUPPORT REMOTE
                                                                                   Χ
MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(10,11)
* IMSB ETO-SUPPORT LOCAL TRAN
TRANSACT_CODE=IZTRANB,MSGTYPE=(SNGLSEG,RESPONSE,1),
                                                                                   Χ
                 MODE=SNGL, INQUIRY=(NO, RECOVER)
* IMSC ETO-SUPPORT REMOTE TRAN
           TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                   Χ
                  MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12,11)
IMSC SYSGEN Definitions for Enabling MSC
APPLCTN PSB=IZTRAN,PGMTYPE=(TP,,1)
* ETO-SUPPORT UPDATE TRAN - LOCAL
           TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                   Χ
MODE=SNGL,INQUIRY=(NO,RECOVER)
* IMSA ETO-SUPPORT REMOTE TRAN
         TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                              X
                  MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10,12)
* IMSB ETO-SUPPORT REMOTE TRAN
         TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                 MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11,12)
* IMSC ETO-SUPPORT LOCAL TRAN
TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1),
                                                                                   Χ
                  MODE=SNGL,INQUIRY=(NO,RECOVER)
```

Figure 3. System definitions for cross-system implementation (scenario 1 environment - IRLM used)

# Using MSC when options data set accessed as VSAM KSDS

The following topic discusses using MSC when the options data set accessed as VSAM KSDS.

The IMS ETO Support online program has three functions:

- 1. Read the E/CSA tables
- 2. Do online refresh
- 3. Update the options data set

When accessing the options data set as a VSAM KSDS, the data set must be available to perform any of these functions. The transaction definitions can be set up in the same way as in scenario 1.

System definitions for cross-system implementation (scenario 3 environment) shows IMS system definitions for a full cross-system implementation on IMSA, IMSB, and IMSC in a sharing environment when the options data set is accessed as a VSAM KSDS (scenario 3). In this example, IMSA has local SYSID 10, IMSB has local SYSID 11, and IMSC has local SYSID 12.

System definitions for cross-system implementation (scenario 3 environment) is the same as System definitions for cross-system implementation (scenario 1 environment - IRLM used) except for the APPLCTN statement. There is no database PCB required when accessing the options data set as a VSAM

KSDS. IMS ETO Support has IMS generate the PSB dynamically by defining the APPLCTN statement with the GPSB parameter.

APPLCTN GPB=IZTRAN, PGMTYPE=(TP), LANG=ASSEM  * ETO-SUPPORT UPDATE TRAN - LOCAL TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSA ETO-SUPPORT LOCAL TRAN TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSB ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11,10)  * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11,10)  * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12,10)  * IMSA ETO-SUPPORT DEPART RAN - LOCAL TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10,11)  * IMSA ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10,11)  * IMSB ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSC SYSGEN Definitions for Enabling MSC APPLCTN GPB=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12,11)  **********************************			
APPLCTN GPB=IZTRAN, PGMTYPE=(TP), LANG=ASSEM  * ETO-SUPPORT UPDATE TRAN - LOCAL TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSA ETO-SUPPORT LOCAL TRAN TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSB ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11, 10)  * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11, 10)  ***********************************	TMSA SYSGEN Definitions for Enabling MSC		
** ETO-SUPPORT UPDATE TRAN - LOCAL TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1), ** IMSA ETO-SUPPORT LOCAL TRAN ** IMSA ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), ** IMSB ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), ** MODE=SNGL, INQUIRY=(NO, RECOVER)  ** IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), ** IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1), ** MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11, 10)  ***********************************	·		
TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSA ETO-SUPPORT LOCAL TRAN TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSB ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11, 10)  * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12, 10)  ***********************************			
* IMSA ETO-SUPPORT LOCAL TRÂN TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), * IMSB ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), * IMSC ETO-SUPPORT REMOTE TRAN * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1), * MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12,10)  ***********************************		Χ	
TRANSACT CODE-IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1),  * IMSB ETO-SUPPORT REMOTE TRAN  TRANSACT CODE-IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1),  * MODE-SNGL, INQUIRY=(NO, RECOVER), SYSID=(11,10)  * IMSC ETO-SUPPORT REMOTE TRAN  TRANSACT CODE-IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1),  ***********************************	MODE=SNGL, INQUIRY=(NO, RECOVER)		
* IMSB ETO-SUPPORT REMOTE TRAN TRANSACT CODE-IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE-SNGL, INQUIRY=(NO, RECOVER), SYSID=(11,10)  * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE-IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE-SNGL, INQUIRY=(NO, RECOVER), SYSID=(12,10)  ***********************************		Υ	
TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11, 10)  * IMSC ETO-SUPPORT REMOTE TRAN TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12, 10)  ***********************************		^	
MODE=SNGL, INQUIRY=(NO, RECOVER), SÝSID=(11,10)  * IMSC ETO-SUPPORT REMOTE TRÂN TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE,1), MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12,10)  ***********************************			
* IMSC ETO-SUPPORT REMOTE TRAN  TRANSACT CODE=IZTRANC,MSGTYPE=(SNGLSEG,RESPONSE,1),  **********************************		Х	
MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(12,10)  ***********************************			
**************************************		Χ	
IMSB SYSGEN Definitions for Enabling MSC  APPLCTN GPB=IZTRAN, PGMTYPE=(TP), LANG=ASSEM  * ETO-SUPPORT UPDATE TRAN - LOCAL  TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1), X  MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSA ETO-SUPPORT REMOTE TRAN  TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), X  MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10, 11)  * IMSB ETO-SUPPORT LOCAL TRAN  TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1), X  MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSC ETO-SUPPORT REMOTE TRAN  TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1), X  MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12, 11)  **********************************	MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(12,10)		
APPLCTN GPB=IZTRAN, PGMTYPE=(TP), LANG=ASSEM  * ETO-SUPPORT UPDATE TRAN - LOCAL	***********************	*****	
* ETO-SUPPORT UPDATE TRAN - LOCAL			
TRANSACT CODE=IZTRAN,MSGTYPE=(SNGLSEG,RESPONSE,1),  MODE=SNGL,INQUIRY=(NO,RECOVER)  * IMSA ETO-SUPPORT REMOTE TRAN  TRANSACT CODE=IZTRANA,MSGTYPE=(SNGLSEG,RESPONSE,1),  MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(10,11)  * IMSB ETO-SUPPORT LOCAL TRAN  TRANSACT CODE=IZTRANB,MSGTYPE=(SNGLSEG,RESPONSE,1),  MODE=SNGL,INQUIRY=(NO,RECOVER)  * IMSC ETO-SUPPORT REMOTE TRAN  TRANSACT CODE=IZTRANC,MSGTYPE=(SNGLSEG,RESPONSE,1),  MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(12,11)  **********************************			
* IMSA ETO-SUPPORT REMOTE TRÂN  TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1),  * IMSB ETO-SUPPORT LOCAL TRAN  TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1),  * MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSC ETO-SUPPORT REMOTE TRÂN  TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1),  MODE=SNGL, INQUIRY=(NO, RECOVER)  ***********************************		Χ	
TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1),  MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10,11)  * IMSB ETO-SUPPORT LOCAL TRAN  TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1),  MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSC ETO-SUPPORT REMOTE TRAN  TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1),  MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12,11)  **********************************			
MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(10,11)  * IMSB ETO-SUPPORT LOCAL TRAN  TRANSACT CODE=IZTRANB,MSGTYPE=(SNGLSEG,RESPONSE,1),  MODE=SNGL,INQUIRY=(NO,RECOVER)  * IMSC ETO-SUPPORT REMOTE TRAN  TRANSACT CODE=IZTRANC,MSGTYPE=(SNGLSEG,RESPONSE,1),  MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(12,11)  **********************************		Χ	
TRANSACT CODE=IZTRANB, MSGTYPE=(SNGLSEG, RESPONSE, 1),	MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10,11)	^	
MODE=SNGL,INQUIRY=(NO,RECOVER)  * IMSC ETO-SUPPORT REMOTE TRÂN		V	
* IMSC ETO-SUPPORT REMOTE TRÂN  TRANSACT CODE=IZTRANC, MSGTYPE=(SNGLSEG, RESPONSE, 1), MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(12, 11)  **********************************		Х	
MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(12,11)  **********************************	* IMSC ETO-SUPPORT REMOTE TRAN		
**************************************		Χ	
IMSC SYSGEN Definitions for Enabling MSC  APPLCTN GPB=IZTRAN,PGMTYPE=(TP),LANG=ASSEM  * ETO-SUPPORT UPDATE TRAN - LOCAL	MODE=SNGL,INQUIRY=(NU,RECOVER),SYSID=(12,11)		
APPLCTN GPB=IZTRAN,PGMTYPE=(TP),LANG=ASSEM  * ETO-SUPPORT UPDATE TRAN - LOCAL		*****	
* ETO-SUPPORT UPDATE TRAN - LÓCAL TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1), MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSA ETO-SUPPORT REMOTE TRÂN TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10, 12)  * IMSB ETO-SUPPORT REMOTE TRÂN			
TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER)  * IMSA ETO-SUPPORT REMOTE TRÂN TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), X MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10, 12)  * IMSB ETO-SUPPORT REMOTE TRÂN			
* IMSA ETO-SUPPORT REMOTE TRÂN  TRANSACT CODE=IZTRANA, MSGTYPE=(SNGLSEG, RESPONSE, 1), X  MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10, 12)  * IMSB ETO-SUPPORT REMOTE TRÂN	TRANSACT CODE=IZTRAN, MSGTYPE=(SNGLSEG, RESPONSE, 1),	Χ	
TRANSACT CODE=IZTRANA,MSGTYPE=(SNGLSEG,RESPONSE,1), X MODE=SNGL,INQUIRY=(NO,RECOVER),SYSID=(10,12) * IMSB ETO-SUPPORT REMOTE TRAN			
* IMSB ETO-SUPPORT REMOTE TRAN		Χ	
	MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(10,12)		
INDIVIDE CODE TELINAND FINAL II E CINGLICA (NEI UNIL 11).		Y	
MODE=SNGL, INQUIRY=(NO, RECOVER), SYSID=(11,12)		^	
* IMSC ETO-SUPPORT LOCAL TRAN	* IMSC ETO-SUPPORT LOCAL TRAN	V	
TRANSACT CODE=IZTRANC,MSGTYPE=(SNGLSEG,RESPONSE,1), X MODE=SNGL,INQUIRY=(NO,RECOVER)		Х	
HODE-ONGE, INVOINT-(NO, NECOVEN)	HODE-SMAL, INVOINT-(NO, NECOVEN)		

Figure 4. System definitions for cross-system implementation (scenario 3 environment)

# **Chapter 4. Configuring IMS ETO Support**

The topics in this section describe how to configure IMS ETO Support after installation is complete.

### **Topics:**

- "IMS ETO Support configuration overview" on page 25
- "Step 1: Adding control statements to your IMS definitions" on page 26
- "Step 2: Generating the DBD" on page 26
- "Step 3: Generating the PSB" on page 27
- "Step 4: Generating the ACB" on page 29
- "Step 5: Generating IMS ETO Support signon panels" on page 30
- "Step 6: Creating dynamic allocation member for options data set" on page 30
- "Step 7: Defining and initializing the options data set" on page 31
- "Step 8: Implementing the IMS ETO Support Partner Product user exit" on page 33
- "Step 9: Implementing the IMS ETO Support Non-Discardable Messages user exit (NDMX)" on page 34
- "Step 10: Implementing the IMS ETO Support OTMA Destination Resolution user exit (OTMAYPRX)" on page 34
- "Step 11: Preparing an IMS ETO Support version of the Build Security Environment user exit (BSEX)" on page 35
- "Step 12: Preparing OTMA connections for IMS ETO Support" on page 35
- "Step 13: Restarting IMS" on page 36
- "Step 14: Performing IMS online refresh setup (APPC)" on page 36

# **IMS ETO Support configuration overview**

To ensure successful configuration of IMS ETO Support for your environment, make sure that the distribution load library is APF authorized and is added to the IMS control region JCL and message region JCL where IZTRAN is executed.

Note that APF authorization is required only for the IMS control region and the APPC refresh job (built by SIZTSAMP(IZTTPADD)). The IMS message regions do not require that their STEPLIB be APF authorized.

Also note that in order to use the IMS ETO Support transaction from a 3270 terminal, the OUTBUF size must be at least 3840 bytes:

- For dynamic terminals, this parameter is specified in the logon descriptor (PROCLIB member DFSDSCxx).
- For static SYSGENed terminals, the TERMINAL macro (or associated TYPE macro) must specify an OUTBUF size of at least 3840.

Before you configure IMS ETO Support, you may want to calculate E/CSA usage. Two formulas for doing this are shown; the number of LTERMs you are using determines which formula is to be used:

- If 0 or 1 LTERM is used for 3270/SLU2 and user ID entries, use the first formula.
- If 2 to 8 LTERMs are used for 3270/SLU2 and user ID entries, use the second formula.

This formula calculates the maximum E/CSA that can be required, and it assumes that each and every 3270 and user ID entry has 8 LTERMs defined.

The following example shows the two formulas for calculating E/CSA usage:

```
Formula for 0 or 1 LTERMs:

E/CSA = ((x * 144) + (y * 100) + (z * 240) + 4096)
```

```
Formula for 2 to 8 LTERMs: E/CSA = ((x * 144) + (y * 100) + (z * 240) + (x * 128) + (y * 128) + 4096)
```

### where:

- x = the number of entries in LU NAME SPECIFIC OPTIONS plus the number of entries in USER SPECIFIC OPTIONS
- y = the number of entries in SECURITY PROFILE COMMANDS
- z = the number of entries in PRINTER LTERM DEFINITIONS

**Note:** You must determine the access method to be used for the IMS ETO Support options data set. This data set can be accessed as either an IMS DL/I database or a VSAM KSDS.

- If your IMS installation includes IMS/DB, accessing the options data set as an IMS DL/I database is the recommended method.
- If your IMS installation does not include IMS/DB, then accessing the options data set as a VSAM KSDS is your only option.

# **Step 1: Adding control statements to your IMS definitions**

Add the IMS ETO Support online transaction to your IMS definitions.

If you are accessing the options data set as an IMS DL/I database, member SIZTDATA(IZTGEN01) contains the control statements that you need to add to your IMS definitions, as shown in the following example:

```
* THESE STATEMENTS MUST BE ADDED TO YOUR GEN IF YOU

* WILL BE UPDATING THE OPTIONS DATA SET AS AN IMS DATABASE.

* DATABASE DBD=DBIZT1,ACCESS=UP
    APPLCTN PSB=IZTRAN,PGMTYPE=(TP),SCHDTYP=SERIAL
    TRANSACT CODE=IZTRAN,MSGTYPE=(SNGLSEG,RESPONSE,1),
    MODE=SNGL,INQUIRY=(NO,RECOVER)

* THIS STATEMENT MUST BE ADDED TO YOUR IMS

* GEN IF YOU WILL BE RUNNING THE BATCH UPDATE UTILITY

* (IZTUD1U0) AS A BMP.

* APPLCTN PSB=IZTUD1U0,PGMTYPE=BATCH
```

If you are accessing the options data set as a VSAM KSDS, member SIZTDATA(IZTGEN02) contains the control statements that you need to add to your IMS definitions, as shown in the following example:

```
* THESE STATEMENTS MUST BE ADDED TO YOUR IMS

* GEN IF YOU ARE UPDATING THE ETO/SUPPORT OPTIONS

* DATA SET AS A VSAM FILE.

* APPLCTN GPSB=IZTRAN,PGMTYPE=(TP),LANG=ASSEM,SCHDTYP=SERIAL
    TRANSACT CODE=IZTRAN,MSGTYPE=(SNGLSEG,RESPONSE,1),
    MODE=SNGL,INQUIRY=(NO,RECOVER)

* THIS STATEMENT MUST BE ADDED TO YOUR IMS

* GEN IF YOU WILL BE RUNNING THE BATCH UPDATE UTILITY

* (IZTUD1U0) AS A BMP.

* APPLCTN GPSB=IZTUD1U0,PGMTYPE=BATCH,LANG=ASSEM
```

# **Step 2: Generating the DBD**

This topic explains how to generate the DBD using the sample JCL with the DBD source.

If you are accessing the options data set as a VSAM KSDS, skip this step.

## JCL data set reference

Member SIZTSAMP(IZTDBDGE) contains sample JCL to generate the DBD. Before you run this sample JCL, you must customize it for your environment.

Except for the JOB card, that you can change to meet your requirements, change only the following two lines:

```
// SET DFSMAC=IMS.SDFSMAC
// SET DBDLIB=IMS.DBDLIB
```

#### **IMS.SDFSMAC**

This value is the IMS distribution library where the macros required for DBDGEN reside.

#### **IMS.DBDLIB**

This value is the output data set where this job saves the generated DBD.

# **Example JCL**

The following example shows the JCL to generate DBD (member SIZTSAMP(IZTDBDGE)):

```
//IZTDBDGE JOB (ACCT), IZTDBDGE, CLASS=A, REGION=OM,
//
//*
                 MSGCLASS=H, MSGLEVEL=(1,1), NOTIFY=&SYSUID
/// SET DFSMAC=IMS.SDFSMAC
// SET DBDLIB=IMS.DBDLIB
//*
                                                         <== LIBRARY UPDATED
      BYPASS THIS JOB IF YOU ARE UPDATING THE
      OPTIONS DATA SET AS A VSAM FILE.
//DBDGEN PROC MBR=TEMPNAME
     EXEC PGM=ASMA90,
               PARM='OBJECT, NODECK, NODBCS'
//SYSLIB
//SYSLIB DD DSN=&DFSMAC,DISP=SHR
//SYSLIN DD UNIT=SYSDA,DISP=(,PASS)
            SPACE=(80,(100,100),RLSE),
DCB=(BLKSIZE=80,RECFM=F,LRECL=80)
//SYSPRINT DD SYSOUT=(,),DCB=BLKSIZE=1089,
// SPACE=(121,(300,300),RLSE,,ROUND)
//SYSUT1 DD UNIT=SYSDA, DISP=(,DELETE),
      SPACE=(CYL,(10,5))
EXEC PGM=IEWL,PARM='XREF,LIST',
//L
                COND=(0,LT,C)
//SYSLIN
            DD DSN=*.C.SYSLIN,DISP=(OLD,DELETE)
//SYSPRINT DD SYSOUT=(,),DCB=BLKSIZE=1089,
            SPACE=(121, (90, 90), RLSE)
//SYSLMOD DD DISP=SHR
            DSN=&DBDLIB(&MBR)
//SYSUT1 DD UNIT=(SYSDA,SEP=(SYSLMOD,SYSLIN))
            SPACE=(1024, (100, 10), RLSE), DISP=(, DELETE)
11
          PEND
//**
//DBIZT1
            EXEC DBDGEN, MBR=DBIZT1
//C.SYSIN DD *
          DBD
                NAME=DBIZT1, ACCESS=SHISAM
          DATASET DD1=DBIZT1
          SEGM NAME=IZTSEGM, PARENT=0, BYTES=120
          FIELD NAME=(IZTKEY, SEQ), BYTES=9, START=1
          DBDGEN
          FINISH
```

# **Step 3: Generating the PSB**

This topic explains how to generate the PSB using the sample JCL with the PSB source.

If you are accessing the options data set as a VSAM KSDS, skip this step.

## JCL data set reference

Member SIZTSAMP(IZTPSBGE) contains sample JCL to generate the PSB. Before you run this sample JCL, you must customize it for your environment.

Except for the JOB card, which you can change to meet your requirements, change only the following two lines:

```
// SET DFSMAC=IMS.SDFSMAC
// SET PSBLIB=IMS.PSBLIB
```

#### **IMS.SDFSMAC**

This value is the IMS distribution library where the macros required for PSBGEN reside.

#### **IMS.PSBLIB**

This value is the output data set where this job saves the generated PSB.

## **Example JCL**

The following example shows the JCL to generate PSB (member SIZTSAMP(IZTPSBGE)):

```
//IZTPSBGE JOB (ACCT), IZTPSBGE, CLASS=A, REGION=OM,
//
//*
                 MSGCLASS=H, MSGLEVEL=(1,1), NOTIFY=&SYSUID
// SET DFSMAC=IMS.SDFSMAC
// SET PSBLIB=IMS.PSBLIB
                                                   <== LIBRARY UPDATED
//*
//*
       BYPASS THIS STEP IF YOU ARE UPDATING THE
      OPTIONS DATA SET AS A VSAM FILE.
//PSBGEN PROC MBR=TEMPNAME
//C EXEC PGM=ASMA90,
               PARM= 'OBJECT, NODECK, NODBCS'
//SYSLIB DD DSN=&DFSMAC,DISP=SHR
            DD UNIT=SYSDA, DISP=(,PASS),
//SYSLIN
            SPACE=(80, (100, 100), RLSE)
            DCB=(BLKSIZE=80, RECFM=F, LRECL=80)
//SYSPRINT DD SYSOUT=(,),DCB=BLKSIZE=1089,
// SPACE=(121,(300,300),RLSE,,ROUND)
//SYSUT1 DD UNIT=SYSDA,DISP=(,DELETE),
            SPACE=(CYL, (10,5))
//L
         EXEC PGM=IEWL, PARM='XREF, LIST',
                COND=(0,LT,C)
//SYSLIN DD DSN=*.C.SYSLIN,DISP=(OLD,DELETE)
//SYSPRINT DD SYSOUT=(,),DCB=BLKSIZE=1089,
// SPACE=(121,(90,90),RLSE)
//SYSLMOD DD DISP=SHR,
            DSN=&PSBLIB(&MBR)
//SYSUT1
            DD UNIT=(SYSDA,SEP=(SYSLMOD,SYSLIN))
//
            SPACE=(1024, (100,10), RLSE), DISP=(, DELETE)
          PEND
//**
//IZTRAN
            EXEC PSBGEN, MBR=IZTRAN
//C.SYSIN DD *
                 \label{typest}  \mbox{TYPE=TP,MODIFY=YES,PCBNAME=ALTPCB1,EXPRESS=YES} \\ \mbox{TYPE=DB,DBDNAME=DBIZT1,PROCOPT=A,KEYLEN=9,} \\
          PCB
          PCB
                 PCBNAME=DBIZT1
          SENSEG NAME=IZTSEGM, PARENT=0, PROCOPT=A
          PSBGEN LANG=ASSEM, PSBNAME=IZTRAN
     REMOVE THE FOLLOWING STEP IF THE BATCH UPDATE PROGRAM
     (IZTUD1U0) WILL NOT RUN AS A BMP.
//*
//IZTUD1U0 EXEC PSBGEN,MBR=IZTUD1U0
//C.SYSIN DD *
                 TYPE=DB, DBDNAME=DBIZT1, PCBNAME=DBIZT1,
                 PROCOPT=A, KEYLEN=9
          SENSEG NAME=IZTSEGM, PARENT=0
          PSBGEN PSBNAME=IZTUD1U0, LANG=ASSEM, CMPAT=YES
          END
/*
```

# **Step 4: Generating the ACB**

This topic explains how to generate the ACB using the sample JCL.

If you are accessing the options data set as a VSAM KSDS, skip this step.

## JCL data set reference

Member SIZTSAMP(IZTACBGE) contains sample JCL to generate the ACB. Before you run this sample JCL, it must be customized for your environment.

Except for the JOB card, which you can change to meet your requirements, change only the following four lines:

```
// SET DFSRESL=IMS.SDFSRESL
// SET DBDLIB=IMS.DBDLIB
// SET PSBLIB=IMS.PSBLIB
// SET ACBLIB=IMS.ACBLIB
```

#### IMS.SDFSRESL

This value is the library that contains the IMS load modules.

#### **IMS.DBDLIB**

This value is the data set where the DBD generated in <u>"Step 2: Generating the DBD" on page 26</u> resides.

## **IMS.PSBLIB**

This value is the data set where the PSB generated in <u>"Step 3: Generating the PSB" on page 27 resides.</u>

## **IMS.ACBLIB**

This value is the output data set where this job saves the generated ACB.

## **Example JCL**

The following example shows the JCL to generate ACB (member SIZTSAMP(IZTACBGE)):

```
//IZTACBGE JOB (ACCT), IZTACBGE, CLASS=A, REGION=OM,
//
                MSGCLASS=H, MSGLEVEL=(1,1), NOTIFY=&SYSUID
// SET DFSRESL=IMS.SDFSRESL
    SET DBDLIB=IMS.DBDLIB
SET PSBLIB=IMS.PSBLIB
// SET ACBLIB=IMS.ACBLIB
                                                      <== LIBRARY UPDATED
//ACBGEN PROC
         EXEC PGM=DFSRRC00, PARM=UPB
//G
//SYSPRINT DD SYSOUT=(,)
//STEPLIB DD DSN=&DFSRESL,DISP=SHR
           DD DSN=&PSBLIB, DISP=SHR
DD DSN=&DBDLIB, DISP=SHR
//IMS
//IMSACB DD DSN=&ACBLIB,DISP=SHR
//SYSUT3 DD UNIT=SYSDA,SPACE=(80,(100,100))
//SYSUT4 DD UNIT=SYSDA, SPACE=(256, (100, 100)),
              DCB=KEYLEN=8
//SYSIN DD DDNAME=SYSIN
         PEND
//**
//S1 EXEC ACBGEN
//G.SYSIN DD *
BUILD PSB=IZTRAN
//* REPLACE THE PREVIOUS BUILD CARD WITH THE ONE BELOW
//* IF YOU WILL BE RUNNING THE BATCH UPDATE PROGRAM
//* (IZTUD1U0) AS A BMP.
 BUILD PSB=(IZTRAN,IZTUD1U0)
```

# Step 5: Generating IMS ETO Support signon panels

This topic explains how to generate IMS ETO Support signon panels by using sample JCL and MFS sources.

This setup is required to use IMS ETO Support signon panels.

Members IZTSIGNO and IZTSIGNP of SIZTDATA contain the MFS sources.

## **JCL** data set reference

Use the following sample JCL to generate IMS ETO Support signon panels from members IZTSIGNO and IZTSIGNP of SIZTDATA and to store them in the staging data set of the IMS format library.

Except for the JOB statement, which you can change to meet your requirements, change only the following three lines:

```
// SET HLQ=IZT
// SET IZTDATA=qual1.qual2.SIZTDATA
// SET PROCLIB=IMS.PROCLIB
```

#### **IZT**

This value is the high level qualifier (HLQ) of the data set SIZTDATA.

## qual1.qual2.SIZTDATA

This value specifies other qualifiers of the data set SIZTDATA. This example supposes that the data set name of SIZTDATA is 'IZT. qual1. Qual1. SIZTDATA'.

#### **IMS.PROCLIB**

This value is the procedure library of the IMS that contains the MFSUTL procedure.

## **Example JCL**

The following example shows the JCL that you can use to generate IMS ETO Support signon panels by using the MFSUTL procedure.

```
//BUILDMFS JOB MSGCLASS=A,REGION=0K,NOTIFY=&SYSUID
//*

// SET HLQ=IZT
// SET IZTDATA=qual1.qual2.SIZTDATA
// SET PROCLIB=IMS.PROCLIB
//*

// JCLLIB ORDER=(&PROCLIB)
//GENSIGNO EXEC MFSUTL,SNODE=&HLQ,SOR=&IZTDATA,MBR='IZTSIGNO'
//GENSIGNP EXEC MFSUTL,SNODE=&HLQ,SOR=&IZTDATA,MBR='IZTSIGNP'
```

# Step 6: Creating dynamic allocation member for options data set

This step is required whether accessing the options data set as an IMS database or a VSAM KSDS.

The resulting dynamic allocation member must reside in a data set that is accessible to all required regions.

- If the options data set is accessed as an IMS database, the dynamic allocation member must reside in an IMSDALIB or STEPLIB library that is in the IMS control region and IMS DLISAS region.
- If the options data set is accessed as a VSAM KSDS, the dynamic allocation member must be available to both the IMS control region and all IMS message regions (MPRs) in which the IMS ETO Support online transaction (IZTRAN) runs.

For the IMS control region, the dynamic allocation member can reside in either the IMSDALIB or STEPLIB concatenation.

For the IMS message region (MPR), the dynamic allocation member must reside in a STEPLIB library.

## **Notes:**

- IMS ETO Support will search for the dynamic allocation member in the IMSDALIB library before searching the STEPLIB.
- IMSDALIB is valid for only the IMS control region and IMS DLISAS region. In all other places where IMS ETO Support performs dynamic allocation, the member is required to be in a STEPLIB library (for example, batch update utility, options data set list utility).

## JCL data set reference

Distribution library member SIZTSAMP(IZTD1MDA) contains sample JCL for creating the dynamic allocation member for the options data set. Before you run this sample JCL, it must be customized for your environment.

Except for the JOB card, which you can change to meet your requirements, change only the following three lines:

```
// SET MDALIB=IMS.MDALIB
// SET MACLIB=IMS.MACLIB
// SET DB1DSN=IMS.DBIZT1
```

#### IMS.MDALIB

This value is the output data set where the options data set dynamic allocation member is written. This member must be available to the:

- · IMS control region
- IMS DLISAS (if updating the options data set as an IMS database)
- IMS ETO Support options data set initialization program (IZTUD1I0)
- IMS ETO Support options data set batch update program (IZTUD1U0)
- IMS ETO Support E/CSA batch table refresh program (SIZTLINK)
- IMS MPRs where IZTRAN runs (if you are updating the IMS ETO Support options data set as a VSAM KSDS)

#### IMS.MACLIB

This value is the IMS distribution library where macro DFSMDA resides.

#### IMS.DBIZT1

This value is the data set name of the IMS ETO Support options data set. This name can be any name that you choose. This data set is physically allocated in <u>"Step 7: Defining and initializing the options</u> data set" on page 31.

# Step 7: Defining and initializing the options data set

This topic explains how to define and initialize the options data set.

This step is required whether the options data set is accessed as an IMS database or a VSAM KSDS.

# JCL data set reference

Distribution library member SIZTSAMP(IZTD1INI) contains sample JCL to define and initialize the options data set. Before you run this sample JCL, it must be customized for your environment.

Except for the JOB card, which you can change to meet your requirements, change only the following 9 lines:

```
// SET IZTLINK=IZT.SIZTLINK
// SET MDALIB=IMS.MDALIB
// SET DB1DSN=IMS.DBIZT1
// SET DB1VOL=*
// SET DB1STOR=
// SET DB1MGMT=
// SET DB1SPAC='MB(1 1)'
// SET DB1FSPC='50 50'
// SET DB1TITL='50-BYTE TITLE AREA'
```

#### SIZTLINK

This value is the data set name of the ETO Support distribution library.

#### **IMS.MDALIB**

This name should match the data set name of the library where the options data set dynamic allocation member resides (from "Step 6: Creating dynamic allocation member for options data set" on page 30).

## **IMS.DBIZT1**

This name should match the data set name used in <u>"Step 6: Creating dynamic allocation member for options data set"</u> on page 30.

#### DB1VOL=\*

This parameter is the SYSDA volume where the options data set is allocated.

#### **DB1STOR=**

This optional parameter is used to assign the SMS STORCLAS.

#### DB1MGMT=

This optional parameter is used to assign the SMS MGMTCLAS.

# DB1SPAC='MB(11)'

This parameter is used to assign the space allocation for the options data set.

#### DB1FSPC='50 50'

This parameter is used to set the VSAM KSDS free space.

#### **DB1TITL='50-BYTE TITLE AREA'**

This parameter is written to the options data set header record. The value supplied here is passed to the reserved MFS MOD fields (IZT@MOD1 and IZT@MOD2).

#### **Example JCL**

The following example shows the JCL to define and initialize DBIZT1 (member SIZTSAMP(IZTD1INI)):

```
//IZTD1INI JOB (ACCT), IZTD1INI, CLASS=A, REGION=OM,
                  MSGCLASS=H, MSGLEVEL=(1,1), NOTIFY=&SYSUID
// SET IZTLINK=IZT.SIZTLINK
// SET MDALIB=IMS.MDALIB
// SET DB1DSN=IMS.DBIZT1
// SET DB1VOL=*
// SET DB1STOR=
// SET DB1STOR=
// SET DB1MGMT=
// SET DB1SPAC=
// SET DR1ESPO
    SET DB1SPAC='MB(1 1)'
SET DB1FSPC='50 50'
// SET DB1TITL='50-BYTE TITLE AREA'
//**
//IDPCH
             EXEC PGM=ASMA90,
//SYSLIB
             DD DSN=SYS1.MACLIB, DISP=SHR
//SYSPRINT DD SYSOUT=(,)
//SYSUT1 DD UNIT=(VIO,1)
//SYSLIN
             DD DSN=&&IDPCH,UNIT=(VIO,1),DISP=(,PASS)
//SYSIN
             DD *
           MACRO
           PARSYS
GBLC &DB1DSN,&DB1VOL,&DB1STOR,&DB1MGMT,&DB1SPAC,&DB1FSPC &DB1DSN SETC '&SYSLIST(1,1)' &DB1VOL SETC '&SYSLIST(1,2)'
&DB1STOR SETC '&SYSLIST(1,3)'
&DB1MGMT SETC '&SYSLIST(1,4)'
&DB1SPAC SETC '&SYSLIST(1,5)'
&DB1FSPC SETC '&SYSLIST(1,6)'
           MEND
GBLC &DB1DSN,&DB1VOL,&DB1STOR,&DB1MGMT,&DB1SPAC,&DB1FSPC &ALLPRMS SETC '(&SYSPARM)'
   PARSYS &ALLPRMS
    PUNCH ' DEL &DB1DSN '
PUNCH ' SET MAXCC = 0'
    PUNCH ' DEF CLUSTER - '
    PUNCH '
                (
    PUNCH '
                 NAME(&DB1DSN) - '
    AIF ('&DB1VOL' EQ '').X2VOL
```

```
PUNCH '
               VOL(&DB1VOL) - '
.X2VOL ANOP
AIF ('&DB1STOR' EQ '').X2STOR
   PUNCH '
              STORCLAS(&DB1STOR) - '
.X2STOR ANOP
AIF ('&DB1MGMT' EQ '').X2MGMT
   PUNCH '
               MGMTCLASS(&DB1MGMT) - '
.X2MGMT ANOP
   AIF ('&DB1FSPC' EQ '').X2FSPC
   PUNCH '
               FSPC(&DB1FSPC) -
.X2FSPC ANOP
   AIF ('&DB1SPAC' EQ '').D2SPAC
   PUNCH '
              &DB1SPAC -
AGO .X2SPAC
.D2SPAC ANOP
   PUNCH '
               CYLINDERS(1 1) - '
.X2SPAC ANOP
   PUNCH '
               KEY(9 0) - '
               RECORDSIZE(120 120) - '
   PUNCH '
               CISZ(4096) -
   PUNCH '
               SHAREOPTIONS(3,3) - '
   PUNCH '
   END
//IDCAMS EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=(,)
           DD DSN=&&IDPCH, DISP=(OLD, DELETE)
//SYSIN
//**
//S1
           EXEC PGM=IZTUD1I0, PARM='&DB1TITL'
//STEPLIB DD DSN=&MDALIB,DISP=SHR
           DD DSN=&IZTLINK, DISP=SHR
//SYSUDUMP DD SYSOUT=(,)
//**
//DB1PRT
           EXEC PGM=IKJEFT01, PARM='PRINT IDS(''&DB1DSN'')'
//SYSTSPRT DD SYSOUT=(,)
//SYSTSIN DD DUMMY
```

# **Step 8: Implementing the IMS ETO Support Partner Product user** exit

This topic explains how to implement the IMS ETO Support Partner Product user exit. This user exit is required for IMS ETO Support's OTMA user data formatting.

Most of IMS ETO Support's initialization takes place in its version of the IMS Initialization exit routine (DFSINTX0). However, there are a few instances where IMS ETO Support requires its version of the IMS Partner Product user exit to perform initialization.

Because many organizations either have their own IMS Partner Product user exit or have a version from some other IMS Tool product, IMS ETO Support distributes its version as member name IZTPPUEZ.

To implement IMS ETO Support's IMS Partner Product user exit, define the IZTPPUEZ exit routine for the PPUE exit routine type in the EXITDEF parameter in the USER\_EXITS section of the DFSDFxxx PROCLIB member. As a result, if you are using only IZTPPUEZ as the IMS Partner Product user exit, the following line will be added to the USER\_EXITS section of the DFSDFxxx PROCLIB member:

```
EXITDEF=(TYPE=PPUE,EXITS=(IZTPPUEZ))
```

Alternatively, you can also choose one of the following procedures to implement IMS ETO Support's IMS Partner Product user exit:

Condition	Procedure
If there is no existing IMS Partner Product user exit (DFSPPUE0) in your environment	Customize and run SIZTSAMP(IZTPPUEZ) to create member DFSPPUE0 as an alias of IZTPPUEZ.
	<b>Recommendation:</b> To ensure that you are always using the latest version of IMS ETO Support's Partner Product user exit, create an SMPE Usermod from SIZTSAMP(IZTPPUEZ).

Condition	Procedure
If there is an existing IMS Partner Product user exit (DFSPPUE0) that is capable of calling other exits	Update the existing IMS Partner Product user exit to call IMS ETO Support's Partner Product user exit (IZTPPUEZ).
If there is an existing IMS Partner Product user exit (DFSPPUE0) that is not capable of calling other exits	Rename the existing IMS Partner Product user exit (DFSPPUE0) to another name (DFSPPUE1 is recommended).
	Create IMS PROCLIB member IZT <i>imsid</i> from SIZTDATA(IZTIMSID).
If you have the IMS Tools Generic Partner Exit (GPR) modules installed	Add the following statement to the GPR PROCLIB member:
	<pre>EXITDEF(TYPE(PARTNER) EXITNAME(IZTPPUEZ) LOADLIB(IZT.siztlink))</pre>
	Replace <i>siztlink</i> with the data set name of your IMS ETO Support load library.

# **Step 9: Implementing the IMS ETO Support Non-Discardable Messages user exit (NDMX)**

This topic describes how to prepare the IMS ETO Support Non-Discardable Messages user exit (NDMX).

This user exit is required for IMS ETO Support to do the subsequent processing, as follows:

- · Transaction abend processing
- · Message origin abend processing

To implement the IMS ETO Support Non-Discardable Messages user exit (NDMX), specify exit routine IZTNDMXx in the USER\_EXITS section of the DFSDFxxx PROCLIB member, under "NDMX" exit type in the EXITDEF= parameter.

The last letter x in IZTNDMXx depends on the IMS version (for example, E for IMS 14, F for IMS 15).

As a result, if you are using only IZTNDMXx as the IMS Non-Discardable Messages user exit, the following line will be added to the USER\_EXITS section of the DFSDFxxx PROCLIB member:

 ${\tt EXITDEF=(TYPE=NDMX,EXITS=(IZTNDMX} x))}$ 

# **Step 10: Implementing the IMS ETO Support OTMA Destination Resolution user exit (OTMAYPRX)**

This topic describes how to prepare the IMS ETO Support OTMA Destination Resolution user exit (OTMAYPRX). This user exit is required for IMS ETO Support to perform OTMA destination processing.

To implement the IMS ETO Support OTMA Destination Resolution user exit (OTMAYPRX), specify exit routine IZTYPRXx in the USER\_EXITS section of the DFSDFxxx PROCLIB member, under "OTMAYPRX" exit type in the EXITDEF= parameter.

The last letter x in IZTYPRXx depends on the IMS version (for example, E for IMS 14, F for IMS 15).

As a result, if you are using only IZTYPRXx as the IMS OTMA Destination Resolution user exit, the following line will be added to the USER EXITS section of the DFSDFxxx PROCLIB member:

 ${\tt EXITDEF=(TYPE=OTMAYPRX,EXITS=(IZTYPRX}x))}$ 

# Step 11: Preparing an IMS ETO Support version of the Build Security Environment user exit (BSEX)

This step describes how to prepare IZTBSEXZ user exit, the Build Security Environment user exit supplied by IMS ETO Support. This step is optional; you need to follow this step only if you want to use the Build Security Environment user exit (IZTBSEXZ) supplied by IMS ETO Support.

To use the Build Security Environment user exit (IZTBSEXZ), define the IZTBSEXZ exit routine for the BSEX exit routine type in the EXITDEF parameter in the USER\_EXITS section of the DFSDFxxx PROCLIB member.

As a result, if you are using only IZTBSEXZ as the IMS Build Security Environment user exit, the following line will be added to the USER EXITS section of the DFSDFxxx PROCLIB member:

EXITDEF=(TYPE=BSEX,EXITS=(IZTBSEXZ))

# **Step 12: Preparing OTMA connections for IMS ETO Support**

This topic explains how to prepare OTMA connections for IMS ETO Support.

At IMS startup, IMS ETO Support uses its Partner Product user exit to set dynamic hooks for an IMS exit, OTMA User Data Formatting (DFSYDRU0).

If this exit is present in your environment, you should not rename it.

In order for the dynamic hook for the OTMA User Data Formatting exit (typically called DFSYDRU0) to work with all OTMA sessions, you must:

- Create member DFSYDTx in IMS PROCLIB and specify the name of the OTMA User Data Formatting exit for each OTMA member that will be connecting to IMS
- Remove the name of the OTMA User Data Formatting exit for each product connecting to this IMS with OTMA

## Example 1

Example DFSYDT PROCLIB member defining two OTMA connections and their OTMA User Data Formatting exit routines:

\* M MEMBER00 DRU=DFSYDRU0 M MQSERIES DRU=MQSYDRU0

**Note:** If you do not have an OTMA User Data Formatting exit (DFSYDRU0) for a particular OTMA connection, you must still code the OTMA connection name in PROCLIB member DFSYDTx. To prevent load failure messages for DFSYDRU0 during an IMS warm start, it is recommended that any OTMA session that does not have an OTMA User Data Formatting exit (DFSYDRU0) specify DRU=IEFBR14 in PROCLIB member DFSYDTx.

## Example 2

Remove the OTMA User Data Formatting exit name for an MOSERIES connection.

For example, change the following line:

OTMACON=(OTMAQJ, MQSQJMO, MQSYDRUO, 2147483647, CSQ)

to:

OTMACON=(OTMAQJ,MQSQJMO, ,2147483647,CSQ)

**Note:** This definition is made on the MQSERIES side. This is not an IMS definition.

# **Step 13: Restarting IMS**

To complete your configuration of IMS ETO Support, you must restart your IMS after making certain system changes.

# Before you begin

Ensure that the following conditions are met before completing this task:

- The IMSCTRL macro includes parameter ETOFEAT=(YES, YES, ALL).
- The IMS PROCLIB member DFSPBxxx contains the following parameters:

ETO=Y OTMAMD=Y

• The SIZTLINK data set is added to the STEPLIB/JOBLIB of the IMS control region and the IMS message processing regions (MPR) where IZTRAN runs.

## **Procedure**

- 1. Run an IMS sysgen.
- 2. Restart your IMS region.

Ensure that you receive messages IZT1011I and IZT7809I. Both messages indicate that IMS ETO Support was successfully installed.

# **Step 14: Performing IMS online refresh setup (APPC)**

This topic describes the APPC setup required for the IMS ETO Support function called IMS online refresh.

This topic does not describe the entire setup required to activate APPC/MVS or APPC/IMS.

**Note:** Bypass this procedure if you do not want to do IMS online refresh.

For more information on how to do setup, see the following documentation:

- MVS Planning: APPC/MVS Management (in the APPC/MVS environment)
- IMS System Administration (in the APPC/IMS environment)

# IMS online refresh overview

IMS online refresh allows you to reload the IMS ETO Support tables on up to 64 MVS images.

The following list of events outlines the sequence for IMS online refresh:

- 1. IMS online refresh is initiated using IZTRAN.
- 2. IZTRAN obtains the list of MVS systems to update from the IMS ETO Support options data set.
- 3. IZTRAN issues an APPC/MVS allocate to the remote update task.
- 4. APPC/MVS schedules the remote update task in an APPC/MVS initiator.
- 5. The remote update task receives the refresh request from IZTRAN.
- 6. The remote update task refreshes the requested E/CSA tables.
- 7. The remote update task deallocates the session with IZTRAN.
- 8. Steps <u>"3" on page 36</u> through <u>"7" on page 36</u> are repeated for all MVS systems obtained in Step <u>"2" on page 36</u>.
- 9. IZTRAN displays the results of the refresh.

In order for the IMS online refresh process to work, you must define the remote update task to APPC/MVS and the routing information for each MVS system to be refreshed.

# **Obtaining APPC/MVS information**

The following information must be obtained from each MVS where the IMS online refresh will run. This information is required in subsequent customization steps.

Note: The following procedure assumes APPC/MVS is already set up.

1. Issue the following MVS command:

```
D APPC, LU, ALL
```

2. Obtain the name of the APPC/MVS side information data set.

Use the command response from step "1" on page 37 to find the data set name (SIDEINFO=).

3. Obtain APPC/MVS Local LU name and TP profile data set name.

Use the command response from step <u>"1" on page 37</u> to find an LLUN= statement that meets the following criteria:

- SCHED=ASCH
- STATUS=ACTIVE

Save the LU name (LLUN=).

Save the TP profile name (TPDATA=).

4. Issue the following MVS command:

```
D ASCH, ALL
```

5. Obtain an APPC/MVS initiator class.

Using the command response from step <u>"4" on page 37</u>, choose an initiator that has STATUS=ACTIVE. Save the class (CLASS=).

# **Customizing APPC for IMS online refresh**

Much of IMS ETO Support's APPC customization depends on how APPC/MVS is set up in your environment. Before trying these steps, familiarize yourself with how APPC/MVS and APPC/IMS work and how they are customized in your environment.

Perform the following steps to customize APPC for IMS online refresh:

- 1. Customize member IZTTPADD.
- 2. Run member IZTTPADD.

If you are not sharing the APPC/MVS TP profile data set across MVS images, this job must be run for each MVS on which you want to do an IMS ETO Support table refresh.

- 3. Customize member IZTSIDEI.
- 4. Run member IZTSIDEI.

If you are not sharing the APPC/MVS side information data set across MVS images, this job must be run for each MVS on which you have an IMS using IMS ETO Support. For the side information entries, you can choose any 8-character name that matches your naming convention.

- 5. Describe APPC routing information to IMS ETO Support by performing the following steps:
  - a. Execute the IMS ETO Support IMS transaction IZTRAN.
  - b. Select option Y (CUSTOMIZE REFRESH ROUTING DATA) from the IZTRAN Primary Menu.
  - c. Add side information (SYMDEST) for each MVS that has a table to be refreshed.

## **Example JCL for customizing APPC**

The following example shows sample JCL for IMS online refresh (member IZTTPADD):

```
//IZTTPADD JOB (ACCT), IZTTPADD, CLASS=A, REGION=OM,
                MSGCLASS=H, MSGLEVEL=(1,1), NOTIFY=&SYSUID
//*
    Change all occurances of the variables below to a valid
//*
//*
    value for your installation.
//*
    VARIABLE
                      DESCRIPTION
               DATA SET FOR ETO SUPPORT REFRESH JOBLOG
    @@JOBLOG
                  - VOLUME FOR JOBLOG DATA SET
    @@VOL1
     @@APPCERR DATA SET FOR ETO SUPPORT REFRESH ERROR MESSAGES
    @@VOL2
                - VOLUME FOR APPCERR DATA SET
     @@SYSUDUMP DATA SET FOR ETO SUPPORT REFRESH SYSUDUMP
     @@VOL3
                  - VOLUME FOR SYSUDUMP DATA SET
                  DATA SET CONTAINS ETO SUPPORT LOAD MODULES
    @@IZTLINK
//*
                  (THIS DATA SET AND ENTIRE STEPLIB MUST BE APF
                   AUTHORIZED)
    @@APPCTP
                  DATA SET CONTAINING THE APPC TP PROFILE INFORMATION
                  (CAN BE OBTAINED FROM MVS COMMAND 'D APPC, LU, ALL')
//*
                  APPC/MVS TP SCHEDULING CLASS
(VALID CLASS' CAN BE OBTAINED FROM
    @@CLASS
//*
//*
                   MVS COMMAND 'D ASCH, ALL')
//STEP01
           EXEC PGM=IEFBR14
//JOBLOG
            DD DISP=(,CATLG),UNIT=SYSDA,SPACE=(CYL,(10,10))
             DCB=(LRECL=133, BLKSIZE=27930, RECFM=FBA), VOL=SER=@@VOL1,
             DSN=@@JOBLOG
//APPCERR DD DISP=(,CATLG),UNIT=SYSDA,SPACE=(CYL,(10,10)),
             DCB=(LRECL=133,BLKSIZE=27930,RECFM=FBA),VOL=SER=@@VOL2,
              DSN=@@APPCERR
//SYSUDUMP DD DISP=(,CATLG),UNIT=SYSDA,SPACE=(CYL,(10,10))
             DCB=(LRECL=133,BLKSIZE=27930,RECFM=FBA),VOL=SER=@@VOL3,
             DSN=@@SYSUDUMP
//*
//STEP1
           EXEC PGM=ATBSDFMU
//SYSPRINT DD SYSOUT=*
//SYSSDLIB DD DISP=SHR,DSN=@@APPCTP
//SYSSDOUT DD SYSOUT=*
//SYSIN
            DD DATA, DLM='QT'
     TPDELETE
     TPNAME(IZTTABLE_EZETO_REFRESH)
     TPADD
     TPNAME(IZTTABLE_EZETO_REFRESH)
     ACTIVE (YES)
    TPSCHED_DELIMITER(DLM1)
KEEP_MESSAGE_LOG(ERROR)
MESSAGE_DATA_SET(@@JOBLOG)
DATASET_STATUS(MOD)
CLASS(@@CLASS)
     JCL DELIMITER(DLM2)
//XXXXXXXX JOB (TECH),'IZTAPPC9',CLASS=A,MSGCLASS=H,
        REGION=4M
//STEP01
           EXEC PGM=IZTAPPC9
//STEPLIB
            DD DISP=SHR, DSN=@@IZTLINK
           DD DISP=OLD, DSN=@@SYSUDUMP
//SYSUDUMP
//APPCERR
            DD DISP=OLD, DSN=@@APPCERR
DLM2
DLM1
QΤ
```

The following example shows sample JCL for IMS online refresh (member IZTSIDEI):

```
//IZTSIDEI JOB (ACCT), IZTSIDEI, CLASS=A, REGION=OM,
//
//*
             MSGCLASS=H, MSGLEVEL=(1,1), NOTIFY=&SYSUID
    Change all occurrances of the variables below to a valid
    value for your installation.
//*
    VARTABLE
                 DESCRIPTION
//*
    =======
             ______
    @@MVS
              THE SIDE INFO ENTRY NAME FOR MVS SYSTEM(S)
    @@MODE
              VTAM LU 6.2 LOGMODE ENTRY
    @@LUNAME THE NAME OF AN LU OWNED BY THE APPC/MVS THAT
```

```
HAS SCHED(ASCH).
                (CAN BE OBTAINED FROM 'D APPC, LU, ALL' ON MVS
                WHERE THE LU RUNS)
DATA SET NAME OF THE SIDE INFO DATA SET
    @@SINFO
                (CAN BE OBTAINED FROM 'D APPC, LU, ALL' ON LOCAL MVS)
//STEP01
         EXEC PGM=ATBSDFMU
//SYSPRINT DD SYSOUT=*
//SYSSDLIB DD DISP=SHR,DSN=@@SINFO
                SYSOUT=*
//SYSSDOUT DD
//SYSIN
            DD DATA, DLM=XX
    SIADD
           DESTNAME(@@MVS)
           TPNAME(*)
           MODENAME (@@MODE)
           PARTNER_LU(@@LUNAME)
    THIS IS HOW TO DELETE A SIDE-INFO ENTRY ID NEEDED
    SIDELETE
           DESTNAME(@@MVS)
```

# **Examples of setting up for IMS online refresh**

The following examples are for demonstration purposes only and should not be considered syntactically accurate or complete.

# Example 1: Shared MVS regions using an APPC configuration

The following figure is an example of shared MVS regions using an APPC configuration:

```
MVS 1

Side Info = SYS1.APPCSI
TPPROF = SYS1.APPCTP
APPC LU = APPCLU01

MVS 2

Side Info = SYS1.APPCSI
TPPROF = SYS1.APPCTP
APPC LU = APPCLU02
```

Figure 5. Multiple MVS systems that share APPC/MVS data sets

In this figure, both the side information and the TP profile data sets are shared across MVS images. When using this configuration, you need to run IZTTPADD and IZTSIDEI only once. The side information job requires an entry (SYMDEST) for MVS1 and MVS2.

The APPC setup parameters are as follows:

```
SIADD DESTNAME(MVS1) PARTNER_LU(APPCLU01)
SIADD DESTNAME(MVS2) PARTNER_LU(APPCLU02)
```

In IZTRAN option Y, you must define MVS1 and MVS2.

## **Example 2: Nonshared MVS regions using an APPC configuration**

The following figure is an example of nonshared MVS regions using an APPC configuration:

## MVS 1

Side Info = MVS1.APPCSI TPPROF = MVS1.APPCTP APPC LU = APPCLU01

## MVS 2

Side Info = MVS1.APPCSI TPPROF = MVS1.APPCTP APPC LU = APPCLU02

Figure 6. Multiple MVS systems that do not share APPC/MVS data sets

In multiple MVS systems that do not share APPC/MVS data sets, neither the side information nor the TP profile data sets are shared across MVS images. When using this configuration, you must run the IZTTPADD and IZTSIDEI to update each data set. Both side information data sets require an entry (SYMDEST) for both MVS1 and MVS2.

The APPC setup parameters are as follows:

SIADD DESTNAME(MVS1) PARTNER\_LU(APPCLU01) SIADD DESTNAME(MVS2) PARTNER\_LU(APPCLU02)

In IZTRAN option Y (CUSTOMIZE REFRESH ROUTING DATA), you must define MVS1 and MVS2.

# **Chapter 5. Choosing IMS ETO Support options**

IMS ETO Support provides options that you can select to define the behavior of IMS terminals.

IMS ETO Support lets you specify global options, and then allows overrides for specific terminal names (node names) and user IDs. You can specify most options globally, with database entries required only for the exceptions to the default global options.

## **Topics:**

- "Logon and signon options" on page 41
- "Security options" on page 50
- "Terminal management options" on page 55
- "Processing options" on page 58
- "Transaction options" on page 68

# **Logon and signon options**

You can use the following group of options to configure logon and signon properties of IMS ETO Support operation.

## **Topics:**

- "Logon process options" on page 41
- "Signon process options" on page 44
- "Auto signoff and logoff" on page 45
- "Signoff cleanup" on page 45
- "Creating a LOG record for signon failures" on page 46
- "Considerations for SLU1 console and SLUP/3600/FINANCE" on page 47
- "Considerations for LU 6.1 (ISC) sessions" on page 47
- "Time-of-day LOGON / SIGNON verification" on page 48
- "Setting the logon descriptor name for VTAM logon mode" on page 49
- "Preventing dynamic devices from logging on to IMS" on page 49
- "Supplying autologon data for dynamic printers" on page 49
- "Specifying IMS application identification (VTAM APPLID) value in message DFS2002" on page 50

# **Logon process options**

The available logon process options for connecting to devices differ based upon the device type.

# SLU2/3270 devices

IMS ETO Support provides logon support for SLU2/3270 devices.

## **ETO SUPPORT**

This option is the standard ETO logon process. In environments with forced signon processing (user ID verification), this option should be used.

If there are selected terminals that do not require signon, these devices can be excluded by terminal name in the LUNAME specific options.

## **USER DFSLGNX1** (logon exit)

This option lets a user exit determine the logon process. A user exit selects ETO logon descriptors and options, as described in *IMS Exit Routines*.

**Note:** When used with IMS ETO Support, the Logon exit module name must be changed to DFSLGNX1 instead of the default DFSLGNX0.

When this option is selected, user exit DFSLGNX1 is called instead of the IMS ETO Support Logon exit DFSLGNX0. This means that IMS ETO Support does not set any of the values that it normally provides in its Logon exit. These include ALOT/ASOT overrides.

Note that the ASOT value can also be provided in the Signon exit (IMS ETO Support's Signon exit, DFSSGNX1, or DFSSGNX2).

## **AUTO SIGNON**

The auto signon option lets users log on to IMS without specifying a user ID or password. In environments that do not currently use IMS signon processing, this option allows transparent implementation of ETO.

Keep in mind, however, that all terminals in your network have access to IMS when ETO is implemented. This option is, therefore, not recommended as a global default.

Instead, consider using the IMS ETO Support option as the global default, and defining specific terminal names that do not require signon processing in the LUNAME specific options.

If AUTO SIGNON or USERID option is specified for an IMS system that uses RACF (SAF) for transactions or command authorization, the IMS control region user ID is used to determine authorization to the transaction or command.

#### **USERID**

This option performs an auto signon (non-RACF) using the specified TSO user ID.

If AUTO SIGNON or USERID option is specified for an IMS system that uses RACF (SAF) for transactions or command authorization, the IMS control region user ID is used to determine authorization to the transaction or command.

**Restriction:** If users are enabled to sign on to IMS multiple times (from multiple terminals) with the same user ID, it is best practice to use ETOS logon and naming options that do not create naming collision errors. For example, when using USERID or RACF USERID for the logon process, do not use IMS DEFAULT as the LTERM/USER NAMING OPTION. Instead, use NODE=LTERM=USER or SUFFIXED USERID as the LTERM/USER NAMING OPTION.

#### **RACF USERID**

Use this option to perform an automatic RACF signon using the user ID specified in option 4 (USERID).

You must enter the TSO user ID value in the entry field for option 4 (USERID).

An online or batch refresh is required after the change is made to activate the change dynamically.

**Note:** IMS ETO Support first matches the LUNAME at the signon with a specific LUNAME in the "LUNAME OPTIONS for SLU2/3270" table (as described in "Setting LUNAME options for the SLU2/3270 device" on page 103) before it attempts to match any wildcard.

**Restriction:** If users are enabled to sign on to IMS multiple times (from multiple terminals) with the same user ID, it is best practice to use IMS ETO Support logon and naming options that do not create naming collision errors. For example, when using USERID or RACF USERID for the logon process, do not use IMS DEFAULT as the LTERM/USER NAMING OPTION. Instead, use NODE=LTERM=USER or SUFFIXED USERID as the LTERM/USER NAMING OPTION.

# SLU1 console and SLUP/3600/FINANCE devices

IMS ETO Support provides logon support for SLU1 console and SLUP/3600/FINANCE devices.

Use one of the following logon options for SLU1 console and SLUP/3600/FINANCE devices:

## **ETO SUPPORT**

This option does an automatic non-RACF signon. The signon is performed to allow IMS to build the required IMS terminal control blocks.

This signon does not prevent the device from sending a subsequent RACF signon request.

## **USER DFSLGNX1** (logon exit)

With this option, a user exit determines the logon process. A user exit selects ETO logon descriptors and options, as described in *IMS Exit Routines*.

**Note:** When used with IMS ETO Support, the Logon exit module name must be changed to DFSLGNX1 instead of the default DFSLGNX0.

When this option is selected, user exit DFSLGNX1 is called instead of the IMS ETO Support Logon exit DFSLGNX0. This means that IMS ETO Support does not set any of the values that it normally provides in its Logon exit. These values include:

- ALOT/ASOT overrides
- IMS Resource Manager (RM) status recovery mode (SRM) overrides

Note that the ASOT value can also be provided in the Signon exit (IMS ETO Support's Signon exit, DFSSGNX1, or DFSSGNX2).

## **AUTO RACF SIGNON**

This option does an automatic RACF signon. At completion of logon, there is a RACF user ID associated with this device.

See "Automatic RACF signon" on page 50 for a complete description of this option.

#### **USERID**

This option performs an auto signon (non-RACF) using the specified user ID.

If the USERID option is specified for an IMS system that uses RACF (SAF) for transactions or command authorization, the IMS control region user ID is used to determine authorization to the transaction or command.

**Note:** If you are using the same user ID for more than one LU name entry, you cannot use IMS DEFAULT for the LTERM/USER naming option.

# LU 6.1 (ISC) sessions

IMS ETO Support provides logon support for LU 6.1 (ISC) sessions.

Use one of the following three logon options for LU 6.1 (ISC) sessions:

## **ETO SUPPORT**

With this option, the base ETO feature of IMS (not IMS ETO Support) will perform an automatic RACF signon.

Additionally, IMS ETO Support will set the ASOT/ALOT timeout values and the LOGON descriptor name.

## **USER DFSLGNX1** (logon exit)

With this option, a user exit determines the logon process. A user exits selects ETO logon descriptors and options, as described in *IMS Exit Routines*.

**Note:** When used with IMS ETO Support, the Logon exit module name must be changed to DFSLGNX1 instead of the default DFSLGNX0.

When this option is selected, user exit DFSLGNX1 is called instead of the IMS ETO Support logon exit DFSLGNX0. This means that IMS ETO Support does not set any values that it normally provides in its logon exit.

These values include:

- · ASOT/ALOT overrides
- · LOGON descriptor

#### **AUTO SIGNON**

The LU 6.1 auto signon allows a signon to complete without calling RACF to ensure the user ID is defined.

# **Signon process options**

IMS ETO Support provides several options for IMS signon panels and signon status panels, used to authenticate to devices after logon.

# SLU2/3270 devices

SLU2/3270 signon panels can be configured for both DFS3649 and DFS3650 messages.

Choose one of the following options for the DFS3649 message:

#### **IMS DEFAULT**

Use the IMS default signon panel.

IMS ETO Support provides additional error text when message DFS3649A is issued due to a signon failure.

## **DFS2002 MESSAGE**

This option changes the screens and messages to IMS 11.1 format.

Instead of having message DFS3649A displayed on the IMS default panel, message DFS2002 is displayed on a blank screen when a terminal connects.

#### **ETO SUPPORT**

Use one of the two types of IMS ETO Support signon panels. By specifying the PASSSIZE suboption, you can choose whether to use the IMS ETO Support password signon panel (uses /SIGN ON command; maximum password length is 8) or the IMS ETO Support passphrase signon panel (uses / SIGN PASSPHRASE command; maximum password length is 100).

If the PASSSIZE suboption is not specified, the MFSPPDEF parameter of the DFSDCxxx PROCLIB member determines which panel to use.

The MFS source code for the IMS ETO Support password signon panel is IZTSIGNO, and the MFS source code for the IMS ETO Support passphrase signon panel is IZTSIGNP.

# **USER DFSGMSG1**

This option allows a user DFSGMSG0 exit routine to supply the MFS MOD name and update message text

For a description of the DFSGMSGO exit routine, see IMS Exit Routines.

Note that when used with IMS ETO Support, the name of the Greeting Message exit module must be changed to DFSGMSG1 instead of the default DFSGMSG0 name.

## **USER MOD**

Use this option to set the MFS screen name that is displayed in place of the DFS3649 message.

When you specify USER MOD for the DFS3649 (message/process), the IMS DFS3649 message text is sent to the specified MFS screen.

Choose one of the following options for the DFS3650 message:

#### **IMS DEFAULT**

Use the IMS default signon panel.

IMS ETO Support provides additional error text when message DFS3649A is issued due to a signon failure.

#### **DFS058 MESSAGE**

This option changes the screens and messages to IMS 11.1 format.

Instead of having message DFS3650 displayed on the IMS default terminal status panel, message DFS058I is displayed on a blank screen when user ID/password verification is completed.

## **BLANK SCREEN**

Use this option to send a 1-byte blank (X'40') message to IMS MOD DFSMO2.

#### **USER DFSGMSG1**

This option allows a user DFSGMSG0 exit routine to supply the MFS MOD name and update message text.

For a description of the DFSGMSG0 exit routine, see *IMS Exit Routines*.

Note that when used with IMS ETO Support, the name of the Greeting Message exit module must be changed to DFSGMSG1 instead of the default DFSGMSG0 name.

## **USER MOD**

Use this option to set the MFS screen name that is displayed in place of the DFS3650 message.

When you specify USER MOD for the DFS3650 (message/process), you can specify whether or not the DFS3650I message text is sent to the specified MFS screen. You can control whether DFS3650I is sent by using the DFS3650 WHEN USER MOD USED option on the IZTRAN global options, or by using the UMFS3650=Y/N option in the IZTUD1U0 batch update utility.

#### **DFS2002 MESSAGE**

This option changes the screens and messages to IMS 11.1 format.

Instead of having message DFS3649A displayed on the IMS default panel, message DFS2002 is displayed on a blank screen when a terminal connects.

## TRX NAME (DFS3650I Transaction Replacement)

Use this option to input an IMS transaction and discard the signon complete (DFS3650I) message.

# SLU1 console and SLUP/3600/FINANCE devices

IMS ETO Support provides signon support for SLU1 console and SLUP/3600/FINANCE devices.

Use one of the following signon options for SLU1 console and SLUP/3600/FINANCE devices:

#### **IMS DEFAULT**

Bypass all IMS ETO Support processing, and return whatever message was built by IMS.

# **DFS058 MESSAGE**

Return message DFS058 after a successful signon.

## **BLANK MESSAGE**

Return a blank message after a successful signon.

#### **USER DFSGMSG1**

Control is passed to the user's version of the Greetings Message exit, DFSGMSG1. This exit can perform any logic described in *IMS Exit Routines*.

# Auto signoff and logoff

IMS provides for terminal timeout in an ETO environment.

IMS ETO Support lets you specify auto-signoff and auto-logoff times at a global level, which can be overridden for specific user IDs or terminal names.

# Signoff cleanup

IMS ETO Support signoff cleanup lets you automatically reset terminal/user status and dequeue messages.

This option is available to dynamic, or dynamic and static, SLU2/3270 devices:

- Dynamic terminal cleanup is performed if signoff cleanup is set to Y.
- Static terminal cleanup is performed if signoff cleanup and process static terminals are both set to Y.

For dynamic SLU2/3270 devices, signoff cleanup is performed at the following times:

- · Signoff
- Signon

For static SLU2/3270 devices, signoff cleanup is performed in the following manner:

- For all static SLU2/3270s at first signon
- For individual SLU2/3270s when they log off IMS

Signoff cleanup consists of the following actions:

- Dequeuing messages (see notes below)
- Reset terminal/user Response
- Reset Conversational
- · Reset Exclusive
- · Reset Test
- · Reset Test MFS
- · Reset Preset
- · Reset Fast Path Response

For additional processing options, see "Auto /TEST MFS" on page 55.

#### Notes:

- 1. IMS ETO Support does not perform signoff cleanup for any (static or dynamic) SLU1, SLUP/3600/FINANCE devices, or LU 6.1 (ISC) sessions.
- 2. In an IMS shared message queues environment, signoff cleanup does not dequeue messages unless the IMS Resource Manager (RM) is being used.
- 3. Dequeuing messages can be bypassed for dynamic and static terminals.
- 4. Dequeuing messages can be bypassed for specific terminals and users.

# Creating a LOG record for signon failures

IMS ETO Support can restrict which SLU2/3270 users can sign on to IMS by use of the User Record Required for Signon flag.

When this flag is active, all SLU2/3270 user IDs must have an entry in the USER table for signon to be successful.

You can set this option using the online (IZTRAN) or in the batch update utility (IZTUD1U0) by the following methods:

- With IZTRAN:
  - Choose option B
  - Choose option 4
  - Set USER RECORD REQUIRED FOR SIGNON to the value of your choice
- With IZTUD1U0 (batch update utility)
  - Set ZD SGNUSREC=Y | N
  - Remember to refresh the E/CSA tables

When the User Record Required for Signon flag is active, IMS ETO Support can optionally create an IMS log record for signon failures caused by signon attempts with a user ID that is not in the IMS ETO Support User table.

You can set IMS log record creation by using online (IZTRAN) or by using the batch update utility (IZTUD1U0):

- With IZTRAN:
  - Choose option A
  - Choose option 2
  - Set SIGNON FAILURE LOG REC ID to a valid hexadecimal value

- With IZTUD1U0 (batch update utility):
  - Set ZG SOFLOGID=xx
  - Remember to refresh the E/CSA tables

The two bytes you enter here represent a hexadecimal value. If the value you enter is D0, IMS ETO Support converts it to X'D0'. The valid values for hexadecimal conversion are 0 - 9, A - F. The valid range for this 2-byte field is D0 - FF.

Following is the signon failures log record layout:

```
Length - description
2 - record length
2 - zz field
1 - log record ID
1 - flag byte (CLBFLAG1)
1 - flag byte (CLBFLAG2)
1 - flag byte (CLBFLAG3)
1 - flag byte (CTDEVIC)
8 - node name (CLBNAME)
8 - user name (name that failed signon)
3 - reserved
4 - time (packed, unsigned local time for example: x'19235670' = 19:23:56.70)
24 - reserved
```

# Considerations for SLU1 console and SLUP/3600/FINANCE

Because IMS has trouble distinguishing between SLUP and FINANCE devices and a cold start is required to clean up their control blocks, it is strongly recommended that there be an IMS ETO Support LUNAME table entry created for each SLUP or FINANCE node that logs on to IMS.

If IMS ETO Support is selected to process dynamic SLU1 console or SLUP/3600/FINANCE devices and the device does not send VTAM logon data, IMS ETO Support performs an auto signon. Depending upon the options selected, the auto signon can be either a RACF or non-RACF signon.

Auto signon is performed for dynamic devices so the device does not need to provide a user ID. Even after the auto signon, the device can still enter the IMS **/SIGN** command.

Auto signon is used to allow IMS to build the control blocks for the dynamic terminals. Provided there is no significant status (/TRA, /STO, queue count, and so on) on SLU1 Console devices, their control blocks are deleted at signoff/logoff. Since the SLUP/3600/FINANCE devices are STSN (set and test sequence number) devices, their control blocks are deleted only during an IMS cold start. To avoid unwanted IMS cold starts, please make sure that proper options are used during the first logon for SLUP/3600/FINANCE devices.

For dynamic SLU1 console devices, IMS ETO Support will always create the user (SPQB) name from the VTAM node name. IMS ETO Support can be configured to use either the VTAM node name, or the first LTERM name to create the user (SPQB) name for dynamic SLUP/3600/FINANCE devices.

SLU1 console and SLUP/3600/FINANCE devices do not search the IMS ETO Support user ID table. Use of the user ID table is limited to SLU2/3270 devices.

**Recommendation:** Because some of the options defined in the GLOBAL OPTIONS entry work differently or might not be applicable for all device types, it is strongly recommended that a DEVICE DEFAULT entry be coded for SLU1 console and SLUP/3600/FINANCE devices.

# Considerations for LU 6.1 (ISC) sessions

IMS ETO Support provides several options specific to LU 6.1 sessions.

# **Auto signon**

During session establishment for a dynamic LU 6.1 (ISC) session on an IMS that requires signon, IMS uses the USER name specified on the /OPNDST to perform a RACF signon. If the signon fails the session establishment fails.

**Note:** IMS attempts the signon without requiring a password.

For static LU 6.1 (ISC) session establishment, IMS does not attempt to perform a RACF signon.

IMS ETO Support provides an option called Auto signon that allows dynamic LU 6.1 (ISC) sessions to bypass performing the RACF signon. This option allows dynamic LU 6.1 (ISC) sessions to work the same as static LU 6.1 (ISC) sessions during session establishment.

# LU 6.1 (ISC) LUNAME entries

IMS ETO Support provides an option that ensures that remote systems can use only desired LUNAMEs for signon. This option is called **LU DEFINITION REQUIRED**. If this option is active, an LU 6.1 (ISC) LUNAME record must be defined in the options data set for every LUNAME that is allowed for LU 6.1 (ISC) sessions.

# LU 6.1 (ISC) user ID entries

When an LU 6.1 (ISC) session is started by the remote partner, the session names are specified by the remote system. If Auto signon is not used for session establishment and IMS requires signon, IMS will use the USER name specified by the remote system to perform a RACF signon. Because the signon is done without a password, any valid RACF user ID could be used.

IMS ETO Support provides an option that ensures remote systems use only desired user IDs for signon. The option is called USER REC REQUIRED FOR SIGNON. When this option is active, an LU 6.1 (ISC) user ID record must be defined in the options data set for all user IDs that are used for LU 6.1 (ISC) sessions.

# LU 6.1 (ISC) auto logon

When a message is inserted to destination unknown to IMS, and IMS ETO Support determines the destination is an LTERM for an LU 6.1 (ISC) session, IMS ETO Support will supply auto logon data for automatic session establishment.

**Note:** The LTERM must be defined to an LU 6.1 (ISC) user ID record and have all pertinent information specified.

# Time-of-day LOGON / SIGNON verification

IMS ETO Support provides an optional time-of-day (TOD) verification feature for dynamic SLU2/3270 devices. You can verify TOD at LOGON, SIGNON, or not at all.

TOD verification uses its own table, called the TOD table. In the TOD table you can specify user ID, NODE name, and a global entry. The global entry is defined as 8 dollar signs (\$\$\$\$\$\$) in the entry name field.

TOD conducts table searches in the following sequence:

- 1. User ID entry \*
- 2. NODE name entry
- 3. Global entry
- \* Because the user ID is not known at LOGON time, a user ID entry is used only when TOD verification is performed at SIGNON time. The only exception to this rule is for the global entry. Even if the global entry is defined with TYPE=USER, it is still used if TOD verification is set to LOGON.

If there is not a matching user ID or NODE name entry, and a global TOD entry is not present, LOGON/SIGNON is allowed.

The TOD table entries contain a time value that begins with *FROM* time and a time value that ends with *TO* time. The time values consist of 4 numeric characters in the form of *hhmm* where *hh* represents the hour (00-23) and *mm* represents the minute (00-59).

A time value of 0000 represents midnight.

In order to pass LOGON/SIGNON verification, the current time must be between the FROM and TO time.

## Example 1:

```
FROM time = 0800
TO time = 1700
```

TOD LOGON/SIGNON verification fails if the current time is less than 0800 or greater than 1700.

# Example 2:

```
FROM time = 2300
TO time = 0800
```

TOD LOGON/SIGNON verification is successful between 2300 - 2359, and 0000 - 0800. Otherwise, verification fails.

# Example 3:

```
FROM time = 0000
TO time = 0000
```

TOD LOGON/SIGNON verification is always successful when FROM and TO times match.

When TOD verification fails for LOGON, the NODE that is attempting to connect to IMS receives a VTAM sense code 08010000, and DFS3645I and DFS3672I messages are displayed by the IMS control region.

When TOD verification fails for SIGNON, message DFS3649A RC 112 is sent to the failing NODE. No messages are displayed in the IMS control region.

# Setting the logon descriptor name for VTAM logon mode

IMS ETO Support provides an optional table that you can use to set the IMS logon descriptor name based upon the VTAM logon mode that is used when a SLU2/3270, SLU1 console, SLUTYPEP/Finance or LU 6.1/ISC device connects to IMS.

If you use this table, the logon descriptor that is specified here overrides all other logon descriptor overrides.

The following list shows the priority in which IMS ETO Support selects the logon descriptor when it is provided in more than one table. The first entry that is encountered in the list below is used:

- 1. Logon descriptor that is specified in the LOGON MODE table
- 2. Logon descriptor that is specified in an LU name-specific entry
- 3. Logon descriptor that is selected by IMS

# Preventing dynamic devices from logging on to IMS

IMS ETO Support provides the ability to prevent unwanted devices from logging on to IMS.

To prevent a device from logging on to IMS, specify IZTFAIL in the Logon Descriptor field in the LU name record.

When IZTFAIL is specified as the Logon Descriptor, IMS ETO Support will reject the logon attempt.

When this occurs, message DFS3645I is displayed in the z/OS syslog, and VTAM sense code 08010000 is returned to the device failing logon.

# Supplying autologon data for dynamic printers

By default, IMS ETO Support provides autologon data when a dynamic LTERM for a printer is created.

Members of an IMS shared message queues environment are often designated as either communications or application processing systems. When this is the case, the communications regions are typically called the front-end systems, and the application processing regions are referred to as back-end systems.

Because messages created for dynamic printer LTERMs in a back-end system should not create the NODE control blocks, IMS ETO Support provides a way to identify an IMS as a back-end systems.

To identify an IMS as a back-end system, the following DD statement needs to be added to the IMS control region JCL:

```
//IZTBKEND DD DUMMY
```

When an IMS is identified as a back-end system, IMS ETO Support will create the dynamic printer LTERM without providing autologon data.

# Specifying IMS application identification (VTAM APPLID) value in message DFS2002

When IMS ETO Support constructs the DFS2002 message, it suffixes the message with the IMS control region application identification (VTAM APPLID). IMS ETO Support lets you specify a value (up to 8 bytes) to use as the suffix for message DFS2002.

For additional information, see member IZT2002 in the SIZTSAMP library.

# **Security options**

You can use the following group of options to configure security properties of IMS ETO Support operation.

## **Topics:**

- "Automatic RACF signon" on page 50
- "Bypass security at signon when user ID is same as node name" on page 50
- "Security profiles for IMS command authorization" on page 51
- "IMS ETO Support Enhanced Transaction Verification" on page 52

# **Automatic RACF signon**

Automatic RACF signon is a feature that is available to static and dynamic SLU1 console and SLUP/3600/FINANCE devices.

When Automatic RACF signon is selected, IMS ETO Support supplies the RACF user ID and password to IMS as logon data.

To avoid hard-coding passwords, IMS ETO Support sets the RACF user ID's password to a generated value at logon time. This means the user ID gets a new password every time it logs on to IMS.

## **Restriction:**

- The RACF user ID must match the VTAM NODE name.
- The RACF user ID cannot be shared.
- If the device sends VTAM logon data, IMS ETO Support bypasses Automatic RACF signon.

Automatic RACF signon does not prevent the device from sending a subsequent signon request in the form of the IMS **/SIGN** command.

# Bypass security at signon when user ID is same as node name

IMS ETO Support provides an option that allows a **/SIGN ON** command to complete even when the user ID is not defined to RACF.

When this option is active, and a **/SIGN ON** command is attempted with the user ID name matching the node name, IMS ETO Support sets the bypass security flag in DFSSGNXO. Although the **/SIGN ON** command completes, there is no RACF information available for this user ID.

When a bypass security signon occurs, IMS uses the control region user ID to verify access to any transaction or command that is entered from this node.

# **Security profiles for IMS command authorization**

IMS ETO Support provides several options for securing IMS commands originating from dynamic terminals, static terminals, APPC, OTMA, IMS ICMD, and CMD AOI programs.

You can choose one of the following options for IMS command authorization for each command point of origin:

- RACF (SMU)
- Your own Command Authorization exit (DFSCCMD1)
- IMS ETO Support security profiles

This section describes IMS ETO Support security profiles for IMS command authorization.

IMS ETO Support security profiles are entries defined in the options data set where you specify which commands and command and keywords a certain profile is allowed to issue. After the profile is defined, you then specify which user, node, transaction and/or program are to use the security profile.

When IMS ETO Support security profiles are selected for IMS command authorization, IMS ETO Support uses the Command Authorization exit (DFSCCMD0) to perform the authorization. Certain IMS command origins have parameters in PROCLIB member DFSPBxxx that inform IMS how to handle command authorization. If you select IMS ETO Support security profiles for IMS command authorization for a certain command origin, any associated parameter in PROCLIB member DFSPBxxx must be specified so that the Command Authorization exit (DFSCCMD0) gets called.

For example, if you specify that IMS CMD calls are to be authorized using IMS ETO Support security profiles, the AOI1= parameter in PROCLIB member DFSPBxxx must be specified as AOI1=C or AOI1=A. These are the only two values for AOI1= where the Command Authorization exit gets called.

There are 4 types of IMS ETO Support security profiles:

- Security Group (SGRP)
- Transaction (TRAN)
- Program (PROG)
- Transaction/Program (T/P)

The TRAN, PROG, and T/P profiles are used only for IMS CMD call authorization.

The SGRP profile can be used for dynamic node, static node, APPC, OTMA, ICMD, and IMS CMD call authorization.

**Note:** A Security Profile Name cannot be defined to more than one security profile type.

When IMS ETO Support security profiles are used for IMS command authorization, there are multiple places the security profile can be defined (device global record, LU name record, and User ID record). If the Security Profile is defined in more than one record, each security profile is checked to determine authorization to the command. If any of the security profiles allow access to the command, IMS ETO Support allows the command to be processed.

## IMS CMD call authorization

In order for an IMS application that issues the CMD call to use IMS ETO Support security profiles, the TRANSACT statement of the IMS system generation must specify AOI=YES or AOI=TRAN.

When the TRANSACT definition specifies AOI=TRAN, the IMS ETO Support security profile type must be specified as either TRAN or T/P, and the profile name must match the name specified on the TRANSACT macro.

When the TRANSACT definition specifies AOI=YES, the IMS ETO Support security profile type used for authorization is dependent upon how the AOI program is coded. If the IMS CMD call is issued prior to a GU to the IOPCB, the security profile type must be coded as either PROG or T/P, and the profile name must match the name specified on the APPLCTN statement of the IMS system generation.

When the TRANSACT definition specifies AOI=YES, and the AOI program issues the IMS CMD call after the GU to the IOPCB, IMS ETO Support searches its user ID table (option **D** from the Primary Menu) looking for an entry name that matches the user ID name IMS passes to the Command Authorization exit. The user ID entry must contain a security profile name, and that name must be defined as a security profile type of SGRP.

# **SMU** migration

Utility IZTSMU00 can be used to provide a migration from SMU to IMS ETO Support security profile authorization. The following outlines the tasks for migration from SMU command authorization:

- 1. Run utility IZTSMU00 with DD name ETOCMD present.
  - This will create the control cards to add IMS ETO Support security profiles that match the old SMU definitions.
- 2. Run the batch update utility (IZTUD1U0) using the control cards from step "1" on page 52.
  - This will add the ETO Security profiles to the options data set.
- 3. Refresh the E/CSA tables by restarting IMS, using the online refresh option of IZTRAN, or by using sample job IZTREFRE in the SIZTSAMP library.
- 4. Change the AOI program TRANSACT macro to use AOI=TRAN.
- 5. Change DFSPBxxx member of PROCLIB to use either AOI1=C or AOI1=A.
  - AOI1=C is recommended if you are using IMS ETO Support security profiles for IMS CMD authorization.
  - This might require a restart of IMS to take effect.
- 6. Inform IMS ETO Support to use security profiles for IMS CMD call authorization.
  - Use either IZTRAN (option **E** from the Primary Menu) or the batch update program (IZTUD1U0), and refresh the E/CSA tables.

# **IMS ETO Support Enhanced Transaction Verification**

IMS ETO Support Enhanced Transaction Verification (ETV) provides two methods for replacing transaction authorization that was previously provided by the IMS Security Maintenance Utility (SMU).

The two ETV methods are:

- A RACF-based verification technique that can provide both Transaction/LTERM and Transaction/ Password protection
- An IMS ETO Support Matrix data set that can be used for Transaction/LTERM protection

The ETV methods are optional and can be used in addition to, or in place of, IMS RACF or IMS SMU security. Only one form of ETV can be used at a time.

Both forms of ETV checking (RACF or IMS ETO Support Matrix) use the IMS Transaction Authorization Exit (DFSCTRN0) to perform the validation. However, ETV cannot be used if there is an existing user version of DFSCTRN0. To use a user version of DFSCTRN0 along with ETV processing, you must rename the user version of DFSCTRN0 to DFSCTRN1.

For example:

- At IMS startup, IMS ETO Support sets an intercept for its version of the DFSCTRN0 exit, and saves the address of any user DFSCTRN1 exit.
- If the IMS ETO Support version of DFSCTRN0 denies access to the transaction, DFSCTRN1 is not invoked.
- If IMS ETO Support determines access is allowed, DFSCTRN1 is called and all parameter input is the same as if IMS ETO Support was never called.

ETV works for both static and dynamic terminals. In order to avoid confusion from receiving different messages for the same error, it is recommended that all of your terminals be dynamic. The following example illustrates this situation (IMS exit DFSCTRNO is used for ETV processing):

- A user ID that fails authorization causes IMS message DFS2469W to be displayed
- Dynamic terminals will receive the Tran not auth 0008 version of this message
- Static terminals that do not issue an IMS /SIGN command will receive the SIGNON REQUIRED version
  of this message

Authorization is performed at initial transaction arrival and for IMS CHNG calls:

- If multiple LTERMs are assigned to a NODE/USER, IMS ETO Support will perform authorization at initial transaction arrival using the first LTERM that is not either STOPPED or LOCKED.
- ETV does not process transactions from APPC or OTMA devices.
- If IMS rejects transaction authorization, the IMS ETO Support DFSCTRNO exit does not get control.
- If the IMS ETO Support DFSCTRN0 exit rejects transaction authorization, DFSCTRN1 does not get control.

ETV is controlled by IMS ETO Support TRANLTRM, TRANPSWD and ETOSMATRIX parameters. You can set these parameters using either the online transaction program (IZTRAN), or the batch update program (IZTUD1U0). They are dynamic and you can change them without requiring a restart of IMS.

**Note:** In order to use ETOS Matrix verification, the matrix DD (IZTMTRX) must be present in the IMS control region at startup.

## **RACF Enhanced Transaction Verification**

The RACF version of ETV is controlled using the IMS ETO Support TRANLTRM and TRANPSWD parameters. You can set these parameters using either the online transaction program (IZTRAN), or the batch update program (IZTUD1U0). The parameters are dynamic and you can change them without requiring a restart of IMS.

The RCF= parameter in the DFSPBxxx member of IMS PROCLIB does not have any impact on ETV.

ETV uses the IMS control region user ID for its RACF calls. Because ETV can be used even if the IMS control region does not do any RACF checking (RCF=N), it does not use the typical IMS RCLASS names (such as TIMS/GIMS). Instead ETV uses the RACF FACILITY class for its RACF calls.

In order for RACF ETV to work properly, the IMS control region user ID cannot have the RACF privileged option set.

When RACF ETV is active, IMS ETO Support will perform verification at initial transaction arrival and for IMS CHNG calls. IMS ETO Support will build a 4-level resource name that it uses to call RACF to check for authorization. The format is:

HLQ.TYPE.TRAN.ID

Descriptions of the 4 levels of a resource name:

## HLQ

The HLQ (high-level qualifier) name is defined in the IMS ETO Support options data set. The name is used to allow multiple IMS regions running in the same complex to have unique RACF definitions. The name can be any 4-character descriptive word, for example: PROD, or TEST.

#### **TYPE**

The TYPE name represents the type of RACF resource name that is being tested. The following values are supplied by IMS ETO Support:

#### **LTRM**

This is the resource name used for checking Transaction/LTERM authorization.

#### **PSWD**

This is the resource name used for checking Transaction/password authorization.

## TRAN

This is the IMS transaction code name that is being attempted.

Depending on the TYPE field, the ID field contains one of the following:

- If TYPE contains LTRM, the ID field contains the name of the LTERM that is attempting this transaction.
- If TYPE contains PSWD, this field contains the password that was supplied by the terminal user, if any.

## **Sample RACF definitions**

The following sample list shows the RACF rules that restrict transaction PART from all LTERMS other than USER1 and USER2:

```
RDEF FACILITY PROD.LTRM.* UACC(READ)
RDEF FACILITY PROD.LTRM.PART.* UACC(NONE)
RDEF FACILITY PROD.LTRM.PART.USER1UACC(READ)
RDEF FACILITY PROD.LTRM.PART.USER2UACC(READ)
```

Using the above sample RACF rules, the following conditions apply:

- When transaction PART is attempted from LTERM USER1, IMS ETO Support builds resource name PROD.LTRM.PART.USER1.
- Because this resource name is defined with UACC(READ), RACF allows access to the IMS control region user ID and IMS ETO Support allows this LTERM to process the transaction.
- If LTERM USER9 attempts transaction PART, IMS ETO Support will perform the RACF call using resource name PROD.LTRM.PART.USER9.
- RACF will reject access because this resource name matches RACF rule PROD.LTRM.PART.\*, which has UACC(NONE).

The same type of rules apply to Transaction/PASSWORD definitions:

```
RDEF FACILITY PROD.PSWD.* UACC(READ)
RDEF FACILITY PROD.PSWD.PART.* UACC(NONE)
RDEF FACILITY PROD.PSWD.PART.PWD1 UACC(READ)
```

In the above example, PWD1 must be supplied as the Password by the terminal user.

IMS ETO Support provides a utility program (IZTSMU00) to convert your existing Security Maintenance Utility (SMU) control cards to the RACF statements.

#### **MATRIX Enhanced Transaction Verification**

The IMS ETO Support MATRIX version of ETV is controlled using the ETOSMATRIX parameter. You set this parameter using either the online transaction program (IZTRAN) or the batch update program (IZTUD1U0).

The ETOSMATRIX parameter is dynamic, so you can change it without requiring a restart of IMS. However, in order to activate this option you must have already added the IMS ETO Support Matrix DDNAME (IZTMTRX) in your IMS control region JCL at startup.

**Note:** The IMS ETO Support Matrix data set must also be APF authorized.

You can use IMS ETO Support Matrix ETV to perform Transaction/LTERM authorization. It uses a Matrix table loaded by the IMS control region at startup, and can be dynamically refreshed using the IMS ETO Support online transaction program (IZTRAN - option R).

The modules in the IMS ETO Support Matrix data set are created from the IMS Security Maintenance Utility (SMU) control cards using utility program IZTSMU.

# **Terminal management options**

You can use the following group of options to configure terminal management properties of IMS ETO Support operation.

## **Topics:**

- "Auto /TEST MFS" on page 55
- "Status recovery mode (SRM) for sysplex terminal management" on page 55
- "Static terminal support" on page 56
- "Naming conventions" on page 56

# **Auto /TEST MFS**

IMS ETO Support provides an optional Auto /TEST MFS feature.

Auto /TEST MFS automatically puts every SLU2/3270, SLUP/3600/FINANCE, SLU1 device, or LU 6.1 (ISC) session into /TEST MFS mode after a valid signon. The signon could be the result of:

- A user entering the IMS /SIGN command
- · Automatic signon by IMS ETO Support
- Signon data passed in the logon data by the device

The Auto /TEST MFS feature can be used in a development environment to put developers into /TEST MFS mode. This feature is controlled by device type.

To enable this feature, add the following DD statement to the IMS control region JCL:

• For SLU2/3270 add:

```
//IZTTESTM DD DUMMY
```

• For SLU1 add:

```
//IZTTESTP DD DUMMY
```

For SLUP/3600/FINANCE add:

```
//IZTTESTF DD DUMMY
```

• For LU 6.1 (ISC) sessions add:

```
//IZTTEST6 DD DUMMY

The only way to activate or deactivate this option is to add/remove the DD statements and restart the IMS
```

control region. IMS test and production systems can still share the IMS ETO Support options data set.

If required, the Auto /TEST MFS feature can be activated in the test region by adding the DD statement. In this case, the production regions remain unaffected.

# Status recovery mode (SRM) for sysplex terminal management

Status recovery mode (SRM) determines if, and where, terminal or end user significant status is maintained (and recovered following logon/signon/restart).

Refer to the IMS library for a more complete description of SRM.

This option is relevant only when operating in an IMS shared message queue environment using the IMS Resource Manager (RM).

Based on your environment, IMS sets default SRM values at startup. You can specify the values IMS should use for SRM by defining them in the DFSDCxxx PROCLIB member before restart.

IMS ETO Support lets you override the SRM values IMS is using, without requiring an IMS restart. You can have IMS ETO Support set a global SRM value, or you can have IMS ETO Support use a value based on the device type.

# Static terminal support

IMS ETO Support provides a global option to determine how static 3270/SLU2 terminals are processed.

**Note:** IMS ETO Support does not perform any processing for static SLU1 console, SLUP/3600/FINANCE devices, or LU 6.1 (ISC) sessions.

When Process Static Terminals is set to N, IMS ETO Support does not perform any processing on statically SYSGENed SLU2/3270 terminals during logon/signon. However, it does call any user version (exit suffixed with a 1) of an ETO exit when a logon/signon occurs. The Command Security Options determine how IMS ETO Support handles command authorization for static terminals.

When Process Static Terminals is set to Y, IMS ETO Support performs the same logon/signon overrides for statically SYSGENed SLU2/3270 terminals as it does for dynamically generated terminals where applicable.

The applicable overrides are as follows:

- Signoff cleanup (based on the signoff cleanup global option)
- · Process DFS3649 screens
- Process DFS3650 screens

# **Naming conventions**

A naming convention for LTERM names and user structure names must be selected.

# SLU2/3270 devices

IMS ETO Support provides specific naming options for SLU2/3270 devices.

## **IMS** default

After a successful signon, the user ID is used for both the user name and LTERM name. Note that this is not the same as the default for a SYSGENed terminal. To use the same names as SYSGENed terminals, use the NODE=USER=LTERM option below.

Note that converting from the SYSGENed terminal default to the ETO default may have an impact on applications. The LTERM name for a user signed on to IMS is changed from the terminal (node) name to the user ID entered at signon time.

## NODE=USER=LTERM

This option provides the same user and LTERM names as a SYSGENed terminal. In environments with a session manager or TCP/IP 3270 terminals, this option allows messages to be sent to a user other than the user who entered the data. If a user is disconnected before a message is delivered, that message is available to the next user who logs on with that node name.

To prevent this, IMS ETO Support provides a signoff cleanup option, which dequeues messages and conversations at terminal signoff and signon time. Consider using the signoff cleanup option when using the NODE=USER=LTERM option.

## User ID from table

When specified at the global or device default level, this option simply sets the default action for IMS ETO Support processing. In order to actually obtain the user/LTERM from the table, a user ID or node record defining the user/LTERM names to be used needs to be created.

#### **Suffixed user ID**

This option allows sharing of user IDs among several users logged on at the same time. Depending on which suffixing technique you choose, this option adds 1 - 3 characters to the user ID specified at signon time to provide a unique user and LTERM name within IMS.

#### **User DFSSGNX1**

This option allows a user exit routine to provide user and LTERM names. See the description of the Signon exit routine DFSSGNX0 in *IMS Exit Routines*.

Note that when used with IMS ETO Support, the name of the Signon exit module must be changed to DFSSGNX1 instead of the default DFSSGNX0.

When this option is selected, user exit DFSSGNX1 is called instead of IMS ETO Support's Signon exit DFSSGNX0. This means that IMS ETO Support does not set any of the values it normally provides in its Signon exit. These include:

- ASOT overrides
- User/LTERM names
- IMS Resource Manager (RM) status recovery mode (SRM) overrides

## Append @ character to user ID

After successful signon, the user ID appended with an at sign (@) character is used for the user name and LTERM name.

In order for an at sign (@) to be appended, the user ID must be less than 8 characters long. If this option is selected and an 8-character user ID is used to sign on to IMS, the 8-character user ID is used for the user name and LTERM name.

# SLU1 console and SLUP/3600/FINANCE devices

When using IMS ETO Support for SLU1 console devices, the user structure name is the same as the NODE name. When using IMS ETO Support for SLUP/3600/FINANCE devices, you can choose to use the NODE name or the first LTERM name as the user structure name.

IMS ETO Support provides the following options for LTERM names:

#### LTERM = NODE name

This option creates an LTERM name that has the same name as the VTAM NODE.

## LTERM from table

When specified at the global or device default level, this option simply sets the default action for IMS ETO Support processing. In order to actually obtain the LTERM from the table, a node record defining the LTERM names to be used needs to be created.

#### **USER DFSSGNX1**

This option allows a user exit routine to provide the LTERM names. See the description of the Signon exit routine in *IMS Exit Routines*.

Note that when used with IMS ETO Support, the name of the Signon exit module must be changed to DFSSGNX1 instead of the default DFSSGNX0.

When this option is selected, user exit DFSSGNX1 is called instead of IMS ETO Support's Signon exit DFSSGNX0. This means that IMS ETO Support does not set any of the values it normally provides in its Signon exit. These values include the following:

- ASOT overrides
- User/LTERM names

# **Processing options**

You can use the following group of options to configure processing properties of IMS ETO Support operation.

## **Topics:**

- "Reserved MFS MID/MOD names" on page 58
- "Mask characters to name control blocks" on page 60
- "IMS processing options set in the initialization exit (DFSINTX0)" on page 63
- "Table search sequence" on page 63
- "User ID suffixing (CSECT IZTSUFFX)" on page 64
- "Processing VTAM userdata" on page 64
- "Open Transaction Manager Access (OTMA) options" on page 65
- "Creating dynamic LTERM (printers and remote CNTs)" on page 66
- "Remapping printer LTERM names" on page 66
- "Preventing control block creation for specific LTERM names" on page 67
- "Managing the IMS dependent region security environment (DFSBSEX0)" on page 67

# **Reserved MFS MID/MOD names**

IMS ETO Support performs special processing for SLU2/3270 devices when you specify the reserved MFS MID/MOD names for signon.

Specify the reserved MOD names for message DFS3649 and/or message DFS3650 options. Reserved MID name processing occurs if the reserved MID name contains a properly formatted IMS /SIGN ON command.

When the reserved MFS MID name is used, IMS ETO Support performs new password verification by comparing the two copies of the changed password. If the changed passwords do not match, the Signon exit (DFSSGNX0) rejects the signon and sends an error return code with message DFS3649.

The reserved MFS MOD names tell IMS ETO Support to build a special message containing information that you might find useful in building your screens. There is one reserved MFS MOD name intended for use in replacing the DFS3649 screen and one for the DFS3650 screen.

See IZT.SIZTDATA for a sample of the reserved MFS source.

## MID IZT@MID1

The reserved MID must have the following syntax.

```
IZT@MID1 MSG TYPE=INPUT,...

SEG

MFLD (IPPFK,'/SIG '),LTH=5

MFLD ' ON ',LTH=4

MFLD IZTUSERI,LTH=8

MFLD ' ',LTH=1

MFLD IZTPSWD1,LTH=8

MFLD ' IZTNULL ',LTH=9

MFLD IZTPSWD2,LTH=8

MFLD IZTPSWD3,LTH=8

MFLD IZTPSWD3,LTH=8

MFLD ' IZTNULL ',LTH=9

MFLD IZTGROUP,LTH=8

MFLD '.',LTH=1

MSGEND
```

If IZTPSWD2 is supplied, IMS ETO Support replaces the first IZTNULL with the NEWPW keyword. IMS ETO Support then compares IZTPSWD2 and IZTPSWD3. If they do not match, an error message is returned to the user. The error message depends upon the option you have specified for DFS3649.

If IZTGROUP is specified, IMS ETO Support replaces the second IZTNULL with the GROUP keyword.

# MOD IZT@MOD1

IZT@MOD1 is intended to be used for message DFS3649 MOD name.

When this MOD name is used, IMS ETO Support builds a message containing the following information:

```
IZT@MOD1 MSG TYPE=OUTPUT, . . .

SEG

MFLD NODENAME,LTH=8

MFLD LTERM,LTH=8

MFLD IMSID,LTH=8

MFLD VERSION,LTH=6

MFLD RETURNCD,LTH=6

MFLD ERRORMSG,LTH=74

MFLD TITLE,LTH=50

MFLD RESERVED,LTH=100

MSGEND
```

where:

#### **NODENAME**

Contains the VTAM NODE name of the device attempting the signon.

#### **LTERM**

Contains the LTERM name of the device attempting the signon.

#### **IMSID**

Contains the IMSID from SSCDIMID.

#### **VERSION**

Contains the IMS version.

#### **RETURNCD**

Contains the error return code from a failed signon. The code is obtained from message DFS3649A.

### **ERRORMSG**

Contains an error message that describes the error encountered during the signon failure. The text is obtained either by default from the Greeting Message exit, DFSGMSG0, or from the user-tailored error message table.

#### TITLE

Contains the data obtained from the 50-byte TITLE area populated during options data set initialization (batch utility IZTUD1I0).

Note: The 50-byte area can be subdivided and displayed in various locations on the screen.

# MOD IZT@MOD2

Mod IZT@MOD2 is intended to be used for the DFS3650 MOD name.

When this MOD name is used, IMS ETO Support builds a message containing the following information:

```
IZT@MOD2 MSG TYPE=OUTPUT,...

SEG

MFLD NODENAME,LTH=8

MFLD LTERM,LTH=8

MFLD IMSID,LTH=8

MFLD VERSION,LTH=6

MFLD USERID,LTH=8

MFLD GROUP,LTH=8

MFLD SPQB,LTH=8

MFLD TITLE,LTH=50

MSGEND
```

where:

## **NODENAME**

Contains the VTAM NODE name.

## **LTERM**

Contains the LTERM name.

#### **IMSID**

Contains the IMSID from SSCDIMID.

#### **VERSION**

Contains the IMS version.

#### **USERID**

Contains the USERID that was used in the signon.

#### **GROUP**

Contains the security GROUP that was either specified in the signon or the user's default GROUP.

## **SPOB**

Contains the SPQB name (user control block).

#### TITLE

Contains the data obtained from the 50-byte TITLE area populated during options data set initialization (batch utility IZTUD1I0).

**Note:** The 50-byte area can be subdivided and displayed in various locations on the screen.

# Mask characters to name control blocks

Mask characters provide another option for naming ETO terminal-related control blocks.

Mask characters are used as wildcard characters when finding matching names, and as merge characters when building control block names.

IMS ETO Support uses the exclamation point (! - X'5A') as the mask character. The mask character can be defined for SLU2/3270 entries in the USER/LTERM field and for PRINTER LTERM entries in the LTERM and NODE fields.

IMS ETO has two methods to create ETO terminal-related control blocks. It calls the first method the logon/signon process. This process occurs when a device attaches to IMS from a network-initiated event (such as, LOGON APPLID=IMS).

IMS ETO calls the second method the unknown destination process. This process occurs when a message is passed to IMS but IMS does not have the destination defined. This can occur when a user at a terminal enters an unknown name; it can also occur when an application program issues a CHNG/ISRT to the alternate PCB or an ISRT to the IOPCB after the ETO user has signed off of IMS.

# LOGON/SIGNON processing

During LOGON/SIGNON processing, IMS knows the device name and type before IMS ETO Support gains control.

When control is passed to IMS ETO Support, it searches the related device-type table looking for a matching LU name entry. If the device is a SLU2/3270 and it has mask characters in the USER/LTERM field of the table entry, the USER/LTERM name passed back to IMS is constructed by merging the VTAM LU name with the USER/LTERM character mask field.

The USER/LTERM name is built by doing a byte-by-byte merge of the VTAM LU name and the USER/LTERM mask from the IMS ETO Support table entry. If the mask contains a mask character (!), the relative byte position in the USER/LTERM name passed back to IMS is obtained from the VTAM LU name. Otherwise, the relative byte value is obtained from the USER/LTERM IMS ETO Support table entry.

The following figure is an example of how a USER/LTERM name is constructed when mask characters are used during LOGON/SIGNON processing.

```
VTAM LU name = SCOTCP01
ETO Support LUNAME table entry = SCO*
USER/LTERM Mask = XXX!!!!!
Result: USER/LTERM passed back to IMS = XXXTCP01
```

Figure 7. Constructing USER/LTERM name when mask used - LOGON/SIGNON processing

Because the USER/LTERM mask did not contain mask characters in the first 3 bytes, the XXX of the merged name was obtained from the mask. The rest of the USER/LTERM mask contained mask characters (!), so the relative byte position from the VTAM LU name (TCP01) was used.

The name merge continues until a blank character is reached in the mask, or until the mask contains a mask character (!) and the LU name contains a blank.

LOGON/SIGNON processing builds the ETO terminal-related control blocks from the top down, that is, first the NODE, then the USER, and then the LTERM, as shown below.

```
NODE (VTCB)
USER (SPQB)
LTERM (CNT)
```

# **Unknown destination processing**

Unknown destination processing occurs whenever there is a message for which IMS does not have a defined resource.

These messages could be caused by:

- The user misspelling a transaction name
- An application program issuing a CHNG/ISRT call to the alternate PCB
- An application program issuing an ISRT to the IOPCB for a transaction that was queued when an ETO user signed off

Even though IMS does not know what to do with these messages, they are sometimes still valid messages. IMS ETO Support determines the fate of many of these messages. If IMS ETO Support determines these messages are not valid, it generally tells IMS to discard the messages. If IMS ETO Support determines the messages are to a valid destination, IMS ETO Support tells IMS how to build the ETO terminal-related control blocks.

When IMS encounters an unknown destination, it calls IMS ETO Support, passing the unknown destination name. IMS ETO Support searches its tables looking for an LTERM name that matches the unknown destination name. If a match is found, IMS ETO Support informs IMS that the LTERM name is valid and gives IMS the name of the USER control block. If IMS ETO Support finds the LTERM match in the PRINTER LTERM table, it also passes back the data used for AUTOLOGON.

If IMS ETO Support does not find a matching LTERM, it informs IMS that the LTERM name is not valid. If IMS has the forced create bit set, IMS ETO Support cannot stop the creation of the USER/LTERM control block or the queuing of the message.

During unknown destination processing, the ETO terminal-related control blocks are built from the bottom up, that is, the LTERM is the entity that causes the control blocks to be built and it is from the LTERM that IMS ETO Support determines the USER and possibly the NODE name.

When the LTERM match is found in any table other than the PRINTER LTERM table, IMS ETO Support returns only the USER (SPQB) name to IMS. IMS then builds only the USER and LTERM control blocks, as shown is the following example:

```
USER (SPQB)
LTERM (CNT)
```

When the LTERM match is found in the PRINTER LTERM table and it has DFSINSX1=N specified, IMS ETO Support returns the NODE (VTCB) name along with the USER (SPQB) name. IMS then builds the USER and LTERM structure and attempts an AUTOLOGON for the NODE. If the AUTOLOGON is successful, the entire structure for the NODE, USER, and LTERM is built, as shown in the following example:

```
NODE (VTCB)
USER (SPQB)
LTERM (CNT)
```

If AUTOLOGON is unsuccessful, only the USER and LTERM control blocks are included in the structure; however, IMS knows of the NODE name and retries AUTOLOGON when other messages are queued to the USER/LTERM and at IMS restart.

When doing an LTERM table lookup, the mask character (!) is treated as a wildcard in the LTERM name, that is, when the LTERM table entry contains a mask character, that relative byte is considered a match.

IMS ETO Support searches its tables in the following sequence:

- USERID
- SLU1 CONSOLE
- SLUP/3600/FINANCE
- LU 6.1 (ISC)
- SLU2/3270 (looking for an exact match)
- PRINTER LTERM (looking for an exact match)
- SLU2/3270 (using mask characters as wildcards)
- PRINTER LTERM (using mask characters as wildcards)

If a matching LTERM name is found in the PRINTER LTERM table and it contains mask characters in the NODE name field of the entry, IMS ETO Support uses the mask character merge process to return the USER and NODE names to IMS.

The following example shows how a USER LTERM name is constructed when mask characters are used and the destination name is unknown:

```
IMS unknown destination name => PRT12345
ETO Support PRINTER LTERM entry => PRT!!!!
PRINTER LTERM NODE name => TRM!!!!!
Resulting control block structure:
NODE = TRM12345
USER = TRM12345
LTERM = PRT12345
```

The unknown destination name (PRT12345) is merged with the NODE character mask (TRM!!!!!) to create the actual USER/NODE structure name. If the NODE mask contains mask characters (!), the relative byte value of the LTERM name is used for building the resulting name. Otherwise, the value from the NODE mask is used.

Perhaps your environment has 7-character VTAM NODE names and your IMS applications use the NODE + P for the LTERM name for printers. The entry in the following example could be used for all of your PRINTER LTERM entries:

```
ETO Support PRINTER LTERM entry => !!!!!!P
PRINTER LTERM NODE name => !!!!!!!
```

IMS ETO Support matches this entry with any 8-character LTERM name with a suffix of P. IMS ETO Support builds the USER and NODE names from the first 7 characters of this LTERM and returns these names to IMS.

# **Duplicate LTERM names when using mask characters**

Because mask characters are used as wildcards in the LTERM name and there are different techniques for creating ETO terminal-related control block structures, it is possible an LTERM could match entries from different tables.

Since the control block structures are named differently depending on the IMS ETO Support table in which they are defined, care needs to be taken to avoid duplicate LTERMS across IMS ETO Support tables.

A new option, called LTERM LOOKUP, has been added to IZTRAN Translation Table Lookup. Use this option to verify that unknown destination processing creates the desired ETO terminal-related control block structures.

# Mask character restrictions

The following restrictions apply when using mask characters in SLU2/3270 USER/LTERM names:

#### **Restrictions:**

- There must be wildcards in the LUNAME field. The valid wildcards for LUNAME entries are asterisk (\* X'5C'), percent sign (% X'6C'), and question mark (? X'6F').
- Only one USER/LTERM definition is allowed in SLU2/3270 entries when using mask characters.

# IMS processing options set in the initialization exit (DFSINTX0)

During restart, the IMS initialization exit (DFSINTX0) lets you specify certain IMS processing characteristics.

Because IMS ETO Support provides its own copy of the initialization exit, it lets you set options in the global processing options table. Then, at IMS restart, IMS ETO Support passes these values to IMS.

The values that IMS ETO Support passes in the initialization exit routine are defined in the options data set global record. The values are as follows:

- ALTERNATE ALOT=0
- DISABLE VGR FOR ISC
- Allow SLU3 to logon as SLU1 with ETO
- Allow SLU3 to logon as 3270P with ETO

For additional information, see IMS.ADFSSMPL(DFSINTX0).

# Table search sequence

When setting processing options for ETO devices, IMS ETO Support uses the value from the first matching table entry.

For SLU2/3270 devices, you can choose from one of two table search sequences.

SLU2/3270 table search sequence 1:

- 1. User ID table
- 2. LU name table
- 3. Device options
- 4. Global options

SLU2/3270 table search sequence 2:

- 1. LU name table
- 2. User ID table
- 3. Device options
- 4. Global options

For SLUP/3600/FINANCE and SLU1 console devices, the user ID table is not searched.

Non-SLU2/3270 table search sequence:

- 1. LU name table
- 2. Device options
- 3. Global options

# **User ID suffixing (CSECT IZTSUFFX)**

The user ID suffixing option allows you to name your USER/LTERM control blocks.

This option allows a specific user ID to sign on to an IMS environment more than once. IMS ETO Support does this by adding a suffix to the user ID to create a name that is unique in that IMS environment.

**Restriction:** For a suffix to be added, the user ID must be 7 characters or less.

You can choose from one of the following techniques to determine how the names are generated:

## Technique 1.

IMS ETO Support adds a single character to the user ID to form the USER/LTERM name.

The values it adds are 0 - 9, A - Z.

## Technique 2.

IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name.

The values it appends are 000 - FFF.

## Technique 3.

For all but the initial signon, IMS ETO Support adds a single character to the user ID to form the USER/LTERM name.

The values are 1 - 9, A - Z.

For the initial signon of a user ID, no suffix is added.

# Technique 4.

For all but the initial signon, IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name.

The values it appends are 001 - FFF.

For the initial signon of a user ID, no suffix is appended.

If you selected technique 2 and the user ID is 7 characters, IMS ETO Support automatically switches to technique 1.

If you selected technique 4 and the user ID is 7 characters, IMS ETO Support automatically switches to technique 3.

If none of the IMS ETO Support-provide user ID suffixing techniques meet your requirements, you can use utility AMASPZAP to specify both the value and number of user ID suffixes.

Refer to member IZTUMOD1 in the SIZTDATA library and member IZTUSER in the SIZTSAMP library for additional information.

# **Processing VTAM userdata**

Select options to control how IMS ETO Support processes VTAM userdata.

VTAM userdata is typically used with a VTAM session manager tool. An end user will logon to the session manager and select IMS from a list of applications.

Rather than have the end user enter their user ID and password a second time, the VTAM session manager can be configured to pass the user ID and password to IMS as VTAM userdata. IMS ETO Support can be configured to accept the user ID and password, and have IMS perform the signon without the requiring the information be entered on a signon panel.

IMS ETO Support can also be configured to accept specific signon and signon-completed MFS screen names, as well as a DFS3650 transaction replacement name as part of the VTAM userdata.

You can instruct IMS ETO Support to inform how VTAM userdata is to be processed. The following options are available:

· Delete userdata

- · Pass VTAM userdata to IMS unchanged
- · Have IMS ETO Support process userdata

When VTAM userdata is processed by IMS ETO Support, it falls into one of the following categories:

- Data used to process logon/signon and build IMS control blocks.
- Data passed to an application program (if DFS3650 transaction replacement is used)

# Data used to process logon/signon and build IMS control blocks

When IMS ETO Support is used to process VTAM userdata, it can extract information such as: node name, user ID, password, default DFS3649 or DFS3650 MFS format names, and DFS3650I transaction replacement name.

Any VTAM userdata that is not extracted for these purposes can be passed to an application program if DFS3650 transaction replacement is used.

All IMS ETO Support userdata overrides can be extracted based upon offset within the userdata, or by a preceding keyword value.

You can control whether IMS ETO support should use VTAM userdata for SLU2/3270 static and/or dynamic devices by specifying the option on the VTAM USERDATA VARIOUS OPTIONS screen.

If IMS ETO Support is configured to process VTAM userdata, any values obtained from the userdata will override values specified in the IMS ETO Support options data set.

# **Determining node name from VTAM userdata**

VTAM userdata can be used to change the name of the node used in the IMS session. This option is typically used for devices logging on to IMS from session managers.

IMS ETO Support can be configured to search VTAM userdata for node name overrides based upon preceding keyword values, or by offset within the userdata.

# Node name inclusion list

IMS ETO Support can use an inclusion list to limit the node names for which it processes VTAM userdata.

You can specify up to 8 node name prefixes that IMS ETO Support uses to limit the scope of nodes for which it processes VTAM userdata. If there are any entries in the NODE NAME INCLUSION LIST, only node names that match an entry are eligible for VTAM userdata processing.

To allow IMS ETO Support to process VTAM userdata for all nodes, make sure there are no entries in the NODE NAME INCLUSION LIST.

# **VTAM userdata syntax**

IMS ETO Support requires one or more blank characters between VTAM userdata fields.

# Open Transaction Manager Access (OTMA) options

Open Transaction Manager Access (OTMA) options is a transaction-based, connectionless client/server protocol. Its implementation is specific to IMS in a sysplex environment.

OTMA is designed to be a high-performance comprehensive protocol that allows clients (z/OS applications) to submit transactions to IMS or issue IMS commands and receive output from IMS application programs and from IMS itself.

## **OTMA** destination table

IMS ETO Support provides a table of destination names that can be used to route messages to OTMA clients.

If the destination of the CHNG call is found in IMS ETO Support's OTMA destination table, IMS ETO Support's OTMA exits will cause the message to be routed to the specified OTMA client.

## **OTMA** user data

OTMA clients, such as MQSeries® and IMS Connect, require routing information be passed along with the application message.

At IMS restart, the IMS ETO Support Partner Product user exit sets an intercept for OTMA User Data Formatting user exit (DFSYDRU0).

IMS ETO Support provides macros that are used to build the OTMA client routing information for MQSeries and IMS Connect clients. After assembling and binding the macro, it must reside in a LOADLIB that is included in the IMS control region JCL as ddname IZTUDATA.

Additional macro information can be found in the following members:

- Member \$IZTMQ1 in the SIZTMACS library MQSeries user data macro
- Member IZTMQ1 in the SIZTSAMP library JCL to assemble/bind MQSeries user data macro
- Member \$IZTIC1 in the SIZTMACS library IMS Connect user data macro
- Member IZTIC1 in the SIZTSAMP library JCL to assemble/bind IMS Connect user data macro

# **OTMA pattern descriptor (OPD)**

OTMA member names can be explicitly defined, or the name can refer to an OTMA pattern descriptor (OPD) name.

OTMA pattern descriptors are used to build the member name dynamically by combining literals and variables.

# **Creating dynamic LTERM (printers and remote CNTs)**

When an attempt is made to insert a message to an unknown LTERM, IMS ETO Support decides if IMS should allow the LTERM to be created. One of the tables IMS ETO Support uses for this decision is the LTERM NAMES table.

When an unknown LTERM name is found in the LTERM NAMES table, IMS ETO Support informs IMS to create the LTERM, and assigns the LTERM to either a printer or an MSNAME (remote CNT).

When an LTERM entry is added to the LTERM NAMES table and it is assigned to a printer, IMS ETO Support adds two records to the options data set: one record for the LTERM entry, and one record for the printer NODE entry. Because many LTERMs can be assigned to a single printer NODE, adding another LTERM that points to the same printer NODE adds only an LTERM record, but does not add another printer NODE record to the options data set.

When using online transaction IZTRAN to delete an LTERM that is assigned to a printer NODE, the associated printer NODE record is not deleted from the options data set. This could potentially leave orphan printer NODE records in the options data set. These records are never loaded into the E/CSA tables, and incur no overhead other than having an additional record in the options data set.

The batch update utility (IZTUD1U0) recognizes when an orphan printer NODE cleanup is required, and performs the cleanup automatically. The batch update utility performs the orphan printer NODE record cleanup when it is required, regardless of the control statement input provided to the utility.

# **Remapping printer LTERM names**

IMS ETO Support provides the REPLACEMENT STRING option for each printer LTERM entry. By using this option, you can enable IMS ETO Support to intercept DL/I calls to IMS and to redirect only the messages for certain LTERMs to different LTERMs. To avoid degrading the performance, this function is enabled at IMS startup only if a value is specified in the REPLACEMENT STRING field for one or more printer LTERM entries.

If this function is enabled at IMS startup, message IZT1017I is issued in the IMS control region. If none of the printer LTERM entries has a value specified for the REPLACEMENT STRING field, this function is disabled at IMS startup. If this function is disabled at IMS startup, message IZT1017I is not issued in the IMS control region. In this case, messages are not redirected even if you specify a REPLACEMENT STRING value while IMS is running.

As the mask character for REPLACEMENT STRING, you can use the exclamation point (! - X'5A'). If mask characters are included in the REPLACEMENT STRING value, the values of the corresponding bytes in the original LTERM name will be used in the remapped LTERM name. For example, if the REPLACEMENT STRING value of "PRT!!!" is specified for LTERM "TRM001", messages originally addressed to TRM001 will be remapped to PRT001. If no mask characters are included, the REPLACEMENT STRING value will be used as the remapped LTERM name.

When IMS ETO Support searches the printer LTERM table during unknown destination processing, the remapped LTERM name is used for a printer LTERM entry for which a REPLACEMENT STRING value was specified; the original LTERM name is not searched for.

If you do not want to replace the name of a printer LTERM entry, you do not need to specify any REPLACEMENT STRING value.

There is no point in specifying the same value as the original LTERM name or the exclamation point (!-X'5A') for all digits.

The following cases might result in an unexpected result because IMS ETO Support cannot determine which printer LTERM entry value to use during printer LTERM creation:

- · If the remapped printer LTERM name overlaps with another printer LTERM entry name
- If the remapped printer LTERM name overlaps with another remapped printer LTERM name

# Preventing control block creation for specific LTERM names

When using mask characters as wildcards in the LTERM NAMES table, there might be cases where a name matches the mask character pattern but you do not want the LTERM to be created. To prevent an unwanted LTERM from being created, define the LTERM name in the LTERM NAME table and specify IZTFAIL in the MSNAME field.

# Managing the IMS dependent region security environment (DFSBSEX0)

IMS provides an optional user exit (DFSBSEX0) that is used to determine how to build the security environment in an IMS dependent region for certain call types. IMS ETO Support provides a version of this exit that eliminates the need to code and maintain your own exit.

IMS ETO Support provides transaction and PSB tables that you can use to specify the return code values that will be returned to IMS from the Build Security Environment user exit (IZTBSEXZ) supplied by IMS ETO Support. IMS ETO Support searches the transaction table for a matching entry, and if found, it will use that entry to set the return code. If a matching transaction table entry is not found, IMS ETO Support will search the PSB table. If no matching entry is found in either table, a return code of 0 will be returned to IMS.

Wildcards are allowed in the transaction and PSB table entries.

To implement the IMS ETO Support version of the IMS Build Security Environment user exit, you need to:

- Define the IZTBSEXZ exit routine for the BSEX exit routine type in the EXITDEF parameter in the USER EXITS section of the DFSDFxxx PROCLIB member.
- Restart IMS or issue the IMS type-2 command **REFRESH USEREXIT TYPE(BSEX)** to refresh the BSEX user exit.
- Create entries in the IMS ETO Support options data set and specify the return code value to be used. See the DFSBSEX0 topic in *IMS Exit Routines* to find out what return code values are valid.

# **Transaction options**

You can use the following group of options to configure transaction properties of IMS ETO Support operation.

## **Topics:**

- "IMS dynamic transactions option" on page 68
- "Enhanced dynamic transaction processing" on page 68
- "DFS3650I transaction replacement" on page 69
- "Abend message routing options" on page 69

# **IMS dynamic transactions option**

The IMS dynamic transactions option is valid only when operating in an IMS shared message queue environment using the IMS Resource Manager (RM).

The IMS dynamic transactions option can be used in IMS environments that use the front-end/back-end approach. With this approach, transactions are defined in the back-end system and users log on to the front-end system. To avoid the need to keep IMS transaction definitions synchronized between regions, you can use the dynamic transactions option.

When a back-end system is started, it registers all of its transactions to the IMS Resource Manager (RM). Then, when a message arrives on the front-end IMS system to an unknown destination, IMS ETO Support sees that the destination is really defined as a transaction in the back-end IMS. If the IMS ETO Support dynamic transactions option is active, it requests that IMS dynamically build the transaction in the front-end IMS.

If the dynamic transactions option is set to N, IMS ETO Support prevents the transaction from being built in the IMS region.

If the dynamic transactions option is set to Y, IMS ETO Support instructs IMS to create the transaction dynamically (provided it is known as a transaction to the IMS Resource Manager (RM)).

# **Enhanced dynamic transaction processing**

Enhanced dynamic transaction processing is optional, and it is valid only when the IMS dynamic transaction option is set to Y.

This process helps ensure that dynamically built transactions are defined in the same way in the different members of the sysplex. When the dynamic transactions option is on but enhanced dynamic transaction processing is not active, IMS ETO Support informs IMS that the transaction should be built using the default values.

At restart time for the front-end IMS, IMS ETO Support enhanced dynamic transaction processing builds a table containing all of the transaction names defined in the back-end system. This table is then used by the front-end IMS system to set parameters for the dynamically created transaction.

IMS ETO Support uses its version of the IMS Destination Creation user exit (DFSINSX0) to return the parameter values to IMS. See IMS.ADFSSMPL (DFSINSX0) for a list of the parameters IMS ETO Support passes to IMS for enhanced dynamic transaction creation.

The enhanced dynamic transaction table is built during IMS restart if the IZTMBLKS DD statement is present in the IMS control region JCL. The required format for this DD statement is shown in the following figure:

//IZTMBLKS DD DISP=SHR,DSN=modblks(member)

Figure 8. IZTMBLKS DD statement format

#### where:

• modblks is the name of the back-end IMS region that contains the desired transaction definitions.

• member is the member name of the modblks data set that contains the transaction definitions. The member name must be DFSSMB0x (where x is the value from the SUFFIX parameter of the IMSGEN macro in the back-end IMS sysgen).

# **Example**

//IZTMBLKS DD DISP=SHR, DSN=IMS.MODBLKS(DFSSMB01)

# **DFS3650I** transaction replacement

IMS ETO Support provides an option to input an IMS transaction and discard the signon complete (DFS3650I) message. This option is valid only for SLU2/3270 devices.

DFS3650I transaction replacement can be specified in several ways:

- SLU2/3270 device global level
- · LU name specific level
- · Specific user ID

You can activate DFS3650I transaction replacement by specifying the TRX NAME field using the online update program (IZTRAN) or by specifying the TRX3650= parameter using the batch update utility (IZTUD1U0). Additionally, IMS ETO Support can be configured to extract the DFS3650I Transaction Replacement name from the VTAM userdata.

# **Building the IMS transaction message**

When DFS3650 transaction replacement builds an IMS transaction message, it consists of the IMS transaction code followed by a single blank.

Transaction text descriptor (TTD) can be used to include useful IMS information in the transaction message. TTD is read from an IMS PROCLIB member (TTDimsid) at IMS initialization.

# Abend message routing options

IMS ETO Support provides an IMS Non-Discardable Messages exit (DFSNDMX0) to handle the routing of messages for transaction abends.

IMS ETO Support can process messages for transaction abends based on the message origin name (LTERM/TPIPE/LUNAME), transaction name, or when the abend occurs prior to the application program issuing a GU to the IOPCB. Additionally, the abend code can be specified to refine the table search.

# Abend message routing options

IMS ETO Support provides the following options for routing of messages that cause an abend:

· IMS default

IMS determines how the message is to be processed.

· Discard the input message

The message that caused the transaction abend is removed from the message queue.

• Queue the message to the suspend queue

The message is moved to the suspend queue.

• Requeue the input message

The message is requeued to the message queue.

Oueue to new destination

The message is queued to another transaction.

# Additional abend processing options

IMS ETO Support provides the following additional options for abend processing:

• Suppress DFS555I

Specify whether IMS message DFS555I should be suppressed from the device where the abended transaction originated.

WTO IZT9201I

Specify whether IMS ETO Support should issue a WTO for message IZT9201I when it has suppressed IMS message DFS555I.

• NO USTOP TRAN/PSB

Specify the state of the IMS TRAN/PSB following an application program abend. For valid states, see "Transaction abend update panel" on page 139.

# Abend processing before a GU is issued to the IOPCB

By creating member \*NOGU in the transaction abend table, IMS ETO Support can be configured to process messages that cause an abend prior to the application program issuing a Get Unique (GU) call to the IOPCB.

When member \*NOGU is found in the transaction abend table, IMS ETO Support checks to see if the application program issued a GU call to the IOPCB. If the call is not issued, the options specified in member \*NOGU are used to determine the disposition of the message.

Additionally, the abend code can be specified on the \*NOGU entry to refine the table search.

# Abend table search sequence

IMS ETO Support provides two tables that are used for abend message routing:

- Message origin (LTERM/TPIPE/LUNAME) table
- · Transaction name table

When a transaction abend occurs, IMS ETO Support looks for entry \*NOGU in the transaction abend table. If entry \*NOGU is found, IMS ETO Support checks to see if the application program issued a GU call to the IOPCB.

If entry \*NOGU is found, and the application did not issue a GU call to the IOPCB, IMS ETO Support uses the \*NOGU entry to determine message disposition.

If entry \*NOGU was not found, or a GU call was made to the IOPCB, IMS ETO Support searches the message origin (LTERM/TPIPE/LUNAME) and transaction abend tables.

The following table illustrates the search sequence:

- 1. \*NOGU / abend code (and no GU call issued to the IOPCB)
- 2. \*NOGU / no abend code (and no GU call issued to the IOPCB)
- 3. Exact match on LTERM / abend code
- 4. Wildcard match on LTERM / abend code
- 5. Exact match on LTERM name / no abend code
- 6. Wildcard match on LTERM name / no abend code
- 7. Exact match on transaction / abend code
- 8. Wildcard match on transaction / abend code
- 9. Exact match on transaction / no abend code
- 10. Wildcard match on transaction / no abend code

# Part 3. Using IMS ETO Support

The topics in this section provide you with information on using the features and functions of IMS ETO Support.

# **Topics:**

- Chapter 6, "Customizing options," on page 73
- Chapter 7, "Test facilities: Translation table lookup," on page 149
- Chapter 8, "Online dynamic table refresh options," on page 157
- Chapter 9, "Reloading IMS exits," on page 161

# **Chapter 6. Customizing options**

This section describes the customize options available on the Primary Menu.

## **Topics:**

- "IMS ETO Support Primary Menu panel" on page 73
- "Setting global options" on page 75
- "Setting device-specific options" on page 87
- "Setting LUNAME-specific options" on page 100
- "Setting user ID types" on page 112
- · "Setting security options" on page 118
- "Protecting specific command+keyword combinations" on page 124
- "Defining security profiles for command authorization" on page 126
- "Adding, changing, and deleting LTERM names" on page 129
- "Listing return codes for message DFS3649A" on page 131
- "Miscellaneous Menu" on page 132

#### Note:

When viewing a panel that lists IMS ETO Support options data set entries, if the name you want does not appear in the list:

- Press PF8 (or type F on the command line and press Enter) to scroll forward (down).
- Press PF7 (or type B on the command line and press Enter) to scroll backward (up).
- Type the first few characters or the entire name on the START command line to scroll through the list to find the name.

# **IMS ETO Support Primary Menu panel**

The IMS ETO Support user interface provides a Primary Menu panel as the starting point for all product options and tasks.

To launch IMS ETO Support, log on and sign on to IMS.

On a blank screen, type IZTRAN and press Enter.

**Note:** If your IMS system was generated with the BLKREQD parameter on the COMM macro, you must type a blank character after IZTRAN, and then press Enter.

The Primary Menu panel is displayed.

```
T7TRAN
                                IMS ETO-SUPPORT
                                                                      IMSID: IMS0
                               VERSION - 03.02.00
PRIMARY MENU
COMMAND ===>
                                                                      RELEASE: 15.1.0
  CUSTOMIZE OPTIONS
                                              VIEW OPTIONS
    A - GLOBAL OPTIONS
                                              1 - GLOBAL OPTIONS
    B - DEVICE SPECIFIC OPTIONS
                                                2 - DEVICE SPECIFIC OPTIONS
                                               3 - LU NAME SPECIFIC OPTIONS
    C - LU NAME SPECIFIC OPTIONS
    D - USER SPECIFIC OPTIONS
                                               4 - USER SPECIFIC OPTIONS
    E - SECURITY OPTIONS
                                                5 - SECURITY OPTIONS
    F - COMMAND+KEYWORD ACTIVATION
                                              6 - COMMAND+KEYWORD ACTIVATION
                                               7 - COMMAND PROFILE ENTRIES
    G - COMMAND PROFILE ENTRIES
                                              8 - LTERM NAMES (PRINTER OR RCNT)
    H - LTERM NAMES (PRINTER OR RCNT)

I - DTS3649A ERROR DETTANS

AMERICAN APPLE AND DETTANS
                                              9 - DFS3649A ERROR MESSAGES
0 - MISC TABLES AND OPTIONS
    J - MISC TABLE AND OPTIONS
  TEST FACILITIES
                                              RELOAD FUNCTION
    T - TRANSLATION TABLE LOOKUP
                                               R - RELOAD EXITS/MATRIX
  TABLE REFRESH OPTIONS
    Y - CUSTOMIZE REFRESH ROUTING DATA
    Z - PERFORM TABLE REFRESH
```

Figure 9. Primary Menu panel

In the panel layout, the first line displays the name of the transaction, product, and IMS region where the transaction is scheduled.

The 2nd line displays the command line (on which you can launch IMS ETO Support options), the version of the product, and the release of IMS.

The 3rd line displays the name of the screen you are currently viewing.

You can set defaults for various options from this panel. To use the panel, select the appropriate option from the following list:

# A - GLOBAL OPTIONS

Used to set default options for all users.

## **B - DEVICE SPECIFIC OPTIONS**

Used to set default options based on the type of device users sign on to.

# **C-LU NAME SPECIFIC OPTIONS**

Used to set default options for the LUNAME users sign on to.

## **D-USER SPECIFIC OPTIONS**

Used to set options specific to a user ID.

# **E - SECURITY OPTIONS**

Used to set security for commands (and to specify use of enhanced command+keyword security).

#### F - COMMAND+KEYWORD ACTIVATION

Used to identify command+keyword combinations that is verified using the enhanced command+keyword option.

## **G - COMMAND PROFILE ENTRIES**

Used to authorize predefined command profiles to commands or command + keyword combinations.

#### H - LTERM NAMES (PRINTER OR RCNT)

Used to define LTERMs that create printers.

#### I - DFS3649A ERROR MESSAGES

Used to customize error text returned by IMS when an invalid IMS signon is attempted.

#### J - MISC TABLES AND OPTIONS

Used to customize various tables and options. This option displays another menu of available table and option updates.

# **R - RELOAD EXITS/MATRIX**

Used to load an IMS exit for the first time, or load a new copy of a previously loaded IMS exit.

#### T - TRANSLATION TABLE LOOKUP

Used to view the options you have chosen for a specific user ID and LUNAME.

Can also be used to list control block names for specific LTERMs.

#### Y - CUSTOMIZE REFRESH ROUTING DATA

Used to add APPC/MVS symbolic destination names for refresh routing.

#### **Z - PERFORM TABLE REFRESH**

Used to refresh E/CSA tables with new or existing options.

**Note:** The **VIEW OPTIONS** menu items on the right hand side of the panel let you view the current E/CSA tables. The corresponding **CUSTOMIZE OPTIONS** menu items on the left hand side of the panel let you view the IMS ETO Support options data set.

# **Setting global options**

The Global Options panel is used to specify whether you want to access global signon options or global processing options.

This panel is displayed if you choose option **A** on the Primary Menu.

```
IZTRAN
COMMAND ===>

IMS ETO-SUPPORT
VERSION - 03.02.00
GLOBAL OPTIONS MENU

OPTIONS

1 - GLOBAL SIGNON OPTIONS
2 - GLOBAL PROCESSING OPTIONS
3 - VTAM USERDATA - OPTIONS FOR NODE NAME
4 - VTAM USERDATA - VARIOUS OPTIONS
5 - OTMA OPTIONS
```

Figure 10. Global Options panel

#### **Topics:**

- "Setting global signon options" on page 75
- "Setting global processing options" on page 79
- "Setting VTAM user data node options" on page 83
- "Setting VTAM user data various options" on page 84
- · "Setting OTMA options" on page 86

# Setting global signon options

IMS signon panel and signon status panel options must be specified at the global options level. Specific terminal names can have these options overridden by specifying an entry in the SLU2/3270 table.

If a global option is set to a value that is not supported by either the SLU1 console or the SLUP/3600/FINANCE devices, and there is not a matching device default or LUNAME table entry, IMS ETO Support uses a default value.

For example, if the Global option is set to AUTO SIGNON and there is not a device default or matching LUNAME entry, IMS ETO Support uses a default processing option for the LOGON PROCESS. The following list shows the GLOBAL options that are invalid for SLU1 console and SLUP/3600/FINANCE devices, and the IMS ETO Support default that is used.

- Process LOGON PROCESS
  - Invalid Auto Signon
  - Default ETO-SUPPORT

- Process DFS3650
  - Invalid USER MOD
  - Default IMS DEFAULT
- Process LTERM/USER NAMING OPTIONS
  - Invalid IMS DEFAULT
  - Invalid SUFFIXED USERID
  - Default LTERM = NODE NAME

To ensure that the proper options are used, consider creating the device default entry for both SLU1 console and SLUP/3600/FINANCE devices.

This panel is displayed if you choose option 1 on the Global Options menu panel.

```
IZTRAN
                                    IMS ETO-SUPPORT
                                                                             IMSID:
                                                                                       IMS0
COMMAND ===>
                                  VERSION - 03.02.00
                                                                             RELEASE: 14.1.0
                                GLOBAL SIGNON OPTIONS
LOGON PROCESS
                            DFS3649
                                                            DFS3650
                                                            1 1 - IMS DEFAULT
2 - DFS058 MESSAGE
   1 - ETO-SUPPORT 1
2 - USER DFSLGNX1
                            1 1 - IMS DEFAULT
                                 2 - DFS2002 MESSAGE
                               2 - DFS2002 MESSAGE
3 - ETO-SUPPORT *
    3 - AUTO SIGNON
                                                                 3 - BLANK SCREEN
                                4 - USER DFSGMSG1
                                                                4 - USER DFSGMSG1
LTERM/USER NAMING OPTIONS: 5 - USER MOD
                                                                5 - USER MOD
    1 - IMS DEFAULT
2 - NODE=USER=LTERM
                                                                6 - DFS2002 MESSAGE
                             * _:MFSPPDEF
W:PASSWORD
                                      :MFSPPDEF
    3 - USERID FROM TABLE P:PASSPHRASE
4 - SUFFIXED USERID IDLE NODE TIMEOUT: (BLANKS, 0000, 0010-1440)
                                         ASOT 0000
ALOT 0015
    5 - USER DFSSGNX1
6 - APPEND "@" TO USERID
```

Figure 11. Global Signon Options panel

# Global signon options reference

# **LOGON PROCESS options**

#### 1 - ETO-SUPPORT

This option is the standard IMS ETO Support logon process. In environments with forced signon processing (user ID verification), this option should be used. If there are selected terminals that do not require signon, these devices can be excluded by terminal name in the LUNAME specific options

# 2 - USER DFSLGNX1

Use this option if you want to supply your own DFSLGNX0 (Logon) exit routine. You must change the 0 in the exit name to numeric 1 to access your exit (DFSLGNX1). When this option is selected, user exit DFSLGNX1 is called instead of the IMS ETO Support Logon exit DFSLGNX0. This means that IMS ETO Support does not set any of the values that it normally provides in its Logon exit. These include ALOT/ASOT overrides. Note that the ASOT value can also be provided in the Signon exit (IMS ETO Support's Signon exit, DFSSGNX1, or DFSSGNX2).

#### 3 - AUTO SIGNON

The auto signon option lets users log on to IMS without specifying a user ID or password. In environments that do not currently use IMS signon processing, this option allows transparent implementation of ETO. Keep in mind, however, that all terminals in your network have access to IMS when ETO is implemented. This option is, therefore, not recommended as a global default. Instead, consider using the IMS ETO Support option as the global default, and defining specific terminal names that do not require signon processing in the LUNAME specific options.

## **DFS3649 options**

#### 1 - IMS DEFAULT

Use this option to receive the standard DFS3649A message.

#### 2 - DFS2002 MESSAGE

Use this option to receive message DFS2002.

#### 3 - ETO-SUPPORT

Use this option to receive the IMS ETO Support standard signon panel.

## **PASSSIZE**

This suboption is located on the right side of '3 - ETO-SUPPORT \*'. Use this suboption to specify which panel to receive when signing on.

P

Use this option to receive the IMS ETO Support passphrase signon panel. Member IZTSIGNP in SIZTDATA contains the MFS source for this option.

W

Use this option to receive the IMS ETO Support password signon panel. Member IZTSIGNO in SIZTDATA contains the MFS source for this option.

If this suboption is not specified, the signon panel is determined by the MFSPPDEF parameter of the DFSDCxxx PROCLIB member.

MFSPPDEF=Y: IMS ETO Support passphrase signon panel is to be used MFSPPDEF=N: IMS ETO Support password signon panel is to be used

#### 4 - USER DFSGMSG1

With this option, you can supply your own DFSGMSGO (Greeting Messages) exit. You must change the 0 in the exit name to numeric 1 to access your exit (DFSGMSG1).

#### 5 - USER MOD

Use this option to supply your own MFS mod name.

## **DFS3650** options

#### 1 - IMS DEFAULT

Use this option to receive the standard DFS3650A (signon status) message after signon.

#### 2 - DFS058 MESSAGE

Use this option to receive message DFS058 after signon.

#### 3 - BLANK SCREEN

Use this option to send a 1-byte blank (x'40') message to IMS MOD DFSMO2.

#### 4 - USER DFSGMSG1

Use this option to invoke your own DFSGMSGO (Greeting Messages) exit after signon. You must change the 0 in the exit name to numeric 1 to access your exit (DFSGMSG1).

#### 5 - USER MOD

Use this option to supply your own MFS mod name after signon.

You can specify whether this MFS mod receives the DFS3650I message from IMS. Set this option with the "DFS3650 WHEN USER MOD USED" option in IZTRAN or the UMFS3650=Y | N in the IZTUD1U0 batch update utility.

## 6 - DFS2002 MESSAGE

Use this option to receive message DFS2002.

# LTERM/USER NAMING OPTIONS

#### 1 - IMS DEFAULT

Use this option to create a USER and LTERM using the standard IMS ETO naming structure (USERID=USER=LTERM).

#### 2 - NODE=USER=LTERM

Use this option to create a USER and LTERM with the same name as the NODE.

#### 3 - USERID FROM TABLE

Use this option to specify the USER/LTERM name that is obtained from a LU name or user specific record. If a matching LU name or User record is not found, the USER/LTERM name is created using the IMS DEFAULT method (option **1**).

#### 4 - SUFFIXED USERID

Use this option to specify that the USER/LTERM is to be created by appending a suffix to the user ID. You can choose from one of the following techniques to determine how the names are generated:

# Technique 1.

IMS ETO Support adds a single character to the user ID to form the USER/LTERM name. The values it adds are 0 - 9, A - Z.

## Technique 2.

IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name. The values it appends are 000 - FFF.

# Technique 3.

For all but the initial signon, IMS ETO Support adds a single character to the user ID to form the USER/LTERM name. The values are 1 - 9, A - Z. For the initial signon of a user ID, no suffix is added.

# Technique 4.

For all but the initial signon, IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name. The values it appends are 001 - FFF. For the initial signon of a user ID, no suffix is appended.

If you selected technique 2 and the user ID is 7 characters, IMS ETO Support automatically switches to technique 1.

If you selected technique 4 and the user ID is 7 characters, IMS ETO Support automatically switches to technique 3.

When this option is used, IMS ETO Support returns to IMS the first available user ID and suffix name.

If the same user ID attempts to sign on at the same time, IMS ETO Support may return the same suffix data to IMS. If this happens, the second attempt to sign on with the same user ID receives an error message indicating that the USER/LTERM is already in use. In this case, the signon needs to be tried again.

**Note:** You can specify both the number and value of the suffixes that IMS ETO Support appends to the user ID (refer to AIZTSAMP members IZTUMOD1 and IZTUSER for additional information).

# 5 - USER DFSSGNX1

Use this option to create your own customized DFSSGNX0 (Sign-On) exit. You must change the 0 in the exit name to numeric 1 to access your exit (DFSSGNX1).

# 6 - APPEND @ TO USERID

Use this option to specify that the USER/LTERM is to be created by appending an at sign (@) character to the user ID. In order for an at sign (@) character to be appended, the user ID must be less than 8 characters long. If this option is selected and an 8-character user ID is used to signon to IMS, the 8-character user ID is used for the user name and LTERM name.

# **IDLE NODE TIMEOUT options**

IMS provides for terminal timeout in an ETO environment. IMS ETO Support lets you specify autosignoff and auto-logoff times at a global level, which can be overridden for specific user IDs and/or terminal names.

The choices are:

# **ASOT**

Use this option to specify an auto signoff time.

# **ALOT**

Use this option to specify an auto logoff time.

After you have entered all your global options, press Enter. A confirmation message appears indicating that the global options have been stored.

Press PF3/PF15 to return to the Primary Menu.

# Setting global processing options

This topic discusses setting global processing options.

This panel is displayed if you choose option 2 on the Global Options menu panel.

```
IMS ETO-SUPPORT
TZTRAN
                                                                              TMSTD:
                                                                                         TMS0
                                                                              RELEASE: 15.1.0
COMMAND ===>
                                   VERSION - 03.02.00
                              GLOBAL PROCESSING OPTIONS
ETO/SUPPORT OPTIONS
                                                       TABLE SEARCH SEQUENCE
  PROCESS STATIC TERMINALS SIGNOFF CLEANUP
                                                       1 1 - USERID BEFORE LUNAME
2 - LUNAME BEFORE USERID
                                          (Y/N)
                                          (Y/N)
  --- BYPASS DEQ (STATIC) N
--- BYPASS DEQ (DYNAMIC) N
ALLOW DYNAMIC TRANSACTIONS N
                                          (Y/N)
                                          (Y/N)
                                                       USERID SUFFIXING TECHNIQUE
                                                       4 1 - 0-9, A-Z
2 - 000-FFF
                                          (Y/N)
  DFS3650 WHEN USER MOD USED
                                          (Y/N)
                                                            3 - BLANK, 1-9, A-Z
4 - BLANK, 001-FFF
  SIGNON FAILURE LOG REC ID D5
                                          (HEX)
DFSINTXO OPTIONS
                                                       SYSPLEX TERMINAL MANAGEMENT (V8)
                                                                    0 - NONE
1 - GLOBAL
  ALTERNATE ALOT=0
                                          (Y/N)
                                                       SRMDEF
  DISABLE VGR FOR ISC
                                          (Y/N)
  DISABLE STATIC ISC SHR
                                                                     2 - LOCAL
                                          (Y/N)
  LU03 LOGON OPTIONS:
                                                       FAST PATH RECOVERY
                                                                                          (Y/N)
  0 0 - NO LU03 OVERRIDE
1 - LU03 LOGON AS SLU1 PRINTER
                                                       CONVERSATION RECOVERY
                                                                                          (Y/N)
                                                       STSN RECOVERY
                                                                                          (Y/N)
       2 - LU03 LOGON AS 3270P
                                                       ALLOW SIGNON W/RM AFFIN
```

Figure 12. Global Processing Options panel

# **Static Terminal Support**

**Note:** IMS ETO Support does not perform any processing for static SLU1 console, SLUP/3600/FINANCE devices, or LU 6.1 (ISC) sessions.

When Process Static Terminals is set to N, IMS ETO Support does not perform any processing on statically SYSGENed SLU2/3270 terminals during logon/signon. However, it does call any user version (exit suffixed with a 1) of an ETO exit when a logon/signon occurs. The Command Security Options determine how IMS ETO Support handles command authorization for static terminals.

When Process Static Terminals is set to Y, IMS ETO Support performs the same logon/signon overrides for statically SYSGENed SLU2/3270 terminals as it does for dynamically generated terminals where applicable.

The applicable overrides are as follows:

- Signoff cleanup (based on the signoff cleanup global option)
- · Process DFS3649 screens
- Process DFS3650 screens

# **IMS dynamic transactions option**

The IMS dynamic transactions option is valid only when operating in an IMS shared message queue environment using the IMS Resource Manager (RM).

This option can be used in IMS environments that use the front-end/back-end approach. With this approach, transactions are defined in the back-end system and users log on to the front-end system. To avoid the need to keep IMS transaction definitions synchronized between regions, you can use the dynamic transactions option.

When a back-end system is started, it registers all of its transactions to the IMS Resource Manager (RM). Then, when a message arrives on the front-end IMS system to an unknown destination, IMS ETO Support sees that the destination is really defined as a transaction in the back-end IMS. If the IMS ETO

Support dynamic transactions option is active, it requests that IMS dynamically build the transaction in the front-end IMS.

If the dynamic transactions option is set to N, IMS ETO Support prevents the transaction from being built in the IMS region.

If the dynamic transactions option is set to Y, IMS ETO Support instructs IMS to create the transaction dynamically (provided it is known as a transaction to the IMS Resource Manager (RM)).

# **Global processing options reference**

## **ETO/SUPPORT OPTIONS**

#### **PROCESS STATIC TERMINALS**

See "Static terminal support" on page 56 for a description of this option.

Υ

This activates static terminal processing.

N

This inactivates static terminal processing.

## **SIGNOFF CLEANUP**

See "Signoff cleanup" on page 45 for a description of this option.

Υ

This causes cleanup activities to be performed at user signoff.

N

This inactivates cleanup activities at user signoff.

# **BYPASS DEQ (STATIC)**

Specify whether messages are dequeued for static SLU2/3270 devices as part of SIGNOFF CLEANUP, provided SIGNOFF CLEANUP and PROCESS STATIC TERMINALS are both active.

Υ

Messages are not dequeued for static SLU2/3270 devices during SIGNOFF CLEANUP processing.

Ν

Messages are dequeued for static SLU2/3270 devices during SIGNOFF CLEANUP processing, provided SIGNOFF CLEANUP and PROCESS STATAIC TERMINALS are both specified as Y.

## **BYPASS DEQ (DYNAMIC)**

Specify whether messages are dequeued for dynamic SLU2/3270 devices as part of SIGNOFF CLEANUP, provided SIGNOFF CLEANUP is active.

Υ

Messages are not dequeued for dynamic SLU2/3270 devices during SIGNOFF CLEANUP processing.

N

Messages are dequeued for dynamic SLU2/3270 devices during SIGNOFF CLEANUP processing, provided SIGNOFF CLEANUP is specified as Y.

## **ALLOW DYNAMIC TRANSACTIONS**

See "IMS dynamic transactions option" on page 68 for a description of this option.

Υ

An unknown destination is to create an IMS transaction, provided the destination is known as an IMS transaction to the IMS Resource Manager (RM).

Ν

An unknown destination is not to create an IMS transaction.

#### **DFS3650 WHEN USER MOD USED**

Use this option to specify whether the DFS3650I message is sent to SLU2/3270 devices that use their own USER MOD in place of DFS3650 of IMS.

Υ

IMS sends message DFS3650I to the requested MFS mod name.

N

IMS does not send message DFS3650I to the requested MFS mod name.

#### **SIGNON FAILURE LOG REC ID**

Use this option to specify whether IMS ETO Support creates an IMS log record for certain signon failures. This option is used when a signon fails because the SLU2/3270 - USER RECORD REQUIRED FOR SIGNON option is set to Y and no record exists in the IMS ETO Support User table for the user ID attempting signon.

IMS ETO Support creates the log record when all of the following conditions are true:

- SLU2/3270 USER RECORD REQUIRED FOR SIGNON = Y
- SIGNON FAILURE LOG REC ID = a valid hexadecimal value

IMS ETO Support does not create a log record if either of the above conditions is untrue.

If SIGNON FAILURE LOG REC ID is specified, this field must contain two characters that can be converted to hexadecimal characters (for example: 0 - 9, A - F). Valid values for this field are X'D0' - X'FF'.

Following is the complete log record layout, and the IMS control block fields where the information was obtained:

```
RECLL
                                       RECORD LENGTH
         DS
               Н
RECZZ
         DS
RECID
         DS
               XL1
                                      USER SPECIFIED RECORD ID
RECFLAG1 DS
               XL1
                                      CLBFLAG1
RECFLAG2 DS
               XL1
                                      CLBFLAG2
RECFLAG3 DS
                                      CLBFLAG3
               XL1
RECDEVIC DS
               XL1
                                      CTTDEVIC
RECNODE DS
               CL8
                                      CLBNAME
RECUSER DS
               CL8
                                      USER ID
                                       RESERVED
         DS
               CL3
RECTIME DS
               AI 4
                                      TIMESTAMP
               CL24
                                       RESERVED
```

#### **DFSINTXO OPTIONS**

The following options set processing characteristics that are in effect for the entire execution of IMS. In order for changes to these options to take effect, IMS must be restarted.

# **ALTERNATE ALOT=0**

Use this option to specify how the Initialization Exit (DFSINTX0) is to set the ALTERNATE ALOT=0 option.

**Note:** This option applies only to SLU2/3270 device types, and only when ALOT=0 is also specified.

Υ

Uses the alternate ALOT=0 process. This form of ALOT=0 processing disconnects the terminal only after ASOT is reached. This should be the most common form of ALOT=0 processing.

N

Uses the standard ALOT=0 process. Unless signon data is sent in logon data, this form of ALOT=0 processing causes the terminal to be immediately disconnected at logon.

#### **DISABLE VGR FOR ISC**

Use this option to specify how the Initialization exit (DFSINTX0) is to set the ISC VTAM generic resource processing option.

Υ

This specifies that VTAM generic resource handling for ISC links is to be disabled.

N

This specifies that VTAM generic resource handling for ISC links is to be allowed.

#### **DISABLE STATIC ISC SHR**

Use this option to specify how the Initialization exit (DFSINTX0) is to set the DISABLE RESOURCE SHARING FOR STATIC ISC terminals flag.

Υ

Specifies RESOURCE SHARING for STATIC ISC terminals in an IMSPLEX environment is disabled.

Ν

Specifies RESOURCE SHARING for STATIC ISC terminals in an IMSPLEX environment is not disabled.

## **LU03 LOGON OPTIONS**

Use this option to specify how the Initialization exit routine (DFSINTX0) sets the LU03 Logon processing option.

#### 0 - NO LU03 OVERRIDE

IMS ETO Support does not set the LU03 override flag in its version of DFSINTXO.

# 1 - LU03 LOGON AS SLU1 PRINTER

IMS ETO Support sets the bit in its DFSINTX0 exit routine that informs IMS that LU03 is allowed to logon as any SLU1 printer device.

## 2 - LU03 LOGON AS 3270P

IMS ETO Support sets the bit in its DFSINTX0 exit routine that informs IMS that LU03 is allowed to logon as any 3270P device.

# **TABLE SEARCH SEQUENCE**

#### 1 - USERID BEFORE LUNAME

When using this option, the search sequence for the IMS ETO Support tables is: USERID, LUNAME, DEVICE GLOBAL, GLOBAL.

# 2 - LUNAME BEFORE USERID

When using this option, the search sequence for the IMS ETO Support tables is: LUNAME, USERID, DEVICE GLOBAL, GLOBAL.

## **USERID SUFFIXING TECHNIQUE**

**Note:** You can specify both the number and value of the suffixes that IMS ETO Support appends to the user ID (Refer to AIZTSAMP members IZTUMOD1 and IZTUSER for additional information).

# 1 - 0 to 9, A to Z

A 1-character suffix is to be appended to the user ID to create the USER/LTERM blocks.

# 2 - 000 to FFF

Up to 3 characters are to be appended to the user ID to create the USER/LTERM blocks. If the user ID is 6 bytes long, the values of the suffixes are 00 to FF. If the user ID is 7 bytes long, the values of the suffixes are 0 to 9 and A to Z.

# 3 - BLANK, 1 to 9, A to Z

For all but the initial signon, a 1-character suffix is to be appended to the user ID to create the USER/LTERM blocks. The initial signon will not have a value appended.

#### 4 - BLANK, 001 - FFF

For all but the initial signon, up to 3 characters are to be appended to the user ID to create the USER/LTERM blocks. The initial signon will not have a value appended.

If the User ID is 7 bytes, IMS ETO Support will automatically switch to USERID SUFFIXING TECHNIQUE 3.

#### SRMDEF

Use this option to set the global status recovery mode (SRM) default.

0

This specifies that status is to be discarded at signoff/logoff/IMS restart.

This specifies that the IMS Resource Manager (RM) is to maintain terminal and user end-user status.

2

This specifies that terminal and user end-user status is to be maintained in local control blocks and log records.

#### **FASTPATH RECOVERY**

Use this option to set the IMS ETO Support global default for Fast Path status and message disposition.

Υ

This specifies that if SRMDEF global/local is set, Fast Path status and messages are to be recoverable.

Ν

This specifies that Fast Path status and messages are not to be recoverable.

# **CONVERSATION RECOVERY**

Use this option to set the IMS ETO Support global default for conversation status.

Υ

This specifies that if SRMDEF global/local is set, conversation status is to be recoverable.

Ν

This specifies that conversation status is not to be recoverable.

#### **STSN RECOVERY**

This option sets the IMS ETO Support global default for STSN (set and test sequence number) recoverability. This option applies only to SLUP/3600/FINANCE device types.

Υ

This specifies that if SRMDEF global/local is set, STSN is to be recoverable.

Ν

This specifies that STSN is not to be recoverable.

## **ALLOW SIGNON W/RM AFFIN**

Use this option to set the IMS ETO Support global default for allowing signon when an IMS Resource Manager (RM) affinity exists.

Υ

This specifies that signon is to be allowed even though an IMS Resource Manager (RM) affinity exists.

Ν

This specifies that signon is not to be allowed if an IMS Resource Manager (RM) affinity exists.

After you have entered all your global options, press Enter. A confirmation message appears indicating that the global options have been stored.

Press PF3/PF15 to return to the Primary Menu where you can now set options for the device, LUNAME, and user IDs.

# Setting VTAM user data node options

Use this panel if the node name for dynamic SLU2/3270 devices is to be obtained from the VTAM user data.

This panel is displayed if you choose option 3 on the Global Options menu panel.

```
IZTRAN
COMMAND ===>

IMS ETO-SUPPORT
VERSION - 03.02.00
VTAM USERDATA NODE OPTIONS

NODE NAME INCLUSION LIST
NODE PREFIX(ES)

SPECIFY ONE OR NONE OF THE FOLLOWING
NODE OFFSET .....
NODE KEYWORD ....
```

Figure 13. VTAM USERDATA Node Options panel

# VTAM user data node options reference

# **NODE NAME INCLUSION LIST**

#### **NODE PREFIX(ES)**

Use this field to specify a list of node name prefixes for which the NODE OFFSET or NODE KEYWORD user data search is performed.

If, at logon time, the node name matches one of the prefixes defined in this list, the NODE OFFSET or NODE KEYWORD user data search will be performed.

Leave this list blank to include all nodes in the NODE OFFSET or NODE KEYWORD user data search.

## **NODE OFFSET**

If the offset of the node name is in a fixed location in the VTAM userdata area, specify 2 numeric digits (relative to 0) where the start of the node name can be found.

**Note:** If a value is specified for OFFSET, do not specify any value for KEYWORD.

## **NODE KEYWORD**

If the VTAM node name is prefixed by a constant stream of characters (for example LUNAME), specify the character constant.

**Note:** If a value is specified for KEYWORD, do not specify any value for OFFSET.

# **Setting VTAM user data various options**

Use this panel if other options for static and dynamic SLU2/3270 devices are to be obtained from the VTAM user data.

This panel is displayed if you choose option 4 on the Global Options menu panel.

```
IZTRAN
                                IMS ETO-SUPPORT
                                                                     IMSID: IMS0
                        VERSION - 03.02.00
VTAM USERDATA VARIOUS OPTIONS
COMMAND ===>
                                                                     RELEASE: 15.1.0
    SPECIFY OFFSET OR KEYWORD IF NAME PRESENT IN USERDATA
                    OFFSET / KEYWORD
                              LTRM
  USERTD
  PASSWORD ...
                               PSWD
  DFS3649 FORMAT ...
                               FMT3640
  DFS3650 FORMAT ...
                               FMT3650
  TRANSACTION .....
                               LEGI
    SLU2/3270 USERDATA PROCESSING OPTIONS
    2 1 - IMS PROCESSES USERDATA
2 - ETO SUPPORT PROCESSES USERDATA
        3 - DELETE USERDATA
    SLU2/3270 OPTIONS IF USERDATA NOT PRESENT
    1 - ALLOW LOGON USING DFS3650I PROCESSING
        2 - REJECT LOGON
        3 - ALLOW LOGON USING DFS2002I FOR DFS3650I PROCESSING OPTION
```

Figure 14. VTAM USERDATA Various Options panel

# VTAM user data various options reference

#### **USERID OFFSET**

If the offset of the user ID is in a fixed location in the VTAM user data area, specify 2 numeric digits (relative to 0) where the start of the user ID can be found. If a value is specified for OFFSET, do not specify a value for KEYWORD.

## **USERID KEYWORD**

If the user ID is prefixed by a constant stream of characters (for example, USERID), specify the character constant. If a value is specified for KEYWORD, do not specify a value for OFFSET.

# **PASSWORD OFFSET**

If the offset of the password is in a fixed location in the VTAM user data area, specify 2 numeric digits (relative to 0) where the start of the password can be found. If a value is specified for OFFSET, do not specify a value for KEYWORD.

#### **PASSWORD KEYWORD**

If the password is prefixed by a constant stream of characters (for example, PSWD), specify the character constant. If a value is specified for KEYWORD, do not specify a value for OFFSET.

#### **DFS3649 FORMAT OFFSET**

If the offset of the DFS3649 MFS FORMAT name is in a fixed location in the VTAM user data area, specify 2 numeric digits (relative to 0) where the start of the DFS3649 MFS FORMAT name can be found. If a value is specified for OFFSET, do not specify a value for KEYWORD.

#### **DFS3649 FORMAT KEYWORD**

If the DFS3649 MFS FORMAT name is prefixed by a constant stream of characters (for example, FMT3649), specify the character constant. If a value is specified for KEYWORD, do not specify a value for OFFSET.

### **DFS3650I FORMAT OFFSET**

If the offset of the DFS3650I MFS FORMAT name is in a fixed location in the VTAM user data area, specify 2 numeric digits (relative to 0) where the start of the DFS3650I MFS FORMAT name can be found. If a value is specified for OFFSET, do not specify a value for KEYWORD.

#### **DFS3650I FORMAT KEYWORD**

If the DFS3650I MFS FORMAT name is prefixed by a constant stream of characters (for example, FMT3650), specify the character constant. If a value is specified for KEYWORD, do not specify a value for OFFSET.

#### TRANSACTION OFFSET

If the offset to the DFS3650I Transaction Replacement name is in a fixed location in the VTAM user data area, specify 2 numeric digits (relative to 0) where the start of the transaction name can be found. If a value is specified for OFFSET, do not specify a value for KEYWORD.

#### TRANSACTION KEYWORD

If the transaction name is prefixed by a constant stream of characters (for example, TRAN), specify the character constant. If a value is specified for KEYWORD, do not specify a value for OFFSET.

## **SLU2/3270 USERDATA PROCESSING OPTIONS**

Specify one of the following options if VTAM user data is present at logon time:

- IMS will process the VTAM user data
- IMS ETO Support will process the VTAM user data
- The VTAM user data is deleted

## **SLU2/3270 OPTIONS IF USERDATA NOT PRESENT**

Specify one of the following options if VTAM user data is not present at logon time:

- Allow the logon using standard IMS DFS3650I logon processing
- · Reject the logon
- Allow the logon using standard IMS DFS3650I logon processing substituting the DFS2002I message

# **Setting OTMA options**

Use this panel to specify how messages that originated from OTMA are to be processed.

This panel is displayed if you choose option 5 on the Global Options menu panel.

Figure 15. OTMA OPTIONS panel

# **OTMA options reference**

# **SPECIFY DFSYPRXO RETURN CODE**

Use this option to specify the return code that is set in the ETO Support version of IMS exit DFSYPRXO. This option is for messages that originate in OTMA when the LTERM name specified in the alternate PCB is not present in either the OTMA DESTINATION or PRINTER LTERM table.

## 1 - PERFORM IMS DEFAULT PROCESSING (RC=0)

ETO Support's version of IMS exit DFSYPRX0 sets return code 0 for messages.

## 2 - PERFORM LEGACY FINDDEST PROCESSING (RC=8)

ETO Support's version of IMS exit DFSYPRX0 sets return 8 for messages.

## **SEARCH PRINTER LTERM TABLE**

Specify whether CHNG calls to the alternate PCB for messages that originate in OTMA search for the LTERM in the PRINTER LTERM table.

Υ

Search the PRINTER LTERM table.

Do not search the PRINTER LTERM table.

# **Setting device-specific options**

The Device Specific Options panel is used to set options for a specific device type.

This panel is displayed if you choose option **B** on the Primary Menu.

```
IMS ETO-SUPPORT
                                                                                                      IMS0
IZTRAN
                                                                                          IMSID:
                                        VERSION - 03.02.00
                                                                                           RELEASE: 15.1.0
COMMAND ===>
                                    DEVICE SPECIFIC OPTIONS
     DEVICE OPTIONS
          1 - SLU1 CONSOLE
2 - SLU1 CONSOLE
                                           (1 OF 2) - SIGNON OPTIONS
(2 OF 2) - SYSPLEX TERMINAL MANAGEMENT (V8)
                                           (1 OF 2) - SIGNON OPTIONS
(2 OF 2) - SYSPLEX TERMINAL MANAGEMENT (V8)
- ADDITIONAL OPTIONS
           3 - SLU2/3270
4 - SLU2/3270
           5 - SLUP/3600/FINANCE (1 OF 2) - SIGNON OPTIONS
6 - SLUP/3600/FINANCE (2 OF 2) - SYSPLEX TERMINAL MANAGEMENT (V8)
                                         (1 OF 1) - DEVICE OPTIONS
           7 - LU 6.1 (ISC)
```

Figure 16. Device Specific Options panel

## **Topics:**

- "Device options for the SLU1 console (panel 1 of 2)" on page 87
- "Device options for the SLU1 console (panel 2 of 2)" on page 89
- "Device options for the SLU2/3270 device (panel 1 of 2)" on page 90
- "Device options for the SLU2/3270 device (panel 2 of 2)" on page 94
- "Device options for SLUP/3600/FINANCE (panel 1 of 2)" on page 96
- "Device options for SLUP/3600/FINANCE (panel 2 of 2)" on page 97
- "Device options for LU 6.1 (ISC)" on page 99

# Device options for the SLU1 console (panel 1 of 2)

Use this panel to set device options for the SLU1 console. Options set on this panel override any global options set for SLU1 devices.

This panel is displayed if you choose option 1 on the Device Specific Options panel.

```
T7TRAN
                                    IMS ETO-SUPPORT
                                                                               IMSID: IMS0
                      VERSION - 03.02.00
DEVICE OPTIONS FOR SLU1 CONSOLE (1 OF 2)
COMMAND ===>
                                                                               RELEASE: 15.1.0
LOGON PROCESS
    2 - USER DFSLGNX1 2 - DESCENSE AND 3 - AUTO PAGE 2
                                                             LTERM NAMING OPTIONS:
1 1 - ETO-SUPPORT
                                  1 - IMS DEFAULT 1 1 - LTERM = NODE NAME
2 - DFS058 MESSAGE 2 - LTERM FROM TABLE
3 - BLANK MESSAGE 3 - USER DFSSGNX1
    3 - AUTO RACF SIGNON
                                4 - USER DFSGMSG1
RESPONSE OPTIONS:
  1 - NORESP
2 - FORCRESP
                           IDLE NODE TIMEOUT: (BLANKS, 0000, 0010-1440)
ASOT 1440
     3 - TRANRESP
                                   ALOT 0000
MSGDEL OPTIONS:
                                  SECURITY PROFILE SECSLU1
  1 - SYSINFO
2 - NOTERM
     3 - NONIOPCB
```

Figure 17. Device Options for the SLU1 console panel (1 of 2)

After you have entered all your device-specific options, press Enter. A confirmation message appears indicating that the device options have been stored.

Press PF3 and then select option **2** to set the remainder of the SLU1 console options, or press PF4 to return to the Primary Menu.

# **SLU1** console options reference

#### **LOGON PROCESS**

#### 1 - ETO SUPPORT

Use this option to perform an automatic non-RACF signon.

#### 2 - USER DFSLGNX1

Use this option if you want to supply your own DFSLGNX0 (Logon) exit routine. You must change the 0 in the exit name to the numeric 1 to access your exit (DFSLGNX1).

#### 3 - AUTO RACF SIGNON

Use this option to perform an automatic RACF signon. See <u>"Automatic RACF signon" on page 50</u> for a description of this option.

#### **DFS3650**

#### 1 - IMS DEFAULT

Use this option to receive the standard DFS3650A (signon status) message after signon.

#### 2 - DFS058 MESSAGE

Use this option to receive message DFS058 after signon.

## 3 - BLANK MESSAGE

Use this option to receive a blank screen after signon.

#### 4 - USER DFSGMSG1

Use this option to invoke your own DFSGMSG0 exit after signon. You must change the 0 in the exit name to numeric 1 to access your exit (DFSGMSG1).

#### LTERM NAMING OPTIONS

With this option, you can specify the LTERM to be created.

### 1 - LTERM = NODE NAME

Use this option to create an LTERM with the same name as the VTAM NODE. (The USER name is always the same as the NODE name.)

#### 2 - LTERM FROM TABLE

Use this option to select the LTERM name from the table as the default option. In order for this option to be used, a specific NODE name record must define the LTERMs.

#### 3 - USER DFSSGNX1

Use this option to invoke your own DFSSGNX0 exit. You must change the 0 in the exit name to numeric 1 to access your exit.

#### **RESPONSE OPTIONS**

Use this option to set the desired terminal response. RESPONSE parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 NORESP
- 2 FORCRESP
- 3 TRANRESP

#### **MSGDEL OPTIONS**

Use this option to specify the messages you want IMS to discard for the specified terminal. MSGDEL parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 SYSINFO
- 2 NOTERM
- 3 NONIOPCB

#### **IDLE NODE TIMEOUT**

#### **ASOT**

Use this option to specify an auto signoff time.

#### **ALOT**

Use this option to specify an auto logoff time.

## **SECURITY PROFILE**

Use this option to specify the 1- to 8-character alphanumeric security group.

# Device options for the SLU1 console (panel 2 of 2)

Use this panel to set status recovery mode (SRM) options for the SLU1 console. Options set on this panel override any global options set for SLU1 console devices.

This panel is displayed if you choose option 2 on the Device Specific Options panel.

```
IZTRAN IMS ETO-SUPPORT IMSID: IMSO
COMMAND ===> VERSION - 03.02.00 RELEASE: 15.1.0

DEVICE OPTIONS FOR SLU1/CONSOLE (2 OF 2)

SYSPLEX TERMINAL MANAGEMENT

SRMDEF 0 - NONE
    1 - GLOBAL
    2 - LOCAL
FASTPATH RECOVERY (Y/N)
CONVERSATION RECOVERY (Y/N)
ALLOW SIGNON W/RM AFFINITY (Y/N)
```

Figure 18. SLU1 - Device Options for SLU1 console panel (2 of 2)

This information is valid only if you are using the IMS Resource Manager (RM). After you have updated the desired fields, press Enter. A confirmation message appears indicating that the device options have been stored.

Press PF3 to return to the Device Specific Options menu, or PF4 to return to the Primary Menu.

# **SLU1** console options reference

# **SRMDEF**

Use this option to set the global status recovery mode (SRM) default.

0

This specifies that status is to be discarded at signoff/logoff/IMS restart.

1

This specifies that the IMS Resource Manager (RM) is to maintain terminal and user end-user status.

2

This specifies that terminal and user end-user status is to be maintained in local control blocks and log records.

## **FASTPATH RECOVERY**

Use this option to set the IMS ETO Support global default for Fast Path status and message disposition.

Υ

This specifies that if SRMDEF global/local is set, Fast Path status and messages are to be recoverable.

Ν

This specifies that Fast Path status and messages are not to be recoverable.

## **CONVERSATION RECOVERY**

Use this option to set the IMS ETO Support global default for conversation status.

Υ

This specifies that if SRMDEF global/local is set, conversation status is to be recoverable.

Ν

This specifies that conversation status is not to be recoverable.

# **ALLOW SIGNON W/RM AFFIN**

Use this option to set the IMS ETO Support global default for allowing signon when an IMS Resource Manager (RM) affinity exists.

Υ

This specifies that signon is to be allowed even though an IMS Resource Manager (RM) affinity exists.

N

This specifies that signon is not to be allowed if an IMS Resource Manager (RM) affinity exists.

# Device options for the SLU2/3270 device (panel 1 of 2)

Use this panel to set device options for the SLU2/3270 device.

This panel is displayed if you choose option 3 on the Device Specific Options panel.

```
IZTRAN
                               IMS ETO-SUPPORT
                                                                  IMSID:
                                                                           IMS0
                                                                  RELEASE: 14.1.0
COMMAND ===>
                              VERSION - 03.02.00
                   DEVICE OPTIONS FOR SLU2/3270 (1 OF 2)
LOGON PROCESS
                        DFS3649
                                                   DFS3650
                       1 1 - IMS DEFAULT
                                                   1 1 - IMS DEFAULT
1 1 - ETO-SUPPORT
   2 - USER DFSLGNX1 2 - DFS2002 MESSAGE
3 - AUTO SIGNON 3 - ETO-SUPPORT *
4 - USER DFSGMSG1
                                                       2 - DFS058 MESSAGE
                                                       3 - BLANK SCREEN
                                                      4 - USER DFSGMSG1
5 - USER MOD
                            5 - USER MOD
6 - DFS2002 MESSAGE
                                                       7 - TRX NAME
                                P:PASSPHRASE
    3 - USERID FROM TABLE IDLE NODE TIMEOUT: (BLANKS, 0000, 0010-1440)
    4 - SUFFIXED USERID
                                    ASOT 0015
    5 - USER DFSSGNX1
                                    ALOT 0010
    6 - APPEND "@" TO USERID
RESPONSE OPTIONS:
                        MSGDEL OPTIONS:
   1 - NORESP
2 - FORCRESP
                        1 1 - SYSINFO
2 - NOTERM
                                                  DEVICE MODEL
                                                                    MOD2
                                                  SECURITY PROFILE SECSLU2
    3 - TRANRESP
                             3 - NONIOPCB
```

Figure 19. Device Options for SLU2/3270 panel

Options set on the Device Options for SLU2/3270 panel override any global options set for SLU2/3270 devices.

Press PF3 to return to the Device Specific Options menu, or PF4 to return to the Primary Menu.

# SLU2/3270 device options reference

### **LOGON PROCESS**

#### 1 - ETO-SUPPORT

Use this option to execute the default IMS ETO Support logon process for SLU2/3270.

## 2 - USER DFSLGNX1

Use this option if you want to supply your own DFSLGNX0 (Logon) exit routine. You must change the 0 in the exit name to the numeric 1 to access your exit (DFSLGNX1).

# 3 - AUTO SIGNON

Use this option to perform an automatic non-RACF signon.

# **DFS3649**

#### 1 - IMS DEFAULT

Use this option to receive the standard DFS3649A message.

#### 2 - DFS2002 MESSAGE

Use this option to receive message DFS2002.

#### 3 - ETO-SUPPORT

Use this option to receive the IMS ETO Support standard signon panel.

#### **PASSSIZE**

This suboption is located on the right side of '3 - ETO-SUPPORT \*'. Use this suboption to specify which panel to receive when signing on.

Р

Use this option to receive the IMS ETO Support passphrase signon panel. Member IZTSIGNP in SIZTDATA contains the MFS source for this option.

W

Use this option to receive the IMS ETO Support password signon panel. Member IZTSIGNO in SIZTDATA contains the MFS source for this option.

If this suboption is not specified, the signon panel is determined by the MFSPPDEF parameter of the DFSDCxxx PROCLIB member.

MFSPPDEF=Y: IMS ETO Support passphrase signon panel is to be used

## 4 - USER DFSGMSG1

With this option, you can supply your own DFSGMSG0 (Greeting Messages) exit. You must change the 0 in the exit name to the numeric 1 to access your exit (DFSGMSG1).

#### 5 - USER MOD

Use this option to supply your own MFS mod name.

### **DFS3650**

#### 1 - IMS DEFAULT

Use this option to receive the standard DFS3650A (signon status) message after signon.

#### 2 - DFS058 MESSAGE

Use this option to receive message DFS058 after signon.

#### 3 - BLANK SCREEN

Use this option to send a 1-byte blank (X'40') message to IMS MOD DFSMO2.

## 4 - USER DFSGMSG1

Use this option to invoke your own DFSGMSG0 exit after signon. You must change the 0 in the exit name to numeric 1 to access your exit (DFSGMSG1).

## 5 - USER MOD

Use this option to supply your own MFS mod name after signon.

#### 6 - DFS2002 MESSAGE

Use this option to receive message DFS2002.

#### 7 - TRX NAME

Use this option to specify the IMS transaction name to schedule after signon. To use this option. you must specify option **7** for the DFS3650 option and you cannot have specified any value for the USER MOD name.

# LTERM/USER NAMING OPTIONS

# 1 - IMS DEFAULT

Use this option to create a USER and LTERM standard IMS ETO naming structure (USERID=USER=LTERM).

#### 2 - NODE=USER=LTERM

Use this option to create a USER and LTERM with the same name as the NODE.

#### 3 - USERID FROM TABLE

Use this option to process (at the device level) the USER and LTERM structures using the IMS default method.

#### 4 - SUFFIXED USERID

Use this option to specify that the USER/LTERM is to be created by appending a suffix to the user ID. You can choose from one of the following techniques to determine how the names are generated:

# Technique 1.

IMS ETO Support adds a single character to the user ID to form the USER/LTERM name. The values it adds are 0 - 9, A - Z.

## Technique 2.

IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name. The values it appends are 000 - FFF.

# Technique 3.

For all but the initial signon, IMS ETO Support adds a single character to the user ID to form the USER/LTERM name. The values are 1 - 9, A - Z. For the initial signon of a user ID, no suffix is added.

#### Technique 4.

For all but the initial signon, IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name. The values it appends are 001 - FFF. For the initial signon of a user ID, no suffix is appended.

If you selected technique 2 and the user ID is 7 characters, IMS ETO Support automatically switches to technique 1.

If you selected technique 4 and the user ID is 7 characters, IMS ETO Support automatically switches to technique 3.

When this option is used, IMS ETO Support returns to IMS the first available user ID and suffix name.

If the same user ID attempts to sign on at the same time, IMS ETO Support may return the same suffix data to IMS. If this happens, the second attempt to sign on with the same user ID receives an error message indicating that the USER/LTERM is already in use. In this case, the signon needs to be tried again.

## 5 - USER DFSSGNX1

Use this option to create your own customized DFSSGNX0 (Sign-On) exit. You must change the 0 in the exit name to numeric 1 to access your exit (DFSSGNX1).

## 6 - APPEND @ TO USERID

Use this option to specify that the USER/LTERM is to be created by appending an at sign (@) character to the user ID. In order for an at sign (@) character to be appended, the user ID must be less than 8 characters long. If this option is selected and an 8-character user ID is used to sign on to IMS, the 8-character user ID is used for the user name and LTERM name.

## **IDLE NODE TIMEOUT**

IMS provides for terminal timeout in an ETO environment. IMS ETO Support lets you specify autosignoff and auto-logoff times at a global level, which can be overridden for specific user IDs and/or terminal names.

The choices are:

#### **ASOT**

Use this option to specify an auto signoff time.

## **ALOT**

Use this option to specify an auto logoff time.

#### **RESPONSE OPTIONS**

Use this option to set the desired terminal response. RESPONSE parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

The choices are:

- 1 NORESP
- 2 FORCRESP
- 3 TRANRESP

## **MSGDEL OPTIONS**

Use this option to specify the messages you want IMS to discard for the specified terminal. MSGDEL parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 SYSINFO
- 2 NOTERM
- 3 NONIOPCB

#### **DEVICE MODEL**

Use this option to select panel size. The name defined for the device model must be for a static SYSGENed terminal.

#### **SECURITY PROFILE**

Use this option to specify the 1- to 8-character alphanumeric security group. The first character must be alphabetic or national (@#\$).

# Device options for the SLU2/3270 device (panel 2 of 2)

Use this panel to set status recovery mode (SRM) options for the SLU2. Options set on this panel override any global options set for SLU2/3270 devices.

This panel is displayed if you choose option 4 on the Device Specific Options panel.

```
IZTRAN
                              IMS ETO-SUPPORT
                                                                IMSID: IMS0
                                                                RELEASE: 15.1.0
COMMAND ===>
                             VERSION - 03.02.00
                  DEVICE OPTIONS FOR SLU2/3270
                                                 (2 OF 2)
SYSPLEX TERMINAL MANAGEMENT
  SRMDEF
             O - NONE
            1 - GLOBAL
             2 - LOCAL
  FASTPATH RECOVERY
                                 (Y/N)
  CONVERSATION RECOVERY
                                 (Y/N)
  ALLOW SIGNON W/RM AFFINITY
SLU2/3270 SIGNON OPTION:
  USER RECORD REQUIRED FOR SIGNON N
                                       (Y/N)
  IZT RC FOR DFS3649A W/USER MOD
                                       (Y/N)
  BYPASS SEC WHEN USERID = NODE
                                       (Y/N)
TIME OF DAY LOGON/SIGNON VERIFICATION
0 0 - NONE
   1 - VERIFY AT LOGON TIME
    2 - VERIFY AT SIGNON TIME
```

Figure 20. SLU2 - Device Global Options panel

This information is valid only if you are using the IMS Resource Manager (RM). When you have updated the desired fields, press Enter. A confirmation message appears indicating that the device options have been stored.

Press PF3 to return to the Device Specific Options menu, or PF4 to return to the Primary Menu.

# **SLU2/3270** device options reference

#### **SRMDEF**

Use this option to set the global status recovery mode (SRM) default.

This specifies that status is to be discarded at signoff/logoff/IMS restart.

**1**This specifies that the IMS Resource Manager (RM) is to maintain terminal and user end-user status.

This specifies that terminal and user end-user status is to be maintained in local control blocks and log records.

# **FASTPATH RECOVERY**

Use this option to set the IMS ETO Support global default for Fast Path status and message disposition.

Υ

This specifies that if SRMDEF global/local is set, Fast Path status and messages are to be recoverable.

N

This specifies that Fast Path status and messages are not to be recoverable.

#### **CONVERSATION RECOVERY**

Use this option to set the IMS ETO Support global default for conversation status.

Υ

This specifies that if SRMDEF global/local is set, conversation status is to be recoverable.

Ν

This specifies that conversation status is not to be recoverable.

## **ALLOW SIGNON W/RM AFFIN**

Use this option to set the IMS ETO Support global default for allowing signon when an IMS Resource Manager (RM) affinity exists.

Υ

This specifies that signon is to be allowed even though an IMS Resource Manager (RM) affinity exists.

Ν

This specifies that signon is not to be allowed if an IMS Resource Manager (RM) affinity exists.

# **SLU2/3270 SIGNON OPTION**

## **USER RECORD REQUIRED FOR SIGNON**

Use this option to set the signon requirements option.

In order for signon to be successful, there must be a record in the user ID table that matches the user ID attempting to sign on.

Ν

The user ID table is not checked during signon.

#### Note:

- Setting this option does not prevent the autologon from completing.
- If you erroneously set this option and cannot signon, you can turn off this option using the batch update (IZTUD1U0). You can use the following control card to turn off the user ID required for signon flag:

ZD SGNUSREC=NO

## IZT RC FOR DFS3649A W/USER MOD

Use this option to specify whether IMS ETO Support will append error text to message DFS3649A if a signon failure occurs and "USER MOD" is specified for the DFS3649 signon option.

IMS ETO Support will append error text to message DFS3649A if a signon failure occurs and "USER MOD" is specified for the DFS3649 signon option.

Ν

IMS ETO Support will not append error text to message DFS3649A if a signon failure occurs and "USER MOD" is specified for the DFS3649 signon option.

## **BYPASS SEC WHEN USERID NODE**

Use this option to specify whether IMS ETO Support is to set the bypass security flag in DFSSGNX0 when a /SIGN ON command is attempted and the user ID matches the Node name.

Υ

When a /SIGN ON command is attempted and the user ID and the Node name match, IMS ETO Support sets the bypass security flag in DFSSGNXO.

Ν

IMS ETO Support does not set the bypass security flag in DFSSGNX0 when the user ID matches the Node name.

# TIME-OF-DAY LOGON/SIGNON VERIFICATION

Use this option to set the IMS ETO Support time-of-day verification option.

This option specifies that no time-of-day verification is performed.

This option specifies that time-of-day verification is performed at LOGON time. When this option is in effect, user ID records (other than the global entry) are not used.

2

This option specifies that time-of-day verification is performed at SIGNON time.

# Device options for SLUP/3600/FINANCE (panel 1 of 2)

Use this panel to set device options for SLUP/3600/FINANCE. Options set on this panel override any global options set for SLUP/3600/FINANCE devices.

This panel is displayed if you choose option 5 on the Device Specific Options panel.

```
IMS ETO-SUPPORT
IZTRAN
                                                                                   IMSID: IMS0
COMMAND ===>
                                     VERSION - 03.02.00
                                                                                   RELEASE: 15.1.0
                       DEVICE OPTIONS FOR SLUP/3600/FINANCE (1 OF 2)
   ON PROCESS DFS3650

1 - ETO-SUPPORT 1 1 - IMS DEFAULT

2 - USER DFSLGNX1 2 - DFS058 MESSAGE

3 - AUTO RACF SIGNON 3 - BLANK MESSAGE
LOGON PROCESS
                                                                LTERM NAMING OPTIONS:
                                                                1 1 - LTERM = NODE NAME
2 - LTERM FROM TABLE
    2 - USER DESIGNON 3 - BLANK MESSAGE 4 - USER DESGMSG1
                                                                   3 - USER DFSSGNX1
RESPONSE OPTIONS:
   1 - NORESP
2 - FORCRESP
                            IDLE NODE TIMEOUT: (BLANKS, 0000, 0010-1440)
                                     ASOT 1440
     3 - TRANRESP
                                     ALOT 0000
MSGDEL OPTIONS:
                                     SECURITY PROFILE SECSLUP
    1 - SYSINFO
2 - NOTERM
     3 - NONIOPCB
USER (SPQB) NAMING OPTIONS:
    1 - USE NODE NAME
2 - USE FIRST LTERM
```

Figure 21. Device Options for SLUP/3600/FINANCE panel

After you have entered all your device-specific options, press Enter. A confirmation message appears indicating that the device options have been stored.

Press PF3 and then select option **6** to set the remainder of the SLUP/3600/FINANCE device options, or press PF4 to return to the Primary Menu.

## **SLUP/3600/FINANCE** options reference

# **LOGON PROCESS**

#### 1 - ETO SUPPORT

Use this option to perform an automatic non-RACF signon.

#### 2 - USER DFSLGNX1

Use this option if you want to supply your own DFSLGNX0 (Logon) exit routine. You must change the 0 in the exit name to the numeric 1 to access your exit (DFSLGNX1).

#### 3 - AUTO RACF SIGNON

Use this option to perform an automatic RACF signon. See <u>"Automatic RACF signon" on page 50</u> for a description of this option.

#### **DFS3650**

# 1 - IMS DEFAULT

Use this option to receive the standard DFS3650A (signon status) message after signon.

#### 2 - DFS058 MESSAGE

Use this option to receive message DFS058 after signon.

#### 3 - BLANK MESSAGE

Use this option to receive a blank screen after signon.

#### 4 - USER DFSGMSG1

Use this option to invoke your own DFSGMSGO exit after signon. You must change the 0 in the exit name to numeric 1 to access your exit (DFSGMSG1).

#### LTERM NAMING OPTIONS

With this option, you can specify the LTERM to be created.

#### 1 - LTERM = NODE NAME

Use this option to create an LTERM with the same name as the VTAM NODE. (The USER name is always the same as the NODE name.)

#### 2 - LTERM FROM TABLE

Use this option to select the LTERM name from the table as the default option. In order for this option to be used, a specific NODE name record must define the LTERMs.

#### 3 - USER DFSSGNX1

Use this option to invoke your own DFSSGNX0 exit. You must change the 0 in the exit name to numeric 1 to access your exit.

#### **RESPONSE OPTIONS**

Use this option to set the desired terminal response. RESPONSE parameter values are described in the TERMINAL macro definition in IMS System Definition.

- 1 NORESP
- 2 FORCRESP
- 3 TRANRESP

#### **MSGDEL OPTIONS**

Use this option to specify the messages you want IMS to discard for the specified terminal. MSGDEL parameter values are described in the TERMINAL macro definition in IMS System Definition.

- 1 SYSINFO
- 2 NOTERM
- 3 NONIOPCB

### **IDLE NODE TIMEOUT**

#### **ASOT**

Use this option to specify an auto signoff time.

#### **ALOT**

Use this option to specify an auto logoff time.

# **SECURITY PROFILE**

Use this option to specify the 1- to 8-character alphanumeric security group.

# **USER (SPQB) NAMING OPTIONS:**

Set which name is used for the USER (SPOB) control block with this option.

#### 1 - USE NODE NAME

The USER (SPQB) name is obtained from the VTAM Node name.

#### 2 - USE FIRST LTERM

The USER (SPQB) name is obtained from the first LTERM name defined in the IMS ETO Support SLUP table for this device.

# Device options for SLUP/3600/FINANCE (panel 2 of 2)

Use this panel to set status recovery mode (SRM) options for the SLUP. Options set on this panel override any global options set for SLUP devices.

This panel is displayed if you choose option 6 on the Device Specific Options panel.

```
IMS ETO-SUPPORT
IZTRAN
                                                                      IMSID:
                   VERSION - 03.02.00
DEVICE OPTIONS FOR SLUP/3600/FINANCE (2 OF 2)
COMMAND ===>
                                                                      RELEASE: 15.1.0
SYSPLEX TERMINAL MANAGEMENT
  SRMDEF
              O - NONE
              1 - GLOBAL
              2 - LOCAL
  FASTPATH RECOVERY
                                    (Y/N)
  CONVERSATION RECOVERY
                                    (Y/N)
  ALLOW SIGNON W/RM AFFINITY
```

Figure 22. SLUP - Device Global Options panel

This information is valid only if you are using the IMS Resource Manager (RM). After you have updated the desired fields, press Enter. A confirmation message appears indicating that the device options have been stored.

Press PF3 to return to the Device Specific Options menu, or PF4 to return to the Primary Menu.

# **SLUP/3600/FINANCE** options reference

## **SRMDEF**

Use this option to set the global status recovery mode (SRM) default.

0

This specifies that status is to be discarded at signoff/logoff/IMS restart.

1

This specifies that the IMS Resource Manager (RM) is to maintain terminal and user end-user status.

2

This specifies that terminal and user end-user status is to be maintained in local control blocks and log records.

#### **FASTPATH RECOVERY**

Use this option to set the IMS ETO Support global default for Fast Path status and message disposition.

Υ

This specifies that if SRMDEF global/local is set, Fast Path status and messages are to be recoverable.

Ν

This specifies that Fast Path status and messages are not to be recoverable.

# **CONVERSATION RECOVERY**

Use this option to set the IMS ETO Support global default for conversation status.

Υ

This specifies that if SRMDEF global/local is set, conversation status is to be recoverable.

Ν

This specifies that conversation status is not to be recoverable.

## **ALLOW SIGNON W/RM AFFIN**

Use this option to set the IMS ETO Support global default for allowing signon when an IMS Resource Manager (RM) affinity exists.

Υ

This specifies that signon is to be allowed even though an IMS Resource Manager (RM) affinity exists.

This specifies that signon is not to be allowed if an IMS Resource Manager (RM) affinity exists.

# **Device options for LU 6.1 (ISC)**

Use this panel to set device options for LU 6.1 (ISC) sessions.

This panel is displayed if you choose option 7 on the Device Specific Options panel.

```
IZTRAN
                                 IMS ETO-SUPPORT
                                                                       IMSID:
                                                                                 IMS0
                                                                       RELEASE: 15.1.0
COMMAND ===>
                                VERSION - 03.02.00
                      DEVICE OPTIONS LU 6.1 (ISC) (1 OF 1)
LOGON PROCESS
1 1 - ETO SUPPORT
2 - USER DFSLGNX1
    3 - AUTO SIGNON (NON-RACF)
RESPONSE OPTIONS
                                            MSGDEL OPTIONS
   1 - NORESP
2 - FORCRESP
                                            2 1 - SYSINFO
2 - NOTERM
    3 - TRANRESP
                                                 3 - NONIOPCB
IDLE NODE TIMEOUT (BLANKS, 0000, 0010-1440)
     ASOT 1440
ALOT 0000
SECURITY PROFILE SECLU61
USER REC REQUIRED FOR SIGNON Y
                                     (Y/N - DEFAULT N)
LU DEFINITION REQUIRED
                                    (Y/N - DEFAULT N)
```

Figure 23. Device Options LU 6.1 (ISC) panel

After you have entered all of your device-specific options, press Enter. A confirmation message appears indicating the device-specific options have been stored.

### LU 6.1 (ISC) options reference

### **LOGON PROCESS**

### 1 - ETO SUPPORT

Use this option to allow IMS to determine logon process.

### 2 - USER DFSLGNX1

Use this option if you want to supply your own DFSLGNX0 (Logon) exit. You must change the 0 in the exit name to numeric 1 access you exit (DFSLGNX1).

### 3 - AUTO SIGNON (NON-RACF)

Use this option to perform a non-RACF signon.

### **RESPONSE OPTIONS**

Use this option to set the required terminal response. RESPONSE parameters are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 NORESP
- 2 FORCRESP
- 3 TRANRESP

### **MSGDEL OPTIONS**

Use this option to specify the messages you want IMS to discard for the specified LU 6.1 (ISC) sessions. MSGDEL parameter values are described in the TERMINAL macro in *IMS System Definition*.

- 1 SYSINFO
- 2 NOTERM
- 3 NONIOPCB

#### **IDLE NODE TIMEOUT**

### **ASOT**

Use this option to specify an auto signoff time.

#### ALOT

Use this option to specify an auto logoff time.

### **SECURITY PROFILE**

Use this option to specify the 1- to 8-character alphanumeric security profile.

### **USER REC REQUIRED FOR SIGNON**

Use this option if you want to ensure only desired user IDs are used to start LU 6.1 (ISC) sessions. If this option is set to Y, any USER specified on the **/OPNDST** command must have an LU 6.1 (ISC) user ID table entry.

### **LU DEFINITION REQUIRED**

Use this option if you want to ensure that only desired LUNAMEs are allowed to start LU 6.1 (ISC) sessions. If this option is set to Y, every node that is specified on the **/OPNDST** command must have an associated LU 6.1 (ISC) LUNAME table entry.

# **Setting LUNAME-specific options**

Use the LUNAME Specific Options panel to set options for the LUNAME.

The LUNAME Specific Options panel is displayed if you choose option **C** on the Primary Menu.

```
IZTRAN
COMMAND ===>

IMS ETO-SUPPORT
VERSION - 03.02.00
LU NAME SPECIFIC OPTIONS

DEVICE TYPE
1 - SLU1 CONSOLE
2 - SLU2 / 3270
3 - SLUP / 3600 / FINANCE
4 - LU 6.1 (ISC)
```

Figure 24. LUNAME Specific Options panel

### **Topics:**

- "Setting LUNAME options for the SLU1 console" on page 100
- "Setting LUNAME options for the SLU2/3270 device" on page 103
- "Setting LUNAME options for the SLUP/3600/FINANCE device" on page 108
- "Setting LUNAME options for the LU 6.1 device" on page 111

# **Setting LUNAME options for the SLU1 console**

This topic describes setting LUNAME options for the SLU1 console.

### Viewing the SLU1 console member list

The SLU1 console Member List panel is displayed if you choose option **1** on the LUNAME Specific Options panel.

```
IMS ETO-SUPPORT
T7TRAN
                                                          IMSID: IMS0
START ===>
                          VERSION - 03.02.00
                                                         RELEASE: 15.1.0
                      SLU1 CONS MEMBER LIST
                                SEL MEMBER SEL MEMBER
SEL MEMBER
              SEL MEMBER
    SLU1000
    SI U1 C01
    SLU1C02
    SLU1C03
    SLU1C04
ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY
COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 25. SLU1 console Member List panel

This panel displays a list of the SLU1 console members, if any.

To add an LUNAME, type A on the command line and press Enter.

To update a listed LUNAME entry, tab to the desired name and type an S or E next to the name; then press Enter.

### **Setting options for the SLU1 console**

Th LUNAME Options for SLU1 console panel is displayed after you select the appropriate option on the SLU1 console Member List panel.

Use this panel to set options for SLU1 console entries. Options set on this panel override any global and device options set for specific SLU1 console LUNAMEs.

```
IZTRAN
                                                    IMS ETO-SUPPORT
                                                                                                                              IMS0
                                                                                                                IMSID:
COMMAND ===> VERSION - 03.02.00
LUNAME ===> SLU1C00 LUNAME OPTIONS FOR SLU1 CONSOLE
                                                                                                                RELEASE: 15.1.0
LUGUN PROCESS DFS3650 LTERM NAMING OPTIONS:

1 1 - ETO-SUPPORT 1 1 - IMS DEFAULT 2 1 - LTERM = NODE NAME
2 - USER DFSLGNX1 2 - DFS058 MESSAGE 2 - LTERM FROM TABLE
3 - AUTO RACF SIGNON 3 - BLANK MESSAGE 3 - USER DFSSGNX1

4 - USERID 4 - USER DFSGMSG1
      1 - NORESP IDLE NODE TIMEOUT: (BLANKS, 0000, 0010-1440)
2 - FORCRESP ASOT 1440
3 - TRANRESP ALOT 0000
DEL OPTIONS:
RESPONSE OPTIONS:
     1 - NORESP
MSGDEL OPTIONS:
    1 - SYSINFO
2 - NOTERM
                                                  SECURITY PROFILE SECSLU1
       3 - NONIOPCB I/O = INPUT/OUTPUT COMPT (1-4)
C = CASE 0=UC,1=ULC

=LTERM== I / 0 C =LTERM== I / 0 C

LUC001 1 1 1 LUC002 2 2 1

LUC004 4 4 1 LUC005 1 1 1

LUC007 1 1 1 LUC008 1 1 1
                                                 C = CASE 0=UC, 1=ULC
                                                                                       =LTERM== I / 0 C
LUC003 3 3 1
LUC006 1 1 1
```

Figure 26. LUNAME Options for the SLU1 console panel

### **LUNAME** (command line)

Enter the LUNAME when adding an LU member. You can use wildcards if you do not want to use specific LUNAMEs. Wildcards include:

Percent sign (%) - represents a one-to-one relationship with character positions in your LUNAMEs.

For example, L1%%% captures those members beginning with L1 followed by any 3 characters.

• Question mark (?) - represents a one-to-one relationship with numeric positions in your LUNAMEs.

For example, L1??? captures those members beginning with L1 followed by 3 numeric digits.

• Asterisk (\*) - represents any characters (from 0 to many) in the LUNAME.

For example, L1\* captures all members starting with L1.

**Note:** An asterisk must be the last character in the name.

### **LOGON PROCESS**

#### 1 - ETO SUPPORT

Use this option to perform an automatic non-RACF auto signon.

### 2 - USER DFSLGNX1

Use this option if you want to supply your own DFSLGNX0 (Logon) exit routine. You must change the 0 in the exit to numeric 1 to access your exit (DFSLGNX1).

### 3 - AUTO RACF SIGNON

Use this option to perform an automatic RACF signon. See <u>"Automatic RACF signon" on page 50</u> for a description of this option.

### 4 - USERID

Use this option to perform an automatic non-RACF signon using the specified user ID.

### **DFS3650**

### 1 - IMS DEFAULT

Use this option to receive the standard DFS3650A (signon status) message after signon.

### 2 - DFS058 MESSAGE

Use this option receive message DFS058 after signon.

### 3 - BLANK MESSAGE

Use this option to receive a blank message after signon.

### 4 - USER DFSGMSG1

Use this option to invoke your own DFSGMSG0 exit after signon. You must change the 0 in the exit name to a numeric 1 to access your exit (DFSGMSG1).

### LTERM NAMING OPTIONS

### 1 - LTERM = NODE NAME

Use this option to create an LTERM with the same name as the VTAM NODE. (For SLU1 consoles, the USER name (SPQB) is always the same as the NODE.)

### 2 - LTERM FROM TABLE

Use this option to select the LTERM name from the table. When this option is specified, you must also specify one or more LTERM names.

### 3 - USER DFSSGNX1

Use this option to invoke your own DFSSGNX0 exit. You must change the 0 in the exit name to numeric 1 to access your exit (DFSSGNX1).

### **RESPONSE OPTIONS**

Use this option to set the desired terminal response. RESPONSE parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 NORESP
- 2 FORCRESP
- 3 TRANRESP

### **MSGDEL OPTIONS**

Use this option to specify the messages you want IMS to discard for the specified terminal. MSGDEL parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 SYSINFO
- 2 NOTERM

### 3 - NONIOPCB

### **IDLE NODE TIMEOUT**

#### **ASOT**

Use this option to specify an auto signoff time.

### **ALOT**

Use this option to specify an auto logoff time.

### **LOGON DESCRIPTOR**

Use this option to specify the 1- to 8-character alphanumeric logon descriptor.

### **SECURITY PROFILE**

Use this option to specify the 1- to 8-character alphanumeric security group

### =LTERM== I/O C

Use these fields to describe the LTERM names and their ICOMPT/COMPT (I/O) and case values. ICOMPT (I) and COMPT (O) fields describe the component in the logon descriptor to be used by this LTERM. IMS ETO Support accepts values between 1 and 4 for the ICOMPT/COMPT fields.

Case (C) describes the character case to be used, where 0 is uppercase and 1 is uppercase or lowercase.

### **WTO AUTO SIGNON**

Use this option to specify whether WTO message IZT9102I is displayed when this device performs an auto signon.

Υ

Message IZT9102I is displayed when this device does an auto signon or an auto signon with user ID.

N

Message IZT9102I is not issued for this device.

After you have entered all your LUNAME options, press Enter.

A confirmation appears indicating that the LUNAME options have been stored.

# Setting LUNAME options for the SLU2/3270 device

This topic describes setting LUNAME options for the SLU2/3270 device.

### Viewing the SLU2/3270 device member list

The SLU2/3270 Member List panel is displayed if you choose option **2** on the LUNAME Specific Options panel.

```
IMS ETO-SUPPORT
T7TRAN
                                                                        IMSID: IMS0
COMMAND ===>
                                 VERSION - 03.02.00
                                                                        RELEASE: 15.1.0
                              SLU2/3270 MEMBER LIST
START
        ===>
                                                  MEMBER
SEL
     MEMBER
                   SEL MEMBER
                                         SEL
                                                                   SEL MEMBER
     SC0TCP02
     SC0TCP99
     TCP*
     X%/%/
     X???
     X###
ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 27. SLU2/3270 Member List panel

This panel displays a list of the SLU2/3270 members created for the option, if any.

To add an LUNAME, type A on the command line and press Enter.

To update a listed LUNAME, tab to the desired name and type an S or E next to the name; then press Enter.

### Setting options for the SLU2/3270 device

The LUNAME Options for SLU2/3270 device panel is displayed after you select the appropriate option on the SLU2/3270 device Member List panel.

Use this panel to set options for SLU2/3270 device entries. Options set on this panel override any global and device options set for specific SLU2/3270 device LUNAMEs.

If you select the appropriate option on the SLU2/3270 Member List panel, the LUNAME Options for SLU2/3270 panel is displayed.

```
IMSID: IMS0
 IZTRAN
                                                              IMS ETO-SUPPORT
 COMMAND ===>
                                                            VERSION - 03.02.00
                                                                                                                                    RELEASE: 14.1.0
LUGUN PROCESS DFS3649 DFS3650

1 1 - ETO-SUPPORT 1 1 - IMS DEFAULT 1 1 - IMS DEFAULT
2 - USER DFSLGNX1 2 - DFS2002 MESSAGE 2 - DFS058 MESSAGE
3 - AUTO SIGNON 3 - ETO-SUPPORT * 3 - BLANK SCREEN
4 - USERID 4 - USER DFSGMSG1 4 - USER DFSGMSG1
5 - RACF USERID 5 - USER MOD 5 - USER MOD
LTERM/USER NAMING OPTIONS: * _:MFSPPDEF 6 - DFS2002 MESSAGE
1 1 - IMS DEFAULT W:PASSWORD 7 - TRX NAME
2 - NODE=USER=LTERM P:PASSPHRASE
3 - USERID FROM TARLE
 LUNAME ===> SCOTCPO2 LUNAME OPTIONS FOR SLU2/3270
                                                                                                                   6 - DFS2002 MESSAGE
        2 - NODE=USER=LIERM P:PASSPHRASE
3 - USERID FROM TABLE IDLE NODE TIMEOUT: WTO AUTO SIGNON Y
4 - SUFFIXED USERID (0, 10-1440) BYPASS DEQUEUE N
5 - USER DFSSGNX1 ASOT 0060 LOGON DESCRIPTOR
                                                                                                                                                  (Y/N)
                                                                                                                                                (Y/N)
        5 - USER DFSSGNX1
6 - APPEND "@" TO USERID
                                                                     ALOT 0010
                                                                                                     DEVICE MODEL
                                                                                                     SECURITY PROFILE
         2 - FORCRESP 2 - NOTERM 3 - TRANRESP 3 - MONTEN
 RESPONSE OPTIONS:
       1 - NORESP
2 - FORCRESP
                                                                                        ===== USER/LTERMS ======
                                                    3 - NONIOPCB
```

Figure 28. LUNAME Options for SLU2/3270 panel

### LUNAME (command line)

You can use wildcards if you do not want to use specific LUNAMEs. Wildcards include:

- Percent sign (%) represents a one-to-one relationship with character positions in your LUNAMEs. For example, L1%%% captures those members beginning with L1 followed by any 3 characters.
- Question mark (?) represents a one-to-one relationship with numeric positions in your LUNAMEs.

For example, L1??? captures those members beginning with L1 followed by 3 numeric digits.

Asterisk (\*) - represents any characters (from 0 to many) in the LUNAME.

For example, L1\* captures all members starting with L1.

**Note:** An asterisk must be the last character in the name.

### **LOGON PROCESS**

### 1 - ETO-SUPPORT

Use this option to execute the default IMS ETO Support logon process for SLU2/3270.

### 2 - USER DFSLGNX1

Use this option if you want to supply your own DFSLGNX0 (Logon) exit routine. You must change the 0 in the exit name to the numeric 1 to access your exit (DFSLGNX1).

### 3 - AUTO SIGNON

Use this option to perform an automatic non-RACF signon.

#### 4 - USERID

Use this option to perform an automatic non-RACF signon using the specified user ID.

#### 5 - RACF USERID

Use this option to perform an automatic RACF signon using the user ID specified in option **4** (USERID).

You must enter the TSO user ID value in the entry field for option 4 (USERID).

An online or batch refresh is required after the change is made to activate the change dynamically.

**Note:** IMS ETO Support first matches the LUNAME at the signon with a specific LUNAME in the "LUNAME OPTIONS for SLU2/3270" table (as described in <u>"Setting LUNAME options for the SLU2/3270 device"</u> on page 103) before it attempts to match any wildcard.

**Restriction:** If users are enabled to sign on to IMS multiple times (from multiple terminals) with the same user ID, it is best practice to use IMS ETO Support logon and naming options that do not create naming collision errors. For example, when using USERID or RACF USERID for the logon process, do not use IMS DEFAULT as the LTERM/USER NAMING OPTION. Instead, use NODE=LTERM=USER or SUFFIXED USERID as the LTERM/USER NAMING OPTION.

### **DFS3649**

### 1 - IMS DEFAULT

Use this option to receive the standard DFS3649A message.

### 2 - DFS2002 MESSAGE

Use this option to receive message DFS2002.

### 3 - ETO-SUPPORT

Use this option to receive the IMS ETO Support standard signon panel.

#### **PASSSIZE**

This suboption is located on the right side of '3 - ETO-SUPPORT \*'. Use this suboption to specify which panel to receive when signing on.

P

Use this option to receive the IMS ETO Support passphrase signon panel. Member IZTSIGNP in SIZTDATA contains the MFS source for this option.

W

Use this option to receive the IMS ETO Support password signon panel. Member IZTSIGNO in SIZTDATA contains the MFS source for this option.

If this suboption is not specified, the signon panel is determined by the MFSPPDEF parameter of the DFSDCxxx PROCLIB member.

MFSPPDEF=Y: IMS ETO Support passphrase signon panel is to be used MFSPPDEF=N: IMS ETO Support password signon panel is to be used

### 4 - USER DFSGMSG1

Use this option to make your own DFSGMSG0 (Greeting Messages) exit after signon. You must change the 0 in the exit name to the numeric 1 to access your exit (DFSGMSG1).

### 5 - USER MOD

Use this option to supply your own MFS mod name.

#### **DFS3650**

#### 1 - IMS DEFAULT

Use this option to receive the standard DFS3650A (signon status) message after signon.

### 2 - DFS058 MESSAGE

Use this option to receive message DFS058 after signon.

#### 3 - BLANK SCREEN

Use this option to send a 1-byte blank (X'40') message to IMS MOD DFSMO2.

### 4 - USER DFSGMSG1

Use this option to invoke your own DFSGMSG0 exit after signon. You must change the 0 in the exit name to numeric 1 to access your exit (DFSGMSG1).

### 5 - USER MOD

Use this option to supply your own MFS mod name after signon.

### 6 - DFS2002 MESSAGE

Use this option to receive message DFS2002.

### 7 - TRX NAME

Use this option to specify the IMS transaction name to schedule after signon. To use this option. you must specify option **7** for the DFS3650 option and you cannot have specified any value for the USER MOD name.

### LTERM/USER NAMING

### 1 - IMS DEFAULT

Use this option to create a USER and LTERM standard IMS ETO naming structure (USERID=USER=LTERM).

### 2 - NODE=USER=LTERM

Use this option to create a USER and LTERM with the same name as the NODE.

### 3 - USERID FROM TABLE

If you select this option, you must specify a user LTERM in the USER/LTERM field. The name you enter is used to create the USER=LTERM name.

**Note:** When selecting this option, if your LUNAME contains wildcards, your USER/LTERM field must contain one entry with mask characters. If your LUNAME does not contain wildcards, the USER/LTERM field must not contain mask characters.

### 4 - SUFFIXED USERID

Use this option to specify that the USER/LTERM is to be created by appending a suffix to the user ID. You can choose from one of the following techniques to determine how the names are generated:

### Technique 1.

IMS ETO Support adds a single character to the user ID to form the USER/LTERM name. The values it adds are 0 - 9, A - Z.

### Technique 2.

IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name. The values it appends are 000 - FFF.

### Technique 3.

For all but the initial signon, IMS ETO Support adds a single character to the user ID to form the USER/LTERM name. The values are 1 - 9 and A - Z. For the initial signon of a user ID, no suffix is added.

### Technique 4.

For all but the initial signon, IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name. The values it appends are 001 - FFF. For the initial signon of a user ID, no suffix is appended.

If you selected technique 2 and the user ID is 7 characters, IMS ETO Support automatically switches to technique 1.

If you selected technique 4 and the user ID is 7 characters, IMS IMS ETO Support automatically switches to technique 3.

When this option is used, IMS ETO Support returns to IMS the first available user ID and suffix name.

If the same user ID attempts to sign on at the same time, IMS ETO Support may return the same suffix data to IMS. If this happens, the second attempt to sign on with the same user ID receives an error message indicating that the USER/LTERM is already in use. In this case, the signon needs to be tried again.

### 5 - USER DFSSGNX1

Use this option to create your own customized DFSSGNX0 (Sign-On) exit. You must change the 0 in the exit name to numeric 1 to access your exit (DFSSGNX1).

### 6 - APPEND @ TO USERID

Use this option to specify that the USER/LTERM is to be created by appending an at sign (@) character to the user ID. In order for an at sign (@) character to be appended, the user ID must be less than 8 characters long. If this option is selected and an 8-character user ID is used to sign on to IMS, the 8-character user ID is used for the user name and LTERM name.

### **IDLE NODE TIMEOUT**

#### **ASOT**

Use this option to specify an auto signoff time.

#### **ALOT**

Use this option to specify an auto logoff time.

### **RESPONSE OPTIONS**

Use this option to set the desired terminal response. RESPONSE parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 NORESP
- 2 FORCRESP
- 3 TRANRESP

#### **MSGDEL OPTIONS**

Use the MSGDEL option to specify the messages you want IMS to discard for the specified terminal.

MSGDEL parameter values are described in the TERMINAL macro definition in IMS System Definition.

- 1 SYSINFO
- 2 NOTERM
- 3 NONIOPCB

### **BYPASS DEOUEUE**

Specify whether messages are dequeued for this device.

Υ

Messages are not dequeued for this device.

N

If this is a dynamic device, messages are dequeued during SIGNOFF CLEANUP processing, provided SIGNOFF CLEANUP is specified as **Y**.

If this is a static device, messages are dequeued during SIGNOFF CLEANUP processing, provided both SIGNOFF CLEANING and PROCESS STATIC TERMINALS are specified as **Y**.

#### **LOGON DESCRIPTOR**

Set the LOGON DESCRIPTOR option to specify the 1- to 8-character alphanumeric logon descriptor. The first character must be alphabetic or national (@#\$).

#### DEVICE MODEL

Use the DEVICE MODEL option to select screen size. The name defined for the device model must be for a static SYSGENed terminal.

#### **SECURITY PROFILE**

Use the SECURITY PROFILE option to specify the 1- to 8-character alphanumeric security group. The first character must be alphabetic or national (@#\$).

### **USER/LTERMS**

Set the USER/LTERMS option if option **3** (USERID FROM TABLE) is selected, If option **3** is selected, you must supply 1 - 8 LTERM names. Each LTERM name is checked for uniqueness within the IMS ETO support tables.

The first name in the list is used both as the user name and as the first LTERM. The remaining names are used for additional LTERMs.

If the name you select contains mask characters (!), the LUNAME must contain wildcards and you cannot specify more than one USER/LTERM name.

#### **WTO AUTO SIGNON**

Use this option to specify whether WTO message IZT9102I is displayed when this device performs an auto signon.

Υ

Message IZT9102I is displayed when this device does an auto signon or an auto signon with user ID.

Ν

Message IZT9102I is not issued for this device.

After you have entered all your LUNAME options, press Enter.

A confirmation appears indicating that the LUNAME options have been stored.

# **Setting LUNAME options for the SLUP/3600/FINANCE device**

This topic describes setting LUNAME options for the SLUP/3600/FINANCE device.

### Viewing the SLUP/3600/FINANCE device member list

The SLUP/3600/FINANCE Member List panel is displayed if you choose option **3** on the LUNAME Specific Options panel.

```
IMS ETO-SUPPORT
T7TRAN
                                                                      IMSID: IMS0
COMMAND ===>
START ===>
                                VERSION - 03.02.00
                                                                     RELEASE: 15.1.0
                           SLUP/3600 MEMBER LIST
                                       SEL MEMBER SEL MEMBER
SEL MEMBER SEL MEMBER
     D36*
     FIN0010
     FIN0011
     FIN0012
     SLUP001
     SLUP002
ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 29. SLUP/3600/FINANCE Member List panel

This panel displays a list of the SLUP/3600/FINANCE members, if any.

To add an LUNAME, type A on the command line and press Enter.

To update a listed LUNAME entry, tab to the desired name and type an S or E next to the name; then press Enter.

### Setting options for the SLUP/3600/FINANCE device

The LUNAME Options for SLUP/3600/FINANCE panel is displayed after you select the appropriate option on the SLUP/3600/FINANCE Member List panel.

Use this panel to set options for SLUP/3600/FINANCE entries. Options set on this panel override any global and device options set for specific SLUP/3600/FINANCE LUNAMEs.

```
IZTRAN
                                      IMS ETO-SUPPORT
                                                                                  IMSID: IMS0
                                     VERSION - 03.02.00
                                                                                  RELEASE: 15.1.0
COMMAND ===>
LUNAME ===> FIN0010 LUNAME OPTIONS FOR SLUP/3600/FINANCE
LOGON PROCESS
                                 DFS3650
                                                                  LTERM NAMING OPTIONS:
LOGON PROCESS DFS3650 LTERM NAMING OPTIONS:

1 1 - ETO-SUPPORT 1 1 - IMS DEFAULT 1 1 - LTERM = NODE NAME
2 - USER DFSLGNX1 2 - DFS058 MESSAGE 2 - LTERM FROM TABLE
3 - AUTO RACF SIGNON 3 - BLANK MESSAGE 3 - USER DFSSGNX1
    1 - NORESP IDLE NODE TIMEOUT: (BLANKS, 0000, 0010-1440)
2 - FORCRESP ASOT 1440
3 - TRANRESP ALOT
DEL OPTIONS:
RESPONSE OPTIONS:
1 1 - NORESP
MSGDEL OPTIONS:
    1 - SYSINFO
2 - NOTERM
                                     SECURITY PROFILE SECSLUP
     3 - NONIOPCB I/O = INPUT/OUTPUT COMPT (1-4)
                                   C = CASE 0=UC,1=ULC
=LTERM== I / O C =LTERM== I / O C
                                                               =LTERM== I / O C
```

Figure 30. LUNAME Options for SLUP/3600/FINANCE panel

### **LUNAME** (command line)

Enter the LUNAME when adding an LU member. You can use wildcards if you do not want to use the specific LUNAMEs. Wildcards include:

- Percent sign (%) represents a one-to-one relationship with character positions in your LUNAMEs.
  - For example, L1%%% captures those members beginning with L1 followed by any 3 characters.
- Question mark (?) represents a one-to-one relationship with numeric positions in your LUNAMEs.

For example, L1??? captures those members beginning with L1 followed by 3 numeric digits.

Asterisk (\*) - represents any characters (from 0 to many) in the LU.

For example, L1\* captures all members starting with L1.

**Note:** An asterisk must be the last character in the name.

### **LOGON PROCESS**

### 1 - ETO SUPPORT

Use this option to perform an automatic non-RACF signon.

### 2 - USER DFSLGNX

Use this option if you want to supply your own DFSLGNX0 (Logon) exit routine. You must change the 0 in the exit to numeric 1 to access your exit (DFSLGNX1).

### 3 - AUTO RACF SIGNON

Use this option to perform an automatic RACF signon. See <u>"Automatic RACF signon" on page 50</u> for a description of this option.

### 4 - USERID

Use this option to perform an automatic non-RACF signon using the specified user ID.

### **DFS3650**

### 1 - IMS DEFAULT

Use this option to receive the standard DFS3650A (session status) message after signon.

### 2 - DFS058 MESSAGE

Use this option to receive message DFS058 after signon.

### 3 - BLANK MESSAGE

Use this option to receive a blank message after signon.

### 4 - USER DFSGMSG1

Use this option to invoke your own DFSGMSG0 exit after signon. You must change the 0 to numeric 1 to access your exit (DFSGMSG1).

### LTERM NAMING OPTIONS

### 1 - LTERM = NODE NAME

Use this option to create an LTERM with the same name as the VTAM NODE. (For SLUP/3600/FINANCE devices, the USER name (SPQB) is always the same as the NODE.)

### 2 - LTERM FROM TABLE

Use this option to select the LTERM name from the table. When this option is specified, you must also specify one or more LTERM names.

### 3 - USER DFSSGNX1

Use this option to invoke you own DFSSGNX0 exit. You must change the 0 in the exit name to a numeric 1 to access your exit (DFSSGNX1).

### **RESPONSE OPTIONS**

Use this option to set the desired terminal response. RESPONSE parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 NORESP
- 2 FORCRESP
- 3 TRANRESP

#### **MSGDEL OPTIONS**

Use this option to specify the messages you want IMS to discard for the specified terminal. MSGDEL parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

1 - SYSINFO

- 2 NOTERM
- 3 NONIOPCB

### **IDLE NODE TIMEOUT**

#### **ASOT**

Use this option to set the auto signoff time.

#### ALOT

Use this option to set the auto logoff time.

### **LOGON DESCRIPTOR**

Use this option to specify the 1- to 8-character alphanumeric logon descriptor.

### **SECURITY PROFILE**

Use this option to specify the 1- to 8-character alphanumeric security group.

### =LTERM== I/O C

Use these fields to describe the LTERM names and their ICOMPT/COMPT (I/O) and case values. ICOMPT (I) and COMPT (O) fields describe the component in the logon descriptor to be used by this LTERM. IMS ETO Support accepts values between 1 and 4 for the ICOMPT/COMPT fields.

Case (C) describes the character case to be used, where 0 is uppercase and 1 is uppercase or lowercase.

#### **WTO AUTO SIGNON**

Use this option to specify whether WTO message IZT9102I is displayed when this device performs an auto signon.

Υ

Message IZT9102I is displayed when this device does an auto signon or an auto signon with user ID.

Ν

Message IZT9102I is not issued for this device.

After you have entered all your LUNAME options, press Enter.

A confirmation appears indicating that the LUNAME options have been stored.

# Setting LUNAME options for the LU 6.1 device

This topic describes setting LUNAME options for LU 6.1 devices.

### Viewing the LU 6.1 device member list

The LU 6.1 Member List panel is displayed if you choose option 4 on the LUNAME Specific Options panel.

```
IZTRAN

COMMAND ===> VERSION - 03.02.00
START ===> LU61(ISC) MEMBER LIST

SEL MEMBER

SEL MEMBER

SEL MEMBER

SEL MEMBER

IMST*
IMSOCTL
IMSOCTL
IMSOCTL
IMS1CTL

ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY
COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 31. LU61 (ISC) Member List panel

This panel displays a list of the LU 6.1 members, if any.

If the LU DEFINITION REQUIRED option is active, only the listed LUNAMEs are allowed to start LU 6.1 (ISC) sessions.

To add an LUNAME, type A on the command line and press Enter.

To update a listed LUNAME entry, tab to the desired name and type S or E next to the name; then press Enter.

### Setting options for the LU 6.1 device

The LUNAME Options for LU 6.1 (ISC) panel is displayed after you select the appropriate option on the LU61 (ISC) Member List panel.

```
IZTRAN IMS ETO-SUPPORT IMSID: IMSO
COMMAND ===> VERSION - 03.02.00 RELEASE: 15.1.0
LUNAME ===> IMST* LUNAME OPTIONS FOR LU 6.1 (ISC)

LOGON DESCRIPTOR ===> DFSLU61
```

Figure 32. LUNAME Options for LU 6.1 (ISC) panel

### **LUNAME** (command line)

Enter the LUNAME when adding an LU member. You can use wildcards if you do not want to use specific LUNAMEs. Wildcards include:

- Percent sign (%) represents a one-to-one relationship with character positions in your LUNAMEs. For example, L1%%% captures those members beginning with L1 followed by any 3 characters.
- Question mark (?) represents a one-to-one relationship with numeric positions in your LUNAMEs. For example, L1??? captures those members beginning with L1 followed by 3 numeric digits.
- Asterisk (\*) represents any characters (from 0 to many) in the LUNAME.

For example, L1\* captures all members starting with L1.

Note: An asterisk must be the last character in the name.

### **LOGON DESCRIPTOR**

Specify the 1- to 8-character alphanumeric logon descriptor name. The first character must be alphabetic or national (@#\$). If IZTFAIL is specified as the logon descriptor, IMS ETO Support will reject the logon attempt.

# **Setting user ID types**

The User ID Type Menu contains user ID options for the SLU2/3270 and LU 6.1.

This panel is displayed if you choose option **D** on the Primary Menu.

```
IZTRAN
COMMAND ===>

IMS ETO-SUPPORT
VERSION - 03.02.00
USERID TYPE MENU

USERID TYPE
1 - SLU2/3270 USERID
2 - LU 6.1 (ISC) USERID
```

Figure 33. User ID Type Menu panel

### **Topics:**

- "Setting SLU2/3270 user ID options" on page 113
- "Setting LU 6.1 user ID options" on page 116

# **Setting SLU2/3270 user ID options**

This topic describes how to set SLU2/3270 user ID options.

### Viewing the SLU2/3270 user ID member list

The SLU2 User ID Member List panel is displayed if you choose option **1** on the User ID Type Menu panel. Use this panel to set options for user IDs.

```
IZTRAN

COMMAND ===>

VERSION - 03.02.00

START ===>

SLU2 USERID MEMBER LIST

SEL MEMBER

IBMUSER
P390
P390A
SSMITH

IMSID: IMS0
RELEASE: 15.1.0

RELEASE: 15.1.0
```

Figure 34. SLU2 User ID Member List panel

This panel displays SLU2/3270 user IDs created for the option, if any.

To add a SLU2/3270 user ID, type A on the command line and press Enter.

To update a listed SLU2/3270 user ID, tab to the required user ID, type an S or E next to the name, and press Enter.

### Setting SLU2/3270 user ID options

The SLU2/3270 User ID Options panel is displayed when you have selected the appropriate option on the SLU2 User ID Member List panel.

```
IMS ETO-SUPPORT
T7TRAN
                                                          IMSID: IMS0
COMMAND ===>
                          VERSION - 03.02.00
                                                          RELEASE: 15.1.0
USERID ===> SSMITH SLU2/3270 USERID OPTIONS
DFS3650
                                  LTERM/USER NAMING OPTIONS:
1 1 - IMS DEFAULT
                                  1 1 - IMS DEFAULT
   2 - DFS058 MESSAGE
                                      2 - NODE=USER=LTERM
   3 - BLANK SCREEN
                                      3 - USERID FROM TABLE
                                     4 - SUFFIXED USERID
5 - USER DFSSGNX1
   4 - USER DFSGMSG1
    5 - USER MOD
    6 - DFS2002 MESSAGE
                                     6 - APPEND "@" TO USERID
    7 - TRX NAME
IDLE NODE TIMEOUT (0, 10-1440)
    AS0T
                                   BYPASS DEQUEUE
                                                   N (Y/N)
                                   SECURITY PROFILE
===== USER/LTERMS ======
                     3 - NONIOPCB
```

Figure 35. SLU2/3270 User ID Options panel

#### **DFS3650**

#### 1 - IMS DEFAULT

Use this option to receive the standard DFS3650A (signon status) message after signon.

### 2 - DFS058 MESSAGE

Use this option to receive message DFS058 after signon.

### 3 - BLANK SCREEN

Use this option to receive a blank screen after signon.

### 4 - USER DFSGMSG1

Use this option to invoke your own DFSGMSG0 exit after signon. You must change the 0 in the exit name to numeric 1 to access your exit (DFSGMSG1).

### 5 - USER MOD

Use this option to supply your own MFS mod name after signon.

### 6 - DFS2002 MESSAGE

Use this option to receive message DFS2002.

### 7 - TRX NAME

Use this option to specify the IMS transaction name to schedule after signon. To use this option. you must specify option **7** for the DFS3650 option and you cannot have specified any value for the USER MOD name.

### LTERM/USER NAMING OPTIONS

With this option, you can specify the USER and LTERM to be created by selecting the names from a customized table.

### 1 - IMS DEFAULT

Use this option to create a USER and LTERM standard IMS ETO naming structure (USERID=USER=LTERM).

### 2 - NODE=USER=LTERM

Use this option to create a USER and LTERM with the same name as the NODE.

### 3 - USERID FROM TABLE

If you select this option, you must specify a user LTERM in the USER/LTERM field at the bottom of the screen. The name you enter is used to create the USER=LTERM name.

#### 4 - SUFFIXED USERID

Use this option to specify that the USER/LTERM is to be created by appending a suffix to the user ID. You can choose from one of the following techniques to determine how the names are generated:

### Technique 1.

IMS ETO Support adds a single character to the user ID to form the USER/LTERM name. The values it adds are 0 - 9, A - Z.

### Technique 2.

IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name. The values it appends are 000 - FFF.

### Technique 3.

For all but the initial signon, IMS ETO Support adds a single character to the user ID to form the USER/LTERM name. The values are 1 - 9, A - Z. For the initial signon of a user ID, no suffix is added.

### Technique 4.

For all but the initial signon, IMS ETO Support adds multiple characters to the user ID to form the USER/LTERM name. The values it appends are 001 - FFF. For the initial signon of a user ID, no suffix is appended.

If you selected technique 2 and the user ID is 7 characters, IMS ETO Support automatically switches to technique 1.

If you selected technique 4 and the user ID is 7 characters, IMS ETO Support automatically switches to technique 3.

When this option is used, IMS ETO Support returns to IMS the first available user ID and suffix name.

If the same user ID attempts to sign on at the same time, IMS ETO Support may return the same suffix data to IMS. If this happens, the second attempt to sign on with the same user ID receives an error message indicating that the USER/LTERM is already in use. In this case, the signon needs to be tried again.

### 5 - USER DFSSGNX1

Use this option to create your own customized DFSSGNX0 (Sign-On) exit. You must change the 0 in the exit name to numeric 1 to access your exit (DFSSGNX1).

### 6 - APPEND @ TO USERID

Use this option to specify that the USER/LTERM is to be created by appending an at sign (@) character to the user ID. In order for an at sign (@) character to be appended, the user ID must be less than 8 characters long. If this option is selected and an 8-character user ID is used to sign on to IMS, the 8-character user ID is used for the user name and LTERM name.

### **IDLE NODE TIMEOUT**

#### **ASOT**

Use this option to specify an auto signoff time.

### **RESPONSE OPTIONS**

Use this option to set the desired terminal response. RESPONSE parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 NORESP
- 2 FORCRESP
- 3 TRANRESP

### **MSGDEL OPTIONS**

Use this option to specify the messages you want IMS to discard for the specified terminal. MSGDEL parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 SYSINFO
- 2 NOTERM

#### 3 - NONIOPCB

### **SECURITY PROFILE**

Use this option to specify the 1- to 8-character alphanumeric security profile. The first character must be alphabetic or national (@#\$).

### **USER/LTERM**

If option **3** (USERID FROM TABLE) is selected, you must supply 1 - 8 LTERM names. Each LTERM name is checked for uniqueness within the IMS ETO Support tables. The first name in the list is used as both the user name as well as that of the first LTERM. The remaining names are used for additional LTERMs.

After you have entered all your user ID options, press Enter.

A confirmation appears indicating the user ID options have been stored.

# **Setting LU 6.1 user ID options**

This topic describes setting LU 6.1 user ID options.

### Viewing the LU 6.1 user ID member list

The LU61 User ID Member List panel is displayed if you choose option **2** on the User ID Type Menu panel. Use this panel to set options for user IDs.



Figure 36. LU61 USERID Member List panel

This screen displays LU 6.1 (ISC) user IDs created for the option, if any.

To add a LU 6.1 (ISC) user ID, type A on the command line and press Enter.

To update a listed LU 6.1 (ISC) user ID, tab to the required user ID, type an S or E next to the name, and press Enter.

### Setting SLU2/3270 user ID options

The LU 6.1 User ID Options panel is displayed when you have selected the appropriate option on the LU61 User ID Member List.

```
IMS ETO-SUPPORT
T7TRAN
                                                                 IMSID: IMS0
COMMAND ===> VERSION - 03.02.00
USERID ===> J001 LU 6.1 USERID OPTIONS
                                                                 RELEASE: 15.1.0
LOGON OPTION
                                        LTERM NAMING OPTIONS
1 1 - ETO SUPPORT
                                        1 1 - LTERM = USER NAME
    2 - USER DFSLGNX1
                                             2 - LTERM FROM TABLE
                                            3 - USER DFSSGNX1
    3 - AUTO SIGNON (NON-RACF)
RESPONSE OPTIONS
                              IDLE NODE TIMEOUT (BLANKS, 0000, 0010-1440)
    1 - NORESP
                                  AS0T
    2 - FORCRESP
                                  LOGON DESCRIPTOR DFSLU61
    3 - TRANRESP
                                   SECURITY PROFILE SECLU61
                                              IMS0
MSGDEL OPTIONS
                                  NODE NAME
    1 - SYSINFO
2 - NOTERM
                                                    LU6NEGPS
                                  LOGONMODE
                                  REMOTE ID
                                                  0001
    3 - NONIOPCB
                     I/O = INPUT/OUTPUT COMPT (1-4)
                          C = CASE 0=UC,1=ULC
C = CASE 0=UC,1=UL(
=LTERM== I / O C =LTERM== I / O C
                                                =LTERM== I / O C
```

Figure 37. LU 6.1 USERID Options panel

After you have entered all of your user ID options, press Enter. A confirmation message appears indicating the user ID options have been stored.

### **LOGON PROCESS**

### 1 - ETO SUPPORT

Use this option to allow IMS to determine logon process.

### 2 - USER DFSLGNX1

Use this option if you want to supply your own DFSLGNX0 (Logon) exit. You must change the 0 in the exit name to numeric 1 to access your exit (DFSLGNX1).

### 3 - AUTO SIGNON (NON-RACF)

Use this option to perform a non-RACF signon.

### LTERM NAMING OPTIONS

### 1 - LTERM = USER NAME

Use this option to create an LTERM with the same name as the USER field from the **/OPNDST** command.

### 2 - LTERM FROM TABLE

If you select this option, you must specify 1 - 8 LTERM names at the bottom of the panel.

#### 3 - USER DFSSGNX1

Use this option if you want to supply your own DFSSGNX0 (Signon) exit. You must change the 0 in the exit name to numeric 1 to access your own exit (DFSSGNX1).

#### **RESPONSE OPTIONS**

Use this option to set the required terminal response. RESPONSE parameters are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 NORESP
- 2 FORCRESP
- 3 TRANRESP

### **MSGDEL OPTIONS**

Use this option to specify the messages you want IMS to discard for the specified LU 6.1 (ISC) sessions. MSGDEL parameter values are described in the TERMINAL macro in *IMS System Definition*.

- 1 SYSINFO
- 2 NOTERM

#### 3 - NONIOPCB

#### **IDLE NODE TIMEOUT**

ASOT - Use this option to specify an auto signoff time.

### **LOGON DESCRIPTOR**

Use this option to specify the 1- to 8-character alphanumeric logon descriptor.

### **SECURITY PROFILE**

Use this option to specify the 1- to 8-character alphanumeric security profile.

### **NODE NAME**

Use this option to specify the 1- to 8-character alphanumeric VTAM node name.

### **LOGONMODE**

Use this option to specify the 1- to 8-character alphanumeric VTAM LOGONMODE name.

#### REMOTE ID

Use this option to specify the 1- to 8-character alphanumeric ID used for the remote systems half-session.

### =LTERM== I / O C

Use these fields to describe the LTERM names and their ICOMPT/OCOMPT (I/O) and case values.

ICOMPT (I) and OCOMPT (O) fields describe the component in the logon descriptor to be used by this LTERM. IMS ETO Support accepts values between 1 and 4 for the ICOMPT/OCOMPT fields.

Case (C) describes the character case to be used, where 0 is uppercase and 1 is uppercase or lowercase.

After you have entered all your user ID options, press Enter.

A confirmation appears indicating that the user ID options have been stored.

# **Setting security options**

You can set security options by selecting option **E** on the Primary Menu.

Use the Security Options Menu to set command security options.

```
IZTRAN
COMMAND ===>

IMS ETO-SUPPORT
VERSION - 03.02.00
SECURITY OPTIONS MENU

OPTIONS
1 - COMMAND SECURITY OPTIONS
2 - ETV SECURITY OPTIONS (SMU)
```

Figure 38. Security Options Menu panel

### **Topics:**

- "Security options overview" on page 118
- "Setting command security options" on page 119
- "Setting ETV security options (SMU)" on page 122

# Security options overview

This topic provides an overview for setting security options.

With IMS ETO Support, you can select how to perform IMS command authorization checking for:

- ETO (dynamic) terminals
- · Static terminals
- · APPC connections

- · OTMA connections
- · ICMD AOI programs
- CMD AOI programs

For each of these different places from which IMS commands can originate, you can select how authorizations are to be performed. Command authorizations can be performed using:

- RACF (or SMU for static terminals)
- User-supplied Command Authorization exit (DFSCCMD1)
- IMS ETO Support-maintained tables

You can also perform enhanced command+keyword authorization checking. Enhanced command+keyword checking restricts or allows access to certain command and keyword combinations.

For example, you might want to allow global access to the **/STO** command but prevent global access to the **/STO** DC command. Or, you might want to restrict use of the **/STO** command but allow global access to the **/STO** TRAN or **/STO** PROG combinations.

Enhanced command+keyword checking using the IMS ETO Support tables is available for IMS commands originating from:

- ETO and static SLU2/3270
- ETO and static SLU1 console
- ETO and static SLUP/3600/FINANCE
- APPC connections
- · OTMA connections
- ICMD AOI
- · CMD AOI programs

Enhanced command+keyword checking using the RACF interface is available for IMS commands originating from:

- ETO and static SLU2/3270
- ETO and static SLU1 console
- ETO and static SLUP/3600/FINANCE
- · APPC connections
- · OTMA connections
- · CMD AOI programs

# **Setting command security options**

You can use this panel to set IMS command authorization checking for each of the places from which IMS commands can originate.

The selections under option **E** on the Primary Menu are the same for each place from which IMS commands can originate. For example:

- · ETO terminals
- Static terminals
- LU 6.2 (APPC) connections
- · OTMA connections
- · ICMD AOI programs
- · CMD AOI programs
- LU 6.1 (ISC) connections

For IMS commands other than those from dynamic and static terminals, IMS ETO Support uses a default group for each place from which an IMS command can originate. When option **3** (ETOS Security Profiles) is selected for a specific place of origin, the default group is:

- APPC (LU 6.2) connection / APPCGRP
- · OTMA connection / OTMAGRP
- ICMD AOI program / ICMDGRP
- CMD AOI program / ICMDGRP

If you select option **1** on the Security Options Menu, the Command Security Options panel is displayed.

```
IZTRAN
                                      IMS ETO-SUPPORT
                                                                                  IMSID:
                                                                                             IMS0
                                     VERSION - 03.02.00
                                                                                  RELEASE: 15.1.0
COMMAND ===>
                                 COMMAND SECURITY OPTIONS
CHOOSE PROCESSING OPTION --- VALID OPTIONS
    - DYNAMIC TERMINALS 1 - USE RACF RETURN CODE

- STATIC TERMINALS 2 - USER DFSCCMD1

- LU 6.2 DEVICES 3 - USE ETOS SECURITY PROFILES
    - OTMA DEVICES
    - ICMD CALLS
   - CMD CALLS
- LU 6.1 (ISC) DEVICES
CALL DFSCCMD1 (Y/N)
     COMMANDS FROM THE WTOR COMMANDS FROM THE MTO
     COMMANDS FROM TCO
     COMMANDS FROM EMCS CONSOLES
ENHANCED COMMAND+KEYWORD SECURITY ===> Y
                                                        (Y OR N)
```

Figure 39. Command Security Options panel

IMS ETO Support provides three options for IMS command authorization for commands originating from dynamic terminals, static terminals, OTMA, APPC, AOI program (ICMD and CMD calls). The available authorization facilities are:

- USE RACF RETURN CODE
- USER DFSCCMD1
- USE ETOS SECURITY PROFILES

### **Use RACF return code**

Use this option to let IMS determine initial command authorization. For each place from which an IMS command can originate, IMS has several options for determining authorization. The options are specified in the DFSPBxxx PROCLIB member. The relevant parameters are:

- RCF=
- AOIS=
- AOI1=
- APPCSE=
- OTMASE=
- CMDMCS=

The enhanced command+keyword checking function will determine final command authorization for all command origins except IMS CMD and ICMD calls, provided it is active and the above options are specified such that the command authorization exit (DFSCCMD0) is invoked.

**Note:** Depending upon the specification of the RCF= parameter, static terminals can use SMU for command authorization rather than RACF.

### **User DFSCCMD1**

Use this option to specify that IMS command authorization checking is to be performed by a user-supplied Command Authorization exit.

This exit must be named DFSCCMD1 and must be a member of either STEPLIB/JOBLIB or a link list library. Additionally, this exit must be either available at IMS startup or loaded dynamically using option **R** on the Primary Menu.

The RCF= parameter of the DFSPBxxx PROCLIB member must be specified such that Command Authorization exit (DFSCCMD0) gets invoked.

### **IMS ETO Support Security Profile Lookup**

Specify this option for IMS ETO Support to use the E/CSA tables to perform IMS command authorization checking.

For dynamic or static devices supported by IMS ETO Support, the E/CSA tables are searched looking for a matching node name or user ID record. If a matching entry is not found, or if the security profile name is not specified on the entry, IMS ETO Support will check the device record for a security profile name.

Different terminals can use unique entries with this option, which can provide unique IMS command access for different devices and/or users. The enhanced command+keyword checking function, if active, determines the final authorization.

For IMS commands that originate from APPC, OTMA and ICMD AOI programs, IMS ETO Support uses a default security profile. The following table lists the default security profile based upon command origin:

- APPC (LU 6.2) connection/APPCGRP
- OTMA connection/OTMAGRP
- · ICMD AOI program/ICMDGRP

If option **3** is selected for IMS command authorization, the default security profile (and the list of authorized commands) must be defined using option **G** on the Primary Menu.

### Allowing DFSCCMD1 to determine authorization

IMS ETO Support handles commands that are entered from the following consoles uniquely:

- Write to Operator with Reply (WTOR)
- IMS Master Terminal Operator (MTO)
- Time Controlled Operations (TCO)
- Multiple Console Support (MCS) or Extended Multiple Console Support (EMCS)

All commands from the WTOR, MTO, and TCO script are allowed if you use IMS ETO Support for command authorization. Authorization for commands from MCS or EMCS consoles is determined by IMS.

IMS ETO Support can be configured to allow exit routine DFSCCMD1 to determine authorization to the command for commands from the WTOR, MTO, TCO and MCS, or EMCS consoles.

### Commands that are entered from the Write To Operator with Reply (WTOR)

Υ

Commands that are entered using the WTOR are passed to exit routine DFSCCMD1. Authorization to the command is determined by exit routine DFSCCMD1.

Ν

Commands that are entered using the WTOR are not passed to exit routine DFSCCMD1. IMS ETO Support allows access to all commands from the WTOR.

### Commands that are entered from the IMS Master Terminal Operator (MTO)

Υ

Commands that are entered from the MTO are passed to exit routine DFSCCMD1. Authorization to the command is determined by exit routine DFSCCMD1.

Ν

Commands that are entered from the MTO are not passed to exit routine DFSCCMD1. IMS ETO Support allows access to all commands from the MTO.

### **Commands that are entered from Time Controlled Operations (TCO)**

Υ

Commands that are entered from TCO are passed to exit routine DFSCCMD1. Authorization to the command is determined by exit routine DFSCCMD1.

Ν

Commands that are entered from TCO are not passed to exit routine DFSCCMD1. IMS ETO Support allows access to all commands from TCO.

# Commands that are entered from Multiple Console Support (MCS) or Extended Multiple Console Support (EMCS) consoles

**Note:** In order for the user Command Authorization exit (DFSCCMD1) to be invoked, parameter CMDMCS= in PROCLIB member DFSPBxxx must be coded to specify the Command Authorization exit is called.

Υ

Commands that are entered from MCS or EMCS consoles are passed to exit routine DFSCCMD1. Authorization to the command is determined by exit routine DFSCCMD1.

Ν

Commands that are entered from MCS or EMCS consoles are not passed to exit routine DFSCCMD1. IMS determines authorization to the command.

### **ENHANCED COMMAND+KEYWORD SECURITY**

Υ

Specifies if RACF or IMS ETO Support security profiles are used for command authorization, command+keyword authorization is performed.

Ν

Command+keyword authorization will not be performed.

# **Setting ETV security options (SMU)**

These options determine whether ETV is active in this IMS region.

Note: IMS ETO Support provides a replacement for setting security options previously set in IMS SMU.

You can specify either RACF verification or ETOS MATRIX verification.

Both methods cannot be active at the same time.

Use this panel to set the processing options for Enhanced Transaction Verification (ETV):

```
IZTRAN
                              IMS ETO-SUPPORT
                                                                  IMSID:
                                                                          IMS1
                         VERSION - 03.02.00
ETV SECURITY OPTIONS (SMU)
COMMAND ===>
                                                                  RELEASE: 15.1.0
  ENHANCED TRANSACTION VERIFICATION OPTIONS
    RACF SECURITY OPTIONS
      PERFORM TRAN/LTERM VERIFICATION
                                                     (Y/N)
                                         ===>
      PERFORM TRAN/PASSWORD VERIFICATION ===>
      PREFIX NAME FOR RACF RULES
    ETOS MATRIX SECURITY OPTIONS
      PERFORM ETOS MATRIX VERIFICATION ===>
                                                     (Y/N)
    WTO MESSAGE OPTIONS
      SUPPRESS ICH408I/IZT0008I
                                                     (Y/N)
                                        ===>
```

Figure 40. ETV Security Options panel

#### **RACF SECURITY OPTIONS**

### PERFORM TRAN/LTERM VERIFICATION

Specify whether RACF verification is performed for Transaction/LTERM authorization.

Υ

IMS ETO Support performs a RACF call to verify that the LTERM attempting the transaction is authorized to process the transaction.

N

IMS ETO Support does not perform RACF calls for Transaction/LTERM authorization.

### PERFORM TRAN/PASSWORD VERIFICATION

Specify whether RACF verification is performed for Transaction/PASSWORD authorization.

γ

IMS ETO Support performs a RACF call to verify that the proper PASSWORD has been entered for the transaction.

N

IMS ETO Support does not perform a RACF call for Transaction/PASSWORD authorization.

#### PREFIX NAME FOR RACF RULES

Specify the prefix name of the RACF rule used for ETV processing.

You must specify the name as 4 characters (A-Z, 0-9, #, @, or \$).

The name is valid only if RACF verification is active for Transaction/LTERM or Transaction/PASSWORD authorization.

### **ETOS MATRIX SECURITY OPTIONS**

### PERFORM ETOS MATRIX VERIFICATION

Specify whether ETOS MATRIX verification is performed for Transaction/LTERM authorization.

Υ

IMS ETO Support performs a binary search of its MATRIX modules to perform Transaction/LTERM authorization.

N

IMS ETO Support will not perform Transaction/LTERM authorization using its MATRIX modules.

### **WTO MESSAGE OPTIONS**

### SUPPRESS ICH408I/IZT0008I

Specify whether RACF ICH408I messages and IMS ETO Support IZT0008I messages are displayed in the IMS control region when ETV denies authorization.

**Y**The messages are suppressed from the IMS control region.

Ν

If authorization to any ETV rule is denied by RACF, the messages are displayed in the IMS control region.

# **Protecting specific command+keyword combinations**

Enhanced Command+Keyword (EKW) authorization checking can be used to provide more granular command authorization. Rather than providing authorization just for the IMS command, you can use EKW to protect and authorize specific commands and their keywords.

The Command+Keyword Activation panel is displayed if you choose option **F** on the Primary Menu. Before choosing option **F**, you must have specified ENHANCED COMMAND+KEYWORD SECURITY on the Security Options panel. The Security Options panel is accessed through option **E** on the Primary Menu.

EKW can be used for all IMS command origination points if you choose **3 - USE ETOS SECURITY PROFILES** through option **E** on the Primary Menu.

EKW can be used for ETO SLU2 devices, SLU2 static devices, APPC connections, and OTMA connections if you choose **1 - USE RACF RETURN CODE**.

Note: EKW is not available for ICMD AOI programs if 1 - USE RACF RETURN CODE is selected.

EKW is activated by selecting option **E** on the Primary Menu and then setting **ENHANCED COMMAND+KEYWORD SECURITY** to **Y**.

After EKW checking is active, you can select the command+keyword combinations that are to be checked. To select these combinations, return to the Primary Menu and select option **F**.

IZTRAN COMMAND ===>	IMS ETO-SUPPORT VERSION - 03.02.00 COMMAND+KEYWORD ACTIVATION		IMSID: IMS0 RELEASE: 15.1.0			
ACT CHE DEQ EXI LOC PST RST STA UNL	ASS COM DIS IAM MOD PUR SEC STO UPD	BRO CQC END IDL MSA RCO SET SWI	CHA DBR EXC INI MSV REC SMC TER			
"S" - TO SELECT COMMAND FOR PROCESSING						

Figure 41. Command+Keyword Activation panel

From this panel, you can now select the commands for which you want to provide further authorization checking. Select a command by entering S next to it. A list is displayed of all available keywords for that particular command, as shown in the Command+Keyword Activation panel.

```
IZTRAN
COMMAND ===>

IMS ETO-SUPPORT
VERSION - 03.02.00
COMMAND+KEYWORD ACTIVATION

OPT ACT NAME
OPT ACT NAME
CHEDUMPQ
CHEFREEZ
CHEPURGE
CHESNAPQ
CHESTATS

"A/D" - TO ADD/DELETE COMMAND KEYWORD IN OPTIONS DATA SET
```

Figure 42. Command+Keyword Activation panel

To add a command+keyword to the EKW protection list, type A next to the command+keyword in the OPT column. An asterisk (\*) in the ACT column tells you that this command+keyword combination has already been activated for EKW authorization checking.

Type D to remove a command+keyword from the EKW protection list.

After you have chosen the command+keyword combinations to be checked, you must set up the users and/or devices that are to have access to this command+keyword combination. How authorization is granted depends on the option specified for the IMS command point of origin. The options (chosen through option **E** on the Primary Menu panel) are:

### • USE RACF RETURN CODE

When using this option, you must add the command+keyword name to the RACF CIMS RCLASS and grant the appropriate access. The following figure shows an example of RACF definitions.

### SECURITY PROFILE LOOKUP

When using this option, the Security Group name is obtained from either a matching user ID or device entry in the IMS ETO Support E/CSA tables. If no matching entry is found, the command is rejected.

```
IMSGEN

SECURITY RCLASS=IMS

RACF

CLASS = CIMS

RESOURCE = DISACT

UACC = NONE

PERMIT GROUP IMSOPS CLASS=CIMS RESOURCE=DISACT ACCESS=READ
```

Figure 43. EKW RACF definitions

Anyone signing on to IMS connected to group IMSOPS can now run the /DIS A command.

# **Defining security profiles for command authorization**

Security profiles are used to specify command and command+keyword authorizations when ETOS SECURITY PROFILES (option 3) is specified in the COMMAND SECURITY OPTIONS (IZTRAN option **E**).

This Security Profile Entries panel is displayed if you choose option **G** on the Primary menu. Use this panel to select these combinations.

```
IZTRAN
                                 IMS ETO-SUPPORT
                                                                       IMSID:
                                                                                IMS0
COMMAND ===>
                               VERSION - 03.02.00
                                                                       RELEASE: 15.1.0
START ===>
                             SECURITY PROFILE ENTRIES
                                                   TYPE
   SEL PROFILE
                                SEL PROFILE
                                                             SEL PROFILE
                                                                                 TYPE
         DBAGRP
                     SGRP
         DISPLAY
                     SGRP
                     SGRP
         IVTNO
         RTPR0F1
                     SGRP
         RTPR0F2
                     TRAN
         RTPR0F3
                     PROG
         RTPR0F4
                     T/P
                     SGRP
         SECLU61
         SECSLUP
                     SGRP
         SECSLU2
                     SGRP
         TECHSUPT
                     SGRP
ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 44. Security Profile Entries panel

The Security Profile Entries panel displays the security profiles you have defined to IMS ETO Support.

Type S or E next to an existing member name to edit the IMS ETO Support security profile definitions for that member name.

Type D to remove an IMS ETO Support security profile entry.

Type A on the command line to add a new IMS ETO Support security profile entry.

The Profile Definition panel appears if you enter A, S, or E.

```
IZTRAN
                             IMS ETO-SUPPORT
                                                               IMSID:
                                                                      IMS0
                                                               RELEASE: 15.1.0
COMMAND ===>
                            VERSION - 03.02.00
                            PROFILE DEFINITION
       PROFILE NAME ===> DBAGRP
       PROFILE TYPE ===> 1 1 SECURITY PROFILE
                             2 TRANSACTION
                             3 PROGRAM
                             4 TRANSACTION/PROGRAM
       IMS COMMAND TYPE ===>
                                 1 STANDARD IMS COMMANDS
                                 2 COMMAND+KEYWORD SECURITY
```

Figure 45. Profile Definition panel

In the panel,

### **PROFILE TYPE**

Specifies the type of IMS ETO Support security profile to define. For details about each profile type, see "Security profiles for IMS command authorization" on page 51.

### **IMS COMMAND TYPE**

Select **1** (STANDARD IMS COMMANDS) or **2** (COMMAND+KEYWORD SECURITY) to indicate the types of commands you are authorizing to this group.

Based on your selection, the Standard Command Authorization panel or the Command+Keyword Authorization panel appears.

# **Authorizing standard commands**

To authorize a command for the selected group, enter S next to the desired command.

IZTRAN COMMAND ===> PROFILE ===> DBAGRP	IMS ETO-SUPPORT VERSION - 03.02.00 STANDARD COMMAND AUTHORIZATION	IMSID: IMS0 RELEASE: 15.1.0			
ACT CHE CQQ S DBR EXC INI MSV RCO RMG RST S STA UNL	ASS BRO CLS COM CQS DIA DEQ S DIS S EXI IAM LOC MOD OPN PST REC RMC RMI RML SEC SET S STO SWI UPD VUN	CHA CQC S DBD END IDL MSA PUR RMD RMN SMC TER			
"S" - TO AUTHORIZE PROFILE FOR COMMAND EXECUTION					

Figure 46. Standard Command Authorization panel

# **Command+Keyword Authorization panel**

To provide authorization to a command+keyword combination, enter S next to the appropriate command.

IZTRAN COMMAND ===> PROFILE ===> DBAGRP	IMS ETO-SUPPORT VERSION - 03.02.00 COMMAND+KEYWORD AUTHORIZATION		IMSID: IMS0 RELEASE: 15.1.0			
ACT S CHE DEQ EXI LOC PST RST STA UNL	ASS COM DIS IAM MOD PUR SEC STO UPD	BRO CQC END IDL MSA RCO SET SWI	CHA DBR EXC INI MSV REC SMC TER			
"S" - TO SELECT FOR COMMAND+KEYWORD PROCESSING						

Figure 47. Command+Keyword Authorization panel (part 1)

A list is displayed of all available keywords for the selected command.

```
IZTRAN IMS ETO-SUPPORT IMSID: IMSO
COMMAND ===> DBAGRP COMMAND+KEYWORD AUTHORIZATION

OPT ACT NAME OPT ACT NAME OPT ACT NAME OPT ACT NAME

CHEDUMPQ
CHEFREEZ
CHEPURGE
CHESNAPQ
CHESTATS

"A/D" - TO ADD/DELETE COMMAND+KEYWORD IN OPTIONS DATA SET
```

Figure 48. Command+Keyword Authorization panel (part 2)

To authorize a group to a command+keyword entry, type an A next to the command+keyword in the OPT column. An asterisk (\*) in the ACT column indicates the command+keyword has already been authorized to the group.

Type a D next to the command+keyword in the OPT column to remove authorization to the command+keyword for the group.

If the Security Profile is a security group (for static or dynamic terminals) you must add the Security Profile name to the desired user ID and device entries.

# Adding, changing, and deleting LTERM names

The LTERM names panel lets you add, change, and delete printer or RCNT LTERM definitions for the displayed IMS ETO Support member names.

This panel is displayed if you choose option **H** on the Primary Menu.

```
IMSID: IMS0
RELEASE: 15.1.0
IZTRAN
                                  IMS ETO-SUPPORT
                                VERSION - 03.02.00
COMMAND ===>
                         LTERM NAMES (PRINTER OR RCNT)
START ===>
NODE
         ===>
                                             SEL MEMBER
SEL MEMBER SEL MEMBER
                                                                    SEL MEMBER
     LTMINSX1
     PRT01
     PRT01!!!
     PRT01A
     PRT02
     PRT03
     PRT04
     PRT05
     RMT01
     RMT02
ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 49. LTERM Names (Printer or RCNT) panel

The Printer/RCNT LTERM Definitions panel displays the printer/RCNT LTERMs you have defined using IMS ETO Support.

You have two options to set the view on the panel: START and NODE.

- To use START, enter the first letters of the LTERMs you want displayed and press Enter. The system scrolls to the LTERMs beginning with the letters you entered.
- To use NODE, enter the node name of the printer LTERMs; this displays the LTERMs associated with that specific node name.

Type A to add a printer/RCNT LTERM definition.

Type S or E next to an existing IMS ETO Support member name to change the printer/RCNT LTERM definition for that member.

Type D next to an existing IMS ETO Support member name to remove the printer/RCNT LTERM definition and the member from the list.

If you type A, S, or E, the Dynamic LTERM update panel appears.

```
IZTRAN
                                   IMS ETO-SUPPORT
                                                                           IMSID:
                                                                                     IMSJ
                                  VERSION - 03.02.00
                                                                           RELEASE: 15.1.0
COMMAND ===>
                                   LTERM NAME UPDATE
LTERM ===> LTERM01
                             (REQUIRED)
                                              REPLACEMENT STRING ===> LTERM01A
  -- ENTER ----
  USER EXIT OPTION
     USER DFSINSX1 ===> N (Y/N, DEFAULT = N)
----- OR -----
  PRINTER DATA
                                                         MSGDEL OPTIONS
                                                            1 - SYSINFO
2 - NOTERM
     NODE NAME ===> NODE001
      LOGMODE
                  ===>
     LOGON DESC ===> DFSSLU1P

ASOT ===> 1440 (BLANKS, 0000, 0010-1440)

SKIP AUTO-LOGON ===> N (Y/N, DEFAULT = N)
                                                              3 - NONIOPCB
   -- OR ----
  RCNT DATA
     MSNAME
```

Figure 50. Dynamic LTERM Update panel

To change the definitions for the selected member, enter the appropriate information in the following fields:

#### REPLACEMENT STRING

Specifies the replacement string for the destination LTERM name. This field is used for remapping the destination LTERM name when messages are sent to IMS.

The value must be 1 - 8 uppercase alphanumeric characters (0 - 9, A - Z) or national characters (@#\$).

You can use the exclamation point (! - X'5A') as the mask character. If mask characters are used, the corresponding bytes in the original LTERM name will be used in the remapped LTERM name.

### **USER DFSINSX1**

Specifies whether the Output User Creation user exit is to be used.

Y

Specifies that you are using your own version of this exit. In this case, subsequent fields on this panel are ignored.

N

Specifies that you are not using your own version of this exit. In this case, subsequent fields on the panel are used and control blocks are created when the LTERM is referenced.

Default DFSINSX1=N.

### **NODE NAME**

Specifies the SLUTYPE1 node name.

The node name must be 1 - 8 uppercase alphanumeric characters.

Character 1 must be alphabetic or national (@#\$).

#### **LOGMODE**

Specifies the VTAM logon mode name.

The logon mode name must be 1 - 8 uppercase alphanumeric characters.

Character 1 must be alphabetic or national (@#\$).

### **LOGON DESC**

Specifies the logon descriptor.

The descriptor must be 1 - 8 uppercase alphanumeric characters.

Character 1 must be alphabetic or national (@#\$).

#### **ASOT**

Specifies the auto signoff time.

If specified, must contain 0, or within the range of 10 - 1440.

### **SKIP AUTO-LOGON**

Use this option to specify whether an AUTO-LOGON is performed when a message is inserted for this LTERM.

Υ

AUTO-LOGON is not performed when a message is inserted for this LTERM.

Ν

AUTO-LOGON is performed when a message is inserted for this LTERM.

**Note:** SKIP AUTO-LOGON should not be used for 3270-Printer devices. IMS ETO Support cannot distinguish a 3270-Printer from a 3270 terminal at logon time.

### **MSGDEL OPTIONS**

Use this option to specify the messages that you want IMS to discard for the specified terminal. MSGDEL parameter values are described in the TERMINAL macro definition in *IMS System Definition*.

- 1 SYSINFO
- 2 NOTERM
- 3 NONIOPCB

### **RCNT DATA**

**MSNAME** 

Use this field to define this field as an RCNT entry. MSNAME must contain the name of an IMS MSC MSNAME.

# **Listing return codes for message DFS3649A**

The DFS3649 RC Update panel lists the return codes for message DFS3649A that have user-customized error descriptions.

This panel is displayed if you choose option **I** on the Primary Menu.

Figure 51. DFS3649 RC Update panel

This panel displays the members created for the option, if any.

To add a return code entry, type A or ADD on the command line and hit Enter.

To update a listed return code entry, tab to the desired entry and type an S or E next to the name; then press Enter.

To delete a listed return code entry, tab next to the desired entry and type D next to the name; then press Enter.

# **DFS3649A RC Update panel**

This panel is displayed after you select the appropriate option on the DFS3649A RC Update panel.

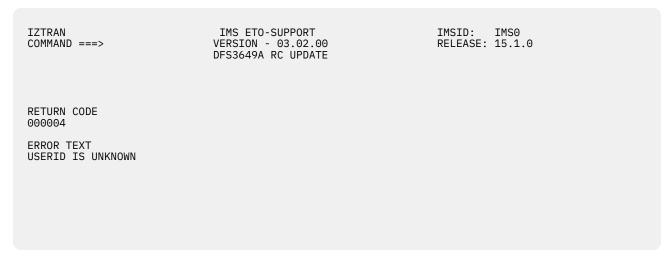


Figure 52. DFS3649A RC Update panel

### **RETURN CODE**

This field contains the return code for error message DFS3649A, for which IMS ETO Support substitutes the tailored error description.

### **ERROR TEXT**

This field contains the error text that IMS ETO Support appends to an IMS DFS3649A error message when a signon failure occurs.

# Miscellaneous Menu

Use the Miscellaneous menu panel to update various tables and options.

The Miscellaneous menu panel is displayed if you choose option  $\bf J$  on the Primary Menu.

```
IMS ETO-SUPPORT
IZTRAN
                                                                IMSID:
                                                                         IMS0
COMMAND ===>
                             VERSION - 03.02.00
                                                                 RELEASE: 15.1.0
                             MISCELLANEOUS MENU
                 OPTIONS
                    1 - TIME OF DAY TABLE
                     2 - LOGON DESCRIPTOR BY LOGMODE
                     3 - OTMA DESTINATION TABLE
                     4 - TRANSACTION ABEND TABLE
                                                      (DFSNDMX0)
                     5 - MESSAGE ORIGIN ABEND TABLE (DFSNDMX0)
                     6 - TRANSACTION/RETURN CODE
                                                      (DFSBSEX0)
                     7 - PSB/RETURN CODE
                                                      (DFSBSEX0)
```

Figure 53. Miscellaneous Menu

### **Topics:**

- "Updating time of day table values" on page 133
- "Setting the logon descriptor by logon mode" on page 134
- "Updating the OTMA destination table" on page 135

- "Updating the transaction abend table" on page 138
- "Updating the message origin abend table" on page 141
- "Updating the transaction/return code table (DFSBSEX0)" on page 144
- "Updating the PSB/return code table (DFSBSEX0)" on page 145

# Updating time of day table values

Use this panel to update time-of-day values globally, and for specific user IDs and NODEs.

This panel is displayed if you choose option **1** from the Miscellaneous Menu.

```
IMS ETO-SUPPORT
IZTRAN
                                                                  TMSTD.
                                                                            TMS8
IZTRAN
                               IMS ETO-SUPPORT
                                                                  IMSID:
                                                                            IMS0
                                                                 RELEASE: 15.1.0
COMMAND ===>
                             VERSION - 03.02.00
                VERSION - 03.02.03
TIME OF DAY TABLE LIST
START ===>
               SEL MEMBER TYPE START END
                   $$$$$$$ N 0001 2359
TCP00026 N 0001 0002
ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY
COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 54. Time of day table list panel

This panel displays time-of-day tables entries, if any exists.

To add a new entry, type A on the command line and press Enter.

To update a listed entry, tab to the desired entry, type S or E next to the name, and press Enter.

# Time of day member update panel

The Time of Day Member Update panel is displayed when you have selected the appropriate option on the time-of-day table list panel.

Figure 55. Time of Day Member Update panel

When you have entered all of your time-of-day options, press Enter. A confirmation message appears indicating that the time-of-day entry has been stored.

The following options are available:

### **NAME**

This field contains the user ID/NODE name, or all dollar signs (\$\$\$\$\$\$) to indicate the global default.

#### **TYPE**

This field describes the TOD entry type, one of the following record types:

U

For a user ID record.

Ν

For a NODE name record.

**Note:** If this is the global default record (Name = \$\$\$\$\$\$\$), this field is ignored.

### **FROM**

This 4-character numeric field specifies a time from which a LOGON/SIGNON is allowed. If the current time is before this time and TOD processing is active, the LOGON/SIGNON is rejected.

Specify the FROM time in *hhmm* format where *hh* represents the hour 00-23 and *mm* represents the minutes after the hour 00 - 59.

#### TO

This 4-character numeric field specifies a time to which a LOGON/SIGNON is allowed. If the current time is after this time and TOD processing is active, the LOGON/SIGNON is rejected.

Specify the TO time in *hhmm* format where *hh* represents the hour 00-23 and *mm* represents the minutes after the hour 00 - 59.

**Note:** Time of day processing is an option that can be activated/deactivated using - IZTRAN option B, then 4 - in the DEVICE OPTIONS FOR SLU2/3270 (2 OF 2) panel, or ZD TODCHECK control statement of the batch update utility (IZTUD1U0).

# Setting the logon descriptor by logon mode

Use the Logon Descriptor by Logon Mode panel to define and edit logon descriptor by logon mode names.

The Logon Descriptor by Logon Mode panel is displayed if you choose option **2** from the Miscellaneous Menu.

```
IMS ETO-SUPPORT
IZTRAN
                                                                           IMSID:
                                                                                    IMS0
COMMAND ===>
                                  VERSION - 03.02.00
                                                                           RELEASE: 15.1.0
                             LOGON DESCRIPTOR BY LOGON MODE
START ===>
                 SEL LOGONMODE LOGOND
                       IBM3600
                                    DFSFIN
                       MODE01
                                    LOGOND
                       MODE 02
                                    LOGOND
                       MODE03
                                    LOGOND
                       MODE04
                                    LOGOND
                       MODE05
                                    LOGOND
                       MODE06
                                    LOGOND
                       MODE07
                                    LOGOND
                       MODE08
                                    LOGOND
                       MODE09
                                     LOGOND
                       MODE10
                                    LOGOND
ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "
                                                                         "B" - BACKWARD
```

Figure 56. Logon Descriptor by Logon mode panel

This panel displays the logon descriptor by logon mode entries, if any exists.

To add a new entry, type A on the command line and press Enter.

To update a listed entry, tab to the desired entry, type S or E on the left **SEL** field next to the name, and press Enter.

# Logon mode table update panel

The Logon mode Table Update panel is displayed when you have selected the appropriate option on the Logon Descriptor by Logon mode Table List panel.

IZTRAN
COMMAND ===>

IMS ETO-SUPPORT
VERSION - 03.02.00
LOGON MODE TABLE UPDATE

LOGONMODE ===> IBM3600

LOGOND ===> DFSFIN

Figure 57. Logon mode Table Update panel

When you have entered all of your Logon Descriptor and Logon mode options, press Enter. A confirmation displays indicating the Logon Descriptor by Logon mode entry has been stored.

#### **LOGONMODE**

This field contains the VTAM Logon mode name.

#### **LOGOND**

This field contains the IMS Logon Descriptor name.

**Note:** The name specified for LOGOND must be defined in IMS PROCLIB member DFSDSCTx or DFSDSCMx at IMS restart, otherwise IMS will select the default Logon Descriptor to be used.

# **Updating the OTMA destination table**

Use the OTMA Destination Override panel to define and edit OTMA destination names.

The OTMA Destination Override panel is displayed if you choose option 3 from the Miscellaneous Menu.

```
IZTRAN

COMMAND ===>

START ===>

OTMA DESTINATION OVERRIDE

SEL DESTINATION MEMBER TPIPE USERDATA IMSID

OTMA1 MEMBER001 PIPE01 MQPROD1 NO
OTMA2 MEMBER002 PIPE02 MQPROD1 NO
OTMA3 MEMBER003 PIPE03 MQPROD1 NO
OTMA4 MEMBER004 PIPE4 UDATA04 NO
OTMA5 MEMBER005 PIPE5 MQ5 YES

ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY
COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 58. OTMA Destination Override panel

This panel displays the OTMA destination table entries, if any exist.

To add a new entry, type A on the command line and press Enter.

To update a listed entry, tab to the desired entry, type S or E next to the name, and press Enter.

# **OTMA** destination update panel

The OTMA Destination Update panel is displayed after you select the appropriate option on the OTMA Destination Override list panel.

```
IMS ETO-SUPPORT
VERSION - 03.02.00
IZTRAN
                                                    IMSID: IMS0
COMMAND ===>
                                                      RELEASE: 15.1.0
                      OTMA DESTINATION OVERRIDE
  DEST LTERM ===> OTMA1
      MEMBER NAME ===> MEMBER001
                                       (OR OPD PATTERN NAME)
      TPIPE
                  ===> PIPE01
      SUPER MEMBER ===>
                                       (IMS 10.1)
  === USERDATA MEMBER (//IZTUDATA) ===
      PDS MEMBER ===> MQPROD1
      PREFIX MEMBER NAME W/IMSID ===> N
                                     (Y/N)
  === SESSION CREATION INFORMATION ===
      REJECT FOR UNKNOWN MEMBER ===> Y
                                     (Y/N)
```

Figure 59. OTMA Destination Override panel

When you have entered all of your OTMA destination override options, press Enter. A confirmation message appears indicating that the OTMA destination override entry has been stored.

The following options are available:

#### **DEST LTERM**

Specify the 1- to 8-character (including wildcards) destination LTERM name.

The following wildcards can be specified as part of the destination LTERM name:

 Question mark (? - X'6F') - represents a one-to-one relationship with numeric positions in your LTERM name.

For example, L1??? captures those LTERM names beginning with L1 followed by 3 numeric digits.

 Percent sign (% - X'6C') - represents a one-to-one relationship with character positions in your LTERM name.

For example, L1%%% captures those LTERM names beginning with L1 followed by any 3 characters.

• Asterisk (\* - X'5C') - represents any characters (from 0 to many) in the LTERM name.

For example, L1\* captures all members starting with L1.

#### **MEMBER NAME**

Specify the 1- to 16-character OTMA member name or OTMA pattern descriptor (OPD).

#### TPIPE

Optionally, specify the 1- to 8-character TPIPE name.

#### **SUPER MEMBER**

Optionally, specify the 1- to 4-character Super Member name.

For additional information about OTMA super member processing, see *IMS Communications and Connections*.

# **PDS MEMBER**

Optionally, specify the 1- to 8-character name of a member in the PDS defined by ddname IZTUDATA. This member, which is created using either macro \$IZTIC1 or \$IZTMQ1, contains the user data that will be passed with the message to the OTMA member.

# PREFIX MEMBER NAME W/IMSID

Specify whether the name specified for PDS member should be prefixed with the IMSID.

Υ

The name specified for PDS member is appended to the IMSID to be used as the IZTUDATA member name.

Ν

The name specified for PDS member is used as the IZTUDATA member name.

#### **SYNC'D**

Specify, if a TPIPE needs to be created, whether a SYNC'D TPIPE is be created.

v

A SYNC'D TPIPE is created, if needed. This flag should only be set for OTMA RESYNC capable clients, such as WEBSPHERE MQ.

Ν

If TPIPE creation is needed, it is not SYNC'D.

#### **PERSISTENT**

Specify whether messages for this TPIPE are persistent.

Υ

Specifies that messages for this TPIPE are persistent. This option requires that SYNC'D also be set to Y.

Ν

Specifies that messages for this TPIPE are not persistent.

#### **HOLD QUEUE**

Specify whether alternate PCB output is eligible for hold queue processing.

Υ

Specifies that alternate PCB messages are eligible for hold queue processing.

Ν

Specifies that alternate PCB messages are not eligible for hold queue processing.

For additional information about OTMA hold-queue processing, see *IMS Communications and Connections*.

# **REJECT FOR UNKNOWN MEMBER**

Specify whether the LTERM is created when the OTMA member is not known to IMS.

Υ

The message is not enqueued to the LTERM.

Ν

The message is enqueued to the LTERM.

# Updating the transaction abend table

Use the Transaction Abend Table panel to specify actions to be taken when a transaction abend occurs.

The Transaction Abend Table panel is displayed if you choose option 4 from the Miscellaneous Menu.

Figure 60. Transaction Abend Table panel

This panel displays the transaction abend table entries, if any exist.

To add a new entry, type A on the command line and press Enter.

To update a listed entry, tab to the desired entry, type S or E next to the name, and press Enter.

# Transaction abend update panel

The Transaction Abend Entry Update panel is displayed when you have selected the appropriate option on the Transaction Abend list panel.

```
T7TRAN
                                IMS ETO-SUPPORT
                                                                    TMSTD:
                                                                             TMS1
                                                                    RELEASE: 15.1.0
COMMAND ===>
                              VERSION - 03.02.00
                          UPDATE TRANSACTION ABEND ENTRY
  TRANSACTION NAME ===> IMSXMOL1
                   ===> 001
  ABEND CODE
                               (U = USER / S = SYSTEM)
  ABEND TYPE
                   ===> S
                PROCESS
                                       SUPPRESS
                                                    WTO
                                                            TRAN/PSB
     ORIGIN
                                       DFS555I IZT9201I
                OPTION NEW DEST
                                                             OPTION
  _____ ___
                                       =======
                                                 =======
                                                            =======
  NORMAL LTERM
                  3
                                                                2
  FROM APPC
                                                                1
  FROM OTMA
                   1
                                                     Υ
                                                               1
        PROCESS OPTION VALUES
                                                   TRAN/PSB OPTION VALUES
  1 - IMS DEFAULT
                                            1 - NO USTOP TRAN/PSB
                                            2 - PSTOP TRAN ONLY (IMS V11+)
3 - PURGE TRAN ONLY (IMS V11+)
4 - STOP TRAN ONLY (IMS V11+)
  2 - DISCARD THE INPUT MESSAGE
  3 - QUEUE MSG TO THE SUSPEND QUEUE
  4 - REQUEUE THE INPUT MESSAGE
  5 - QUEUE TO NEW DESTINATION
                                            5 - START TRAN ONLY (IMS V11+)
```

Figure 61. Update Transaction Abend Entry panel

When you have entered all of your transaction abend options, press Enter. A confirmation message appears indicating that the transaction abend entry has been stored.

The following options are available:

#### TRANSACTION NAME

Specify the 1- to 8-character (including wildcards) transaction code name.

When a transaction name contains \*NOGU, the entry is used for abends that occur prior to a GU call being issued to the IOPCB.

The following wildcards can be specified as part of the transaction name:

• Question mark (? - X'6F') - represents a one-to-one relationship with numeric positions in your transaction name.

For example, L1??? captures those transaction names beginning with L1 followed by 3 numeric digits.

 Percent sign (% - X'6C') - represents a one-to-one relationship with character positions in your transaction name.

For example, L1%%% captures those transaction names beginning with L1 followed by any 3 characters.

• Asterisk (\* - X'5C') - represents any characters (from 0 to many) in the transaction name.

For example, L1\* captures all members starting with L1.

#### **ABEND CODE**

Optionally, specify the transaction abend code.

If the abend type is specified as USER, this field must be specified as a 1- to 4-byte numeric field in the range of 1 - 4095.

If the abend type is specified as SYSTEM, this field must contain a valid 3-byte SYSTEM abend code in the range of 001 - FFF.

#### **ABEND TYPE**

This field is optional unless an abend code is specified.

If an abend is specified, this field must specify the type of abend code. Specify U for a USER abend or S for a SYSTEM abend.

The following five fields must be specified for messages arriving from LTERMs, APPC, and OTMA points of origin.

#### **PROCESS OPTION**

Specify the disposition of the message for the abending transaction.

# 1 - IMS DEFAULT

IMS determines the disposition of the message.

# 2 - DISCARD THE INPUT MESSAGE

The message is discarded from the system.

# 3 - QUEUE THE MESSAGE TO THE SUSPEND QUEUE

The message is queued to the transaction's suspend queue.

# 4 - REQUEUE THE INPUT MESSAGE

Requeues the message to the same transaction.

# **5 - QUEUE TO NEW DESTINATION**

Queues the message to the transaction specified in field NEWDEST.

#### **NEWDEST**

If option **5** is specified, specify the name of the transaction where the message is queued.

#### **SUPPRESS DFS555I**

Specify whether message DFS555I is sent to the inputting device of the message that caused the abend.

Υ

DFS555I is suppressed and not sent to the inputting device.

Ν

DFS555I is not suppressed.

#### **WTO IZT9201I**

Specify whether a WTO message (IZT9201I) should be issued when message DFS555I is suppressed.

Υ

Specifies that a WTO message (IZT9201I) is issued when message DFS555I is suppressed for an abending transaction.

N

Specifies that no WTO message (IZT9201I) is issued when message DFS555I is suppressed for an abending transaction.

# TRAN/PSB OPTIONS

Specify the state of the IMS TRAN/PSB following an application program abend.

**Restriction:** If you specify process option **4 - REQUEUE THE INPUT MESSAGE**, only TRAN/PSB options **2 - PSTOP TRAN ONLY** and **4 - STOP TRAN ONLY** behave as defined in the following list. The other TRAN/PSB options cause the transaction to enter a USTOP state and the PSB is not stopped.

The TRAN/PSB options are provided to support the Non-Discardable Messages Exit Routine (DFSNDMX0) Enhancement: PSTOP TRANSACTION SUPPORT.

**Recommendation:** Certain TRAN/PSB options can have undesirable results, so test the results of your options before you deploy your user exit into your production environment.

#### Blank

If no option is specified, IMS sets the state of the TRAN and PROG following an application program abend.

# 1 - NO USTOP TRAN/PSB

Specifies that the TRAN and PROG is not put into USTOP and STOPPED state, respectively.

# 2 - PSTOP TRAN ONLY (IMS V11+)

Specifies that the TRAN is put into a PSTOPPED state.

# 3 - PURGE TRAN ONLY (IMS V11+)

Specifies that the TRAN is put through the PURGE process.

# 4 - STOP TRAN ONLY (IMS V11+)

Specifies that the TRAN is put into a STOPPED state.

# 5 - START TRAN ONLY (IMS V11+)

Specifies that the TRAN is put into a STARTED state.

# Updating the message origin abend table

Use the Message Origin Abend Table panel to specify actions to be taken when a message origin abend occurs.

The Message Origin Abend Table panel is displayed if you choose option 5 from the Miscellaneous Menu.

```
IZTRAN
COMMAND ===>
START ===>
MESSAGE ORIGIN ABEND TABLE

SEL ORIGIN ABEND TYPE
LITERM1
LITERM1
LITERM1 4020 USER
LITERM*

ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY
COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 62. Message Origin Abend Table panel

This panel displays the message origin abend table entries, if any exists.

To add a new entry, type **A** on the command line and press Enter.

To update a listed entry, tab to the desired entry, type **S** or **E** next to the name, and press Enter.

# Message origin abend update panel

The Message Origin Abend Entry Update panel is displayed when you have selected the appropriate option on the Message Origin Abend Table List panel.

```
T7TRAN
                                IMS ETO-SUPPORT
                                                                     TMSTD:
                                                                              TMS1
                                                                     RELEASE: 15.1.0
COMMAND ===>
                               VERSION - 03.02.00
                           UPDATE MSG ORIGIN ABEND ENTRY
  LTERM/TPIPE/LUNAME ===> IMSXMOL1
             ===> 001
  ABEND CODE
                      ===> S
                                 (U = USER / S = SYSTEM)
  ABEND TYPE
                PROCESS
                                        SUPPRESS
                                                             TRAN/PSB
                                        DFS555I IZT9201I OPTION
     ORIGIN
                OPTION NEW DEST
  _____ ___
                                        _____ ___
  NORMAL LTERM
                                           Ν
                                                      Ν
  FROM APPC
                                                                2
                                           Υ
                                                                2
  FROM OTMA
                   2
                                                     Υ
        PROCESS OPTION VALUES
                                                   TRAN/PSB OPTION VALUES
                                             1 - NO USTOP TRAN/PSB
  2 - DISCARD THE INPUT MESSAGE
3 - QUEUE MSG TO THE SUSPEND QUEUE
4 - REQUEUE THE INPUT MESSAGE
5 - QUEUE TO NEW DESTINATION
5 - STAPT TRAN ONLY (IMS V11+)
  1 - IMS DEFAULT
```

Figure 63. Message Origin Abend Entry Update panel

When you have entered all of your message origin abend options, press Enter. A confirmation message appears indicating that the message origin abend entry has been stored.

The following options are available:

#### LTERM/TPIPE/LUNAME

Specify the 1- to 8-character (including wildcards) LTERM, TPIPE, or LUNAME.

The following wildcards can be specified as part of the LTERM, TPIPE, or LUNAME name:

• Question mark (? - X'6F') - represents a one-to-one relationship with numeric positions in your LTERM, TPIPE, or LUNAME name.

For example, L1??? captures those LTERM, TPIPE, or LUNAME names beginning with L1 followed by 3 numeric digits.

 Percent sign (% - X'6C') - represents a one-to-one relationship with character positions in your LTERM, TPIPE, or LUNAME name.

For example, L1%%% captures those LTERM, TPIPE, or LUNAME names beginning with L1 followed by any 3 characters.

 Asterisk (\* - X'5C') - represents any characters (from 0 to many) in the LTERM, TPIPE, or LUNAME name.

For example, L1\* captures all members starting with L1.

# **ABEND CODE**

Optionally, specify the message origin abend code.

If the abend type is specified as USER, this field must be specified as a 1- to 4-byte numeric field in the range of 1 - 4095.

If the abend type is specified as SYSTEM, this field must contain a valid 3-byte SYSTEM abend code in the range of 001 - FFF.

#### **ABEND TYPE**

This field is optional unless an abend code is specified.

If an abend is specified, this field must specify the type of abend code. Specify U for a USER abend or S for a SYSTEM abend.

The following five fields must be specified for messages arriving from LTERMs, APPC, and OTMA points of origin.

# **PROCESS OPTION**

Specify the disposition of the message for the abending transaction.

#### 1 - IMS DEFAULT

IMS determines the disposition of the message.

#### 2 - DISCARD THE INPUT MESSAGE

The message is discarded from the system.

#### 3 - QUEUE THE MESSAGE TO THE SUSPEND QUEUE

The message is queued to the transaction's suspend queue.

# 4 - REQUEUE THE INPUT MESSAGE

Requeues the message to the same transaction.

#### **5 - QUEUE TO NEW DESTINATION**

Queues the message to the transaction specified in field NEWDEST.

#### **NEWDEST**

If option 5 is specified, specify the name of the transaction where the message is queued.

# **SUPPRESS DFS555I**

Specify whether message DFS555I is sent to the inputting device of the message that caused the abend.

Υ

DFS555I is suppressed and not sent to the inputting device.

Ν

DFS555I is not suppressed.

#### **WTO IZT9201I**

Specify whether a WTO message (IZT9201I) should be issued when message DFS555I is suppressed.

Υ

Specifies that a WTO message (IZT9201I) is issued when message DFS555I is suppressed for an abending transaction.

Ν

Specifies that no WTO message (IZT9201I) is issued when message DFS555I is suppressed for an abending transaction.

# **TRAN/PSB OPTIONS**

Specify the state of the IMS TRAN/PSB following an application program abend.

**Restriction:** If you specify process option **4 - REQUEUE THE INPUT MESSAGE**, only TRAN/PSB options **2 - PSTOP TRAN ONLY** and **4 - STOP TRAN ONLY** behave as defined in the following list. The other TRAN/PSB options cause the transaction to enter a USTOP state and the PSB is not stopped.

The TRAN/PSB options are provided to support the Non-Discardable Messages Exit Routine (DFSNDMX0) Enhancement: PSTOP TRANSACTION SUPPORT.

**Recommendation:** Certain TRAN/PSB options can have undesirable results, so test the results of your options before you deploy your user exit into your production environment.

# **Blank**

If no option is specified, IMS sets the state of the TRAN and PROG following an application program abend.

# 1 - NO USTOP TRAN/PSB

Specifies that the TRAN and PROG is not put into USTOP and STOPPED state, respectively.

# 2 - PSTOP TRAN ONLY (IMS V11+)

Specifies that the TRAN is put into a PSTOPPED state.

#### 3 - PURGE TRAN ONLY (IMS V11+)

Specifies that the TRAN is put through the PURGE process.

# 4 - STOP TRAN ONLY (IMS V11+)

Specifies that the TRAN is put into a STOPPED state.

# 5 - START TRAN ONLY (IMS V11+)

Specifies that the TRAN is put into a STARTED state.

# Updating the transaction/return code table (DFSBSEX0)

Use the TRANSACTION/RC (DFSBSEX0) panel to create or update transaction/return code table entries. These table entries, which specify return code values for IMS transactions, are used by the Build Security Environment user exit (BSEX) that IMS ETO Support provides.

You can use the Build Security Environment user exit (BSEX) to tell IMS whether to build the RACF or equivalent security environment in an IMS dependent region for an application that has not received its input message from OTMA or from an LU 6.2 device.

You can also use this user exit to request that IMS bypass some part of the security processing in the dependent region when one of the following events occurs for a message that did not originate from an OTMA or LU 6.2 device:

- · CHNG call.
- AUTH call.
- Deferred conversational program switch on the local system (when the system where the inputting terminal is active).

Security authorization for the deferred conversational program switch occurs only on the local system.

The TRANSACTION/RC (DFSBSEX0) panel is displayed if you choose option **6** from the Miscellaneous Menu.

```
IMS ETO-SUPPORT
TZTRAN
                                                                              TMSTD:
                                                                                         TMS0
                                                                              RELEASE: 15.1.0
COMMAND ===>
                                   VERSION - 03.02.00
                              TRANSACTION/RC (DFSBSEX0)
START ===>
          SEL TRAN
                              0000
                 PART
                              0004
                TRAN0
                              0020
ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 64. TRANSACTION/RC (DFSBSEX0) panel

This panel displays the transaction/return code table entries, if any exists.

To add a new entry, type **A** on the command line and press Enter.

To update a listed entry, tab to the desired entry, type **S** or **E** next to the name, and press Enter.

# Transaction/return code update panel

Use the UPDATE TRAN/RC ENTRY (DFSBSEX0) panel to specify the return code to be returned to IMS when IMS ETO Support's DFSBSEX0 (IZTBSEXZ) exit is called.

The UPDATE TRAN/RC ENTRY (DFSBSEX0) panel is displayed if you select an entry or request a new entry on the TRANSACTION/RC (DFSBSEX0) panel.

Figure 65. UPDATE TRAN/RC ENTRY (DFSBSEX0) panel

# **TRANSACTION**

To create a new transaction member, enter the name of the transaction.

To minimize the number of transaction/return code table entries, wildcards are supported in the TRANSACTION field. Wildcards include:

• Percent sign (%) - represents a one-to-one relationship with character positions in your transaction name.

For example, T1%%% captures transaction names beginning with T1 followed by any 3 characters.

• Question mark (?) - represents a one-to-one relationship with numeric positions in your transaction name.

For example, T1??? captures transaction names beginning with T1 followed by any 3 numeric digits.

• Asterisk (\*) - represents any characters (from 0 to many) in your transaction name. If used, an asterisk must be the last character in the transaction name.

For example, T1\* captures transaction names beginning with T1.

#### **RETURN CODE**

Enter a 1- to 4-digit return code that will be passed to IMS ETO Support's Build Security Environment user exit (IZTBSEXZ).

The return code should be entered as a decimal number. IMS ETO Support will convert the number to a hexadecimal value as required by the exit. For example, a decimal 0012 will be converted to X'000C'.

For valid return code values, see the topic "BSEX: Build Security Environment user exit (DFSBSEX0 and other BSEX exits)" in *IMS Exit Routines*.

# Updating the PSB/return code table (DFSBSEX0)

Use the PSB/RC (DFSBSEX0) panel to create or update PSB/return code table entries. These table entries, which specify return code values for PSBs, are used by the Build Security Environment user exit (BSEX) that IMS ETO Support provides.

You can use the Build Security Environment user exit (BSEX) to tell IMS whether to build the RACF or equivalent security environment in an IMS dependent region for an application that has not received its input message from OTMA or from an LU 6.2 device.

You can also use this user exit to request that IMS bypass some part of the security processing in the dependent region when one of the following events occurs for a message that did not originate from an OTMA or LU 6.2 device:

- · CHNG call.
- AUTH call.
- Deferred conversational program switch on the local system (when the system where the inputting terminal is active).

Security authorization for the deferred conversational program switch occurs only on the local system.

The PSB/RC (DFSBSEX0) panel is displayed if you choose option 7 from the Miscellaneous Menu.

```
IMS ETO-SUPPORT
IZTRAN
                                                                               IMSID:
                                                                                          IMS0
                                                                               RELEASE: 15.1.0
COMMAND ===>
                                   VERSION - 03.02.00
                                   PSB/RC (DFSBSEX0)
START ===>
                PSB
                              RC
           SEL
                               0000
                 DFSSAM02
                               0004
                 PGM001
                               0020
ROW COMMANDS: "S" OR "E" - TO EDIT ENTRY, "D" - TO DELETE ENTRY COMMAND LINE: "A" OR "ADD" - TO ADD AN ENTRY, "F" - FORWARD, "B" - BACKWARD
```

Figure 66. PSB/RC (DFSBSEX0) panel

This panel displays PSB return code table entries, if any exists.

To add a new entry, type **A** on the command line and press Enter.

To update a listed entry, tab to the desired entry, type **S** or **E** next to the name, and press Enter.

# PSB/return code update panel

Use the UPDATE PSB/RC ENTRY (DFSBSEX0) panel to specify the return code to be returned to IMS when IMS ETO Support's DFSBSEX0 (IZTBSEXZ) exit is called.

The UPDATE PSB/RC ENTRY (DFSBSEX0) panel is displayed if you select an entry or request a new entry on the PSB/RC (DFSBSEX0) panel.

Figure 67. UPDATE PSB/RC ENTRY (DFSBSEX0) panel

#### **PSB**

To create a new PSB member, enter the PSB name.

To minimize the number of PSB/return code table entries, wildcards are supported in the PSB name. Wildcards include:

- Percent sign (%) represents a one-to-one relationship with character positions in your PSB name. For example, P1%%% captures PSB names beginning with P1 followed by any 3 characters.
- Question mark (?) represents a one-to-one relationship with numeric positions in your PSB name. For example, P1??? captures PSB names beginning with P1 followed by any 3 numeric digits.

• Asterisk (\*) - represents any characters (from 0 to many) in your PSB name. If used, an asterisk must be the last character in the PSB name.

For example, P1\* captures PSB names beginning with P1.

# **RETURN CODE**

Enter a 1- to 4-digit return code that will be passed to IMS ETO Support's Build Security Environment user exit (IZTBSEXZ).

The return code should be entered as a decimal number. IMS ETO Support will convert the number to a hexadecimal value as required by the exit. For example, a decimal 0012 will be converted to X'000C'.

For valid return code values, see the topic "BSEX: Build Security Environment user exit (DFSBSEX0 and other BSEX exits)" in *IMS Exit Routines*.

# Chapter 7. Test facilities: Translation table lookup

The Translation Table Menu is used to determine how ETO terminal-related control blocks are built for specific devices or user IDs during LOGON or SIGNON processing.

This panel is displayed if you choose option **T** on the Primary Menu. Use this menu to select the translation table/process.

```
IZTRAN
COMMAND ===>

IMS ETO-SUPPORT
VERSION - 03.02.00
TRANSLATION TABLE MENU

TRANSLATION TYPE
1 - SLU1 CONSOLE
2 - SLU2 / 3270
3 - SLUP / 3600 / FINANCE
4 - LTERM LOOKUP
5 - CONTROL BLOCK LIST
6 - LU 6.1 (ISC)
```

Figure 68. Translation Table Menu panel

On this menu, select which table lookup to perform.

Options 1 - 3 perform the same table search as is done during device LOGON/SIGNON processing.

Option 4 finds LTERMS in the same way as is done during unknown destination processing.

#### 1 - SLU1 CONSOLE

Use this option to perform table searches for SLU1 console devices.

#### 2 - SLU2/3270

Use this option to perform table searches for SLU2/3270 devices. This option also searches the user ID table.

#### 3 - SLUP/3600/FINANCE

Use this option to perform table searches for SLUP/3600/FINANCE devices.

#### 4 - LTERM LOOKUP

Use this option to perform the same LTERM search as is done during unknown destination processing.

#### 5 - CONTROL BLOCK LIST

Use this option to obtain NODE, USER, and LTERM information not available from the IMS DISPLAY command. You can also use this option to dump several IMS control blocks.

# 6 - LU 6.1 (ISC)

Use this option to determine how ETO terminal-related control blocks are built for specific LU 6.1 (ISC) devices or user IDs during LOGON or SIGNON processing.

# **SLU1** translation lookup

Use this panel to determine how ETO terminal-related control blocks are built for specific SLU1 console devices during LOGON or SIGNON processing.

This panel is displayed if you choose option 1 on the Translation Table Menu panel.

```
IZTRAN
                               IMS ETO-SUPPORT
                                                                  IMSID: IMS0
                           VERSION - 03.02.00
SLU1 TRANSLATION LOOKUP
COMMAND ===>
                                                                   RELEASE: 15.1.0
LUNAME ===>
SEARCH ===>
                  1 - SEARCH OPTIONS DATA SET
                  2 - SEARCH E/CSA TABLE
                                                     ----- ENTRY TYPE
                                                     =LUNAME= =DEVICE= =GLOBAL=
LOGON PROCESS
                 ===>
DFS3650 OPTION
LTERM/USER NAMES ===>
AS0T
                 ===>
ALOT
RESPONSE
MSGDEL
LOGON DESCRIPTOR ===>
SECURITY PROFILE ===>
USER/LTERM NAME =LTERM== I/O-C =LTERM== I/O-C
  (I = ICOMPT)
  (0 = OCOMPT)
  (C = CASE)
```

Figure 69. SLU1 Translation Table Lookup panel

To view the options that are in effect for a SLU1 console device during LOGON or SIGNON processing, search the options data set (option 1) or the E/CSA table (option 2).

#### LUNAME

VTAM node name of the SLU1 Console for which the options are listed.

#### **SEARCH**

How the lookup is performed.

# 1 - SEARCH OPTIONS DATA SET

Perform the lookup using the options data set.

# 2 - SEARCH E/CSA TABLE

Do the lookup using the ECSA tables.

Keep in mind that if options are not working for a particular SLU1 Console device, you should check both the options data set and the E/CSA table. The options may have been saved to the options data set, but the E/CSA table may not have been refreshed.

Options entered into the system are not available until after the system has been refreshed. The system is refreshed when IMS is restarted or when you use the IMS ETO Support refresh options.

# **SLU2** translation lookup

Use this panel to determine how ETO terminal-related control blocks are built for specific SLU2/3270 devices or user IDs during LOGON or SIGNON processing.

This panel is displayed if you choose option 2 on the Translation Table Menu.

```
IZTRAN
                                IMS ETO-SUPPORT
                                                                    IMSID: IMS0
                           VERSION - 03.02.00
SLU2 TRANSLATION LOOKUP
COMMAND ===>
                                                                    RELEASE: 15.1.0
LUNAME ===>
USERID ===>
SEARCH ===>
                   1 - SEARCH OPTIONS DATA SET
                   2 - SEARCH E/CSA TABLE
LOGON
                                                  ASOT ===>
       ===>
DFS3649 ===>
                                                  ALOT ===>
                                                  RESP ===>
DFS3650 ===>
LOGOND ===>
                                                  MSGD ===>
MODEL
       ===>
BYP DEQ ===>
SECURITY PROFILES ===>
                   ===>
LTERM/USER NAMES ===>
ITFRMS ===>
```

Figure 70. SLU2 Translation Lookup panel

To view the options that are in effect for a SLU2/3270 and/or a specific user ID during LOGON or SIGNON processing, search the Options data set (option **1**) or the E/CSA table (option **2**).

#### LUNAME

VTAM node name of the SLU2/3270 device for which the options are listed.

#### **USERID**

Security ID (from the IMS /SIGN ON command) for which the options are listed.

#### **SEARCH**

How the lookup is to be performed.

# 1 - SEARCH OPTIONS DATA SET

Perform the lookup using the Options data set.

# 2 - SEARCH E/CSA TABLE

Perform the lookup using the ECSA tables.

For all displayed fields, there is a label describing the record from which the information was obtained:

# **REC=GLOBAL**

The option was obtained from the Global record.

# **REC=SLU2DFLT**

The option was obtained from the SLU2/3270 device default record.

#### LUN=xxxx

The option was obtained from record xxxx in a SLU2/3270 LU table.

#### USR=yyyy

The option was obtained from record yyyy in the SLU2/3270 user ID table.

Keep in mind that if options are not working for a particular SLU2/3270 device, you should check both the Options data set and the E/CSA table. The options might have been saved to the Options data set, but the E/CSA table may not have been refreshed.

Options entered into the system are not available until after the system has been refreshed. The system is refreshed when IMS is restarted or when you use the IMS ETO Support refresh options.

# **SLUP translation lookup**

Use this panel to determine how ETO terminal-related control blocks are built for specific SLUP devices during LOGON or SIGNON processing.

This panel is displayed if you choose option 3 on the Translation Table Menu panel.

```
IZTRAN
                                 IMS ETO-SUPPORT
                                                                      IMSID: IMS0
                            VERSION - 03.02.00
SLUP TRANSLATION LOOKUP
COMMAND ===>
                                                                      RELEASE: 15.1.0
LUNAME ===>
SEARCH ===>
                   1 - SEARCH OPTIONS DATA SET
                   2 - SEARCH E/CSA TABLE
                                                        ----- ENTRY TYPE
                                                        =LUNAME= =DEVICE= =GLOBAL=
LOGON PROCESS
                  ===>
DFS3650 OPTION
LTERM/USER NAMES ===>
AS0T
                  ===>
ALOT
RESPONSE
MSGDEL
LOGON DESCRIPTOR ===>
SECURITY PROFILE ===>
USER/LTERM NAME =LTERM== I/O-C =LTERM== I/O-C
  (I = ICOMPT)
  (0 = OCOMPT)
  (C = CASE)
```

Figure 71. SLUP Translation Table Lookup panel

To view the options that are in effect for a SLUP/3600/FINANCE device during LOGON or SIGNON processing, search the options data set (option **1**) or the E/CSA table (option **2**).

# **LUNAME**

VTAM node name of the SLUP/3600/FINANCE device for which the options are listed.

#### **SEARCH**

How the lookup is performed.

# 1 - SEARCH OPTIONS DATA SET

Perform the lookup using the options data set.

# 2 - SEARCH E/CSA TABLE

Perform the lookup using the ECSA tables.

Keep in mind that if options are not working for a particular SLUP/3600/FINANCE device, you should check both the options data set and the E/CSA table. The options may have been saved to the options data set, but the E/CSA table may not have been refreshed.

Options entered into the system are not available until after the system has been refreshed. The system is refreshed when IMS is restarted or when you use the IMS ETO Support refresh options.

# LTERM lookup

Use this panel to determine how ETO terminal-related control blocks are built for specific LTERMS during unknown destination processing.

This panel is displayed if you choose option 4 on the Translation Table Menu panel.

```
IZTRAN
                                IMS ETO-SUPPORT
                                                                    IMSID:
                                                                             IMS<sub>0</sub>
                              VERSION - 03.02.00
                                                                    RELEASE: 15.1.0
COMMAND ===>
                                 LTERM LOOKUP
LTERM
                              REPLACEMENT STRING
       ===>
                                                    ===>
                              RESULT LTERM
                                                     ===>
SEARCH ===>
                   1 - SEARCH OPTIONS DATA SET
                   2 - SEARCH E/CSA TABLE
  TABLE ENTRY
                    ===>
  TABLE TYPE
                   ===>
  RESULT USER
                   ===>
  LTERM MASK
  RCNT NAME
                    ===>
                                AUTOLOGON DATA
   (PRINTER TABLE ONLY)
                                              (LU 6.1 USERID TABLE ONLY)
  USER DFSINSX1
                                            NODE NAME
  NODE MASK
                                            LOGON DESC
                   ===>
                                                              ===>
  RESULT NODE
                                            REMOTE ID
                    ===>
                                                              ===>
                    ===>
  LOGMODE
                                            LOGMODE
                                                              ===>
  LOGON DESC
  AS0T
  MSGDEL
                    ===>
  SKIP AUTO-LOGON ===>
```

Figure 72. LTERM Lookup panel

To view the options that are in effect for the LTERM during unknown destination processing, search the options data set (option  $\mathbf{1}$ ) or the E/CSA table (option  $\mathbf{2}$ ).

This screen searches multiple tables looking for a matching LTERM name. The tables are searched looking for an exact name match and, if none is found, two of the tables are searched looking for an LTERM that matches with mask characters. The table search sequence is:

- · USERID table
- SLU1 console table
- SLUP/3600/FINANCE table
- SLU2/3270 table
- PRINTER LTERM table

If no exact match is found in these tables, the mask character search continues with:

- SLU2/3270 table
- PRINTER LTERM table

If a matching LTERM is found, the remaining fields of the screen are populated with any defined options. The data contained in the remaining fields is as follows:

#### **REPLACEMENT STRING**

The value used for remapping outbound messages.

#### **RESULT LTERM**

When a message is sent to IMS, IMS ETO Support remaps the destination LTERM name to this name by using the value specified in REPLACEMENT STRING.

If mask characters are used in REPLACEMENT STRING, IMS ETO Support merges the original LTERM name with the REPLACEMENT STRING value to build the resulting name. If no mask characters are used, the new name is built from the REPLACEMENT STRING value.

# TABLE ENTRY

Name of the member that had a matching LTERM or mask character.

## **TABLE TYPE**

Table where the listed member exists.

### **RESULT USER**

Name that IMS ETO Support returns to IMS for the USER (SPQB) control block.

# **LTERM MASK**

This is the name of the LTERM or the LTERM with mask characters that matches the search argument.

The remaining fields are populated only if a matching LTERM was found in the PRINTER LTERM table. The data contained in the remaining fields is as follows:

# **USER DFSINSX1**

Whether (Y) or not (N) control is passed to customer-supplied exit DFSINSX1.

#### **NODE MASK**

This field is populated from the PRINTER LTERM table entry.

#### **RESULT NODE**

NODE name that IMS ETO Support passes back to IMS for AUTOLOGON. If mask characters are present in the NODE MASK field, this name has been put through name merge with the LTERM field.

#### **LOGONMODE**

VTAM log mode used during auto logon processing.

#### **LOGON DESC**

IMS logon descriptor used during auto logon processing.

#### **ASOT**

Auto signoff timeout value set for this device during auto logon processing.

# **MSGDEL**

IMS MSGDEL option set for this device during auto logon processing.

Keep in mind that if the options are not working for a particular LTERM, you should check both the options data set and the E/CSA table. The options may have been saved to the options data set, but the E/CSA table may not have been refreshed. Options entered into the system are not available until after the system has been refreshed. The system is refreshed when IMS is restarted or when you use the IMS ETO Support refresh options.

If you are still not getting the options you desire, remember that LTERM mask characters may cause duplicate LTERM names. Review the LTERM definitions in your SLU2/3270 and PRINTER LTERM tables to ensure that you are not getting undesired results.

# **Control block list**

Use this panel to obtain NODE, USER, and LTERM information that is not available from the IMS DISPLAY command. You can also use this option to dump several IMS control blocks.

This panel is displayed if you choose option 5 from the Translation Table Menu panel.

If you are using IMS MSC, the information returned on this panel is obtained from the system where IZTRAN is entered, not from the system where IZTRAN runs.

Figure 73. Control Block List panel

#### NAME

Specify the name of the IMS element to be displayed.

#### **TYPE**

Specify the type of listing to be displayed. Valid values for type are NODE, USER, LTERM, CLB, CTB, SPQB, CNT, CIB and CTT.

NODE, USER, and LTERM returns a formatted screen containing various data about the requested element.

CLB, CTB, SPQB, CNT CIB, and CTT returns a dump-type listing of the requested IMS control block.

# **LU 6.1 translation lookup**

Use this panel to determine how ETO terminal-related blocks control blocks are built for specific LU 6.1 (ISC) devices or user IDs during LOGON or SIGNON processing.

If you choose option **6** on the Translation Table Menu panel, the LU 6.1 Translation Lookup Options panel is displayed.

```
IZTRAN
                              IMS ETO-SUPPORT
                                                                IMSID:
                                                                        IMS0
COMMAND ===>
                            VERSION - 03.02.00
                                                               RELEASE: 15.1.0
                         LU 6.1 TRANSLATION LOOKUP
LUNAME ===>
USERID
       ===>
SEARCH ===>
                 1 - SEARCH OPTIONS DATA SET
                 2 - SEARCH E/CSA TABLE
                                                    ----- ENTRY TYPE -----
                                                   =USERID= =LUNAME= =DEVICE=
LOGON PROCESS
LTERM NAMING OPT ===>
RESPONSE
                ===>
MSGDEL
                 ===>
ALOT
ASOT
LOGON DESCRIPTOR ===>
SECURITY PROFILE ===>
NODE NAME
LOGMODE
REMOTE ID
USER/LTERM NAME =LTERM== I/O-C =LTERM== I/O-C =LTERM== I/O-C
  (I = ICOMPT)
  (0 = OCOMPT)
  (C = CASE)
```

Figure 74. LU 6.1 Translation Lookup panel

To view the options that are in effect for a LU 6.1 (ISC) session and/or a specific LU 6.1 (ISC) user ID during LOGON or SIGNON processing:

- Search the Options data set (option 1)
- Search the E/CSA table (option 2)

#### **LUNAME**

This VTAM node name of the LU 6.1 (ISC) device for which the options are listed.

#### **USERID**

The local half-session USER name from the **/OPNDST** command for which the options are listed.

#### **SEARCH**

The method by which the lookup is performed.

# 1 - SEARCH OPTIONS DATA SET

Perform the lookup using the Options data set.

#### 2 - SEARCH E/CSA TABLE

Perform the lookup using the E/CSA tables.

Keep in mind that if the options are not working for a particular LU 6.1 (ISC) device, you should check both the Options data set and the E/CSA tables. The options might have been saved to the Options data set, but the E/CSA table may not have been refreshed.

he system is options.				

# Chapter 8. Online dynamic table refresh options

This section describes the online dynamic table refresh options available on the Primary Menu.

# **Topics:**

- "Setting refresh routing options" on page 157
- "Performing E/CSA table refresh" on page 157

# **Setting refresh routing options**

Use this panel to add APPC/MVS symbolic destination names for refresh routing.

This panel is displayed if you choose option **Y** on the Primary Menu.

Enter the APPC/MVS symbolic destination name for each CPU where the options are to be updated during E/CSA TABLE REFRESH processing.

```
T7TRAN
                              IMS ETO-SUPPORT
                                                                       TMS0
                                                                TMSTD:
                                                                RELEASE: 15.1.0
COMMAND ===>
                             VERSION - 03.02.00
                        REFRESH ROUTING INFORMATION
SYMDEST
             SYMDEST
                         SYMDEST
                                     SYMDEST
                                                 SYMDEST
                                                             SYMDEST
SYS1
ADD APPC/MVS SYMBOLIC DESTINATION NAMES
```

Figure 75. Refresh Routing Information panel

# Performing E/CSA table refresh

Use this panel to specify the options that you want refreshed or to free (FREEMAIN) the inactive IMS ETO Support tables.

This panel is displayed if you choose option **Z** on the Primary Menu.

**Background information:** After you have selected the options you want to change, you can dynamically refresh the E/CSA tables using either a batch or online refresh process.

The batch refresh process (BRP) refreshes all E/CSA tables, but only on the CPU where the batch job runs.

The online refresh process (ORP) refreshes selected E/CSA tables on each CPU that has an APPC/MVS symbolic destination name (you can specify up to 64 destination names) specified in the REFRESH ROUTING table. ORP requires that APPC/IMS be active.

These 64 images must reside in a shared DASD complex and must share the same IMS ETO Support options data set.

You start the online refresh process by selecting option **Z** on the Primary Menu panel and then selecting the IMS ETO Support E/CSA table that you want to refresh.

IZTRAN reads the IMS ETO Support options data set for the selected table and passes it to each of the requested MVS systems; IZTRAN executes the APPC conversations one at a time, starting the conversation for the next MVS system after the refresh conversation completes for the MVS system preceding it in the list. It continues this process until all MVS systems in the list are refreshed or an error is encountered. If an error is encountered, IZTRAN displays an informational message and a prompt for proceeding. The options include trying the failed conversation again, skipping to the next MVS system, or ending the process.

You can view the list of MVS systems on which IMS ETO Support attempts to refresh its E/CSA tables by using option **Y** on the Primary Menu panel.

```
IZTRAN
                                    IMS ETO-SUPPORT
                                                                              IMSID:
                                                                                         IMS0
COMMAND ===>
                                  VERSION - 03.02.00
                                                                              RELEASE: 15.1.0
                                 E/CSA TABLE REFRESH
  REFRESH SELECTIONS
    A - GLOBAL OPTIONS
B - DEVICE TYPE OPTIONS
    C - LU NAME SPECIFIC OPTIONS
    D - USER SPECIFIC OPTIONS
    E - SECURITY OPTIONS
    F - COMMAND+KEYWORD ACTIVATION
G - COMMAND PROFILE ENTRIES
    H - LTERM NAMES (PRINTER OR RCNT)
I - DFS3649A ERROR MESSAGES
    J - MISC TABLE AND OPTIONS
  CLEANUP OPTIONS
    Z - FREEMAIN INACTIVE TABLES
```

Figure 76. E/CSA Table Refresh panel (before refresh)

#### **REFRESH SELECTIONS**

# A through J

Choose one of these options to update the E/CSA tables.

# **CLEANUP OPTIONS**

Z

Choose this option to free (FREEMAIN) the inactive E/CSA tables.

This option submits an asynchronous cleanup task to each MVS. The cleanup task runs asynchronously, so IZTRAN receives no indication that the task was successful. Review the IZT messages in the SYSLOG to determine whether the cleanup task was successful.

# E/CSA table refresh results (after refresh)

This panel is displayed after you enter the option you want refreshed in the E/CSA Table Refresh panel (after refresh).

The selected option is refreshed, and the E/CSA Table Refresh panel displays the message E/CSA REFRESH COMPLETED.

IMS ETO Support refreshes the E/CSA table for all CPUs to which it has been routed.

IZTRAN COMMAND ===> IMS ETO-SUPPORT IMSID: IMSO VERSION - 03.02.00 RELEASE: 15.1.0 E/CSA TABLE REFRESH

SYMDEST SYMDEST SYMDEST SYMDEST SYMDEST SYMDEST SYMDEST SYS1

IZT2013I - E/CSA REFRESH COMPLETED

Figure 77. E/CSA Table Refresh panel (after refresh)

# Chapter 9. Reloading IMS exits

Use the Exit/MATRIX Reload panel to load a new copy of an existing IMS exit, or refresh the ETOS MATRIX modules.

The Exit/MATRIX Reload panel is displayed if you choose option **R** on the Primary Menu.

This panel can also be used to perform an initial load of the exit and ETOS MATRIX modules.

```
IZTRAN
                                IMS ETO-SUPPORT
                                                                    IMSID:
                                                                              IMS1
COMMAND ===>
                                                                    RELEASE: 12.1.0
                               VERSION - 03.02.00
                               EXIT/MATRIX RELOAD
                       EXIT CHOICES
                           1 - DFSCCMD1
                           2 - DFSGMSG1
                           3 - DFSINSX1
4 - DFSLGFX0
                           5 - DFSLGNX1
                           6 - DFSSGFX1
                           7 - DFSSGNX1
                           8 - DFSSGNX2
                           9 - DFSLGNX2
                           A - DFSINSX2
                           B - DFSYPRX0 (OBSOLETE AS OF IMS V13)
                           C - DFSYDRU0
                           D - DFSNDMX0 (OBSOLETE AS OF IMS V13)
                           E - ETOS MATRIX MODULES
```

Figure 78. Exit /MATRIX Reload panel

Specify the number or the alphabetic character that represents the exit or table you want to load, and press Enter. A message is displayed indicating the result of the load operation.

Certain error conditions can cause additional error messages to be displayed in the IMS control region.

When you have finished loading exits, tables, or both, press PF3 or PF4 to return to the Primary Menu.

**Note:** If you are using IMS Multiple Systems Coupling (MSC) or shared message queues, IZTRAN might run on a different system from where it was entered. This does not matter because the reload takes place on the system where the transaction is entered. If you need to reload an exit/MATRIX on more than one system, you will need to log on to each system independently and perform the reload.

# Options obsolete as of IMS 13

Options **B - DFSYPRX0** and **D - DFSNDMX0** are obsolete as of IMS 13.

If you are using IMS 13 or later, you can load the DFSYPRX0 and DFSNDMX0 user exits by specifying them in the USER\_EXITS section of the IMS DFSDF*xxx* member. This member belongs to the IMS PROCLIB data set.

The exit type to be specified is OTMAYPRX (OTMA Destination Resolution user exit).

The name of the exit for IMS 13 is IZTYPRXD. The naming convention for the exit uses the position of the name to designate IMS version compatibility (for example, D for IMS 13, E for IMS 14).

The USER\_EXITS section of the DFSDFxxx member specifies the user exits to be called. The section must begin with the header <SECTION=USER\_EXITS>. See the topic "USER\_EXITS section of the DFSDFxxx member" in *IMS System Definition*.

# Displaying and refreshing refreshable exit routines

You can use the IMS type-2 command **QUERY USEREXIT** to display information about the user exits.

Use the type-2 **QUERY USEREXIT** command to display information about the user exits that are defined in the USER\_EXITS section of the DFSDFxxx member of the IMS PROCLIB data set. Information about

user exits that are not specified in the USER\_EXITS section of the DFSDFxxx member is not displayed in the output of the **QUERY USEREXIT** command.

See the topic "QUERY USEREXIT command" in IMS Commands, Volume 2: IMS Commands N-V.

You can use the IMS type-2 command **REFRESH USEREXIT** to refresh the user exits.

Use the type-2 **REFRESH USEREXIT** command to refresh the user exit modules that are defined in the USER\_EXITS section of the DFSDF*xxx* member. When the command is processed, IMS rereads the DFSDF*xxx* member and processes the USER\_EXITS section.

See the topic "REFRESH USEREXIT command" in IMS Commands, Volume 2: IMS Commands N-V.

# Part 4. Batch utilities

The topics in this section provide you with information about IMS ETO Support batch utilities.

# **Topics:**

- Chapter 10, "Updating the options data set (batch update utility)," on page 165
- Chapter 11, "Listing the options data set (batch list utility)," on page 215
- Chapter 12, "Refreshing E/CSA tables (batch refresh utility)," on page 217
- Chapter 13, "Refreshing the OTMA user data table (OTMA user data batch refresh utility)," on page 219

# Chapter 10. Updating the options data set (batch update utility)

The batch update utility (IZTUD1U0) utility allows you to update the options data set with printer LTERM records, user ID records, and luname records without using the online IMS transaction IZTRAN.

The batch update utility is convenient to use if you need to perform bulk updates.

# **Topics:**

- "Control statement syntax for batch update utility" on page 166
  - "ZP LTERM record control statements" on page 166
  - "ZU User ID record control statements" on page 168
  - "ZN LUNAME record control statements" on page 170
  - "ZL LTERM definitions" on page 173
  - "ZG Global options control statements (dynamic refresh)" on page 176
  - "ZG Global options control statements (requires IMS restart)" on page 181
  - "ZD Default device control statements (SLU2 / 3270)" on page 182
  - "ZC SLU1 console LUNAME record control statements" on page 185
  - "ZF SLUP/3600/FINANCE LUNAME record control statements" on page 187
  - "ZV LU 6.1 (ISC) User ID record control statements" on page 189
  - "Z1 Default device control statements for SLU1 console" on page 190
  - "Z3 Default device control statements for SLUP/3600/FINANCE" on page 193
  - "Z6 Default device control statements for LU 6.1" on page 195
  - "Z7 LU 6.1 LUNAME record control statements" on page 196
  - "ZM DFS3649 error messages" on page 197
  - "ZR Routing data for ETO table refreshes" on page 197
  - "ZS Security options" on page 198
  - "ZS Command+keyword selection" on page 201
  - "ZS Security profile definitions" on page 201
  - "J1 Time-of-day table entries" on page 203
  - "LM Logon Descriptor by Logon mode table entries" on page 204
  - "VN VTAM userdata node options" on page 204
  - "VU VTAM userdata various options" on page 205
  - "OT OTMA destination control statements" on page 208
  - "AL Message origin abend control statements" on page 210
  - "AT Transaction abend control statements" on page 211
- "TX transaction/return code statements (DFSBSEX0)" on page 212
  - "PS PSB/return code statements (DFSBSEX0)" on page 213
  - "Example JCL (DLIBATCH)" on page 213
  - "Example JCL (IMSBATCH)" on page 214

# **Control statement syntax for batch update utility**

Control statement syntax for the batch update utility shows the syntax for specifying the various function options for this utility.

```
<FUNC> <KWD PARM> <KWD1=VALUE> <KWD2=VALUE> ...
<FUNC> = ZP (for printer LTERM)
           ZU (for user ID)
           ZN (for SLU2/3270 LUName)
           ZL (multiple LTERM)
           ZG (default global)
ZD (default SLU2/3270 device)
           ZC (for SLU1 console LUName)
           ZF (for SLUP/3600/FINANCE LUName)
ZV (LU 6.1 user ID options)
           Z1 (default SLU1 console device)
           Z3 (default for SLUP/3600/FINANCE device)
Z6 (default for LU 6.1 devices)
           Z7 (for LU 6.1 LUName)
           ZM (DFS3649 error messages)
           ZR (routing data for ETO table refreshes)
ZS (security options)
           ZS (command+keyword selection)
           ZS (security group definitions)
J1 (time-of-day table entries)
           LM (Logon Descriptor by Logon mode entries)
VN (VTAM userdata node options)
           VU (VTAM userdata various options)
           OT (OTMA destination control statements)
           AL (message origin abend control statements)
           AT (transaction abend control statements)
TX (transaction / return code statements)
           PS (PSB / return code statements)
```

Figure 79. Control statement syntax for batch update utility functions

All parameters are separated by one or more spaces.

The function parameter **<FUNC>** must be specified in column 1.

The keyword parameters can be specified in any order.

An asterisk (\*) in column 1 means that the control statement is a comment and is ignored.

# ZP - LTERM record control statements

This reference topic describes how to add, modify, or delete an LTERM record.

Specific actions include:

- Add an LTERM when DFSINSX1 (Destination Creation user exit) is used
- · Add an LTERM defined as a printer
- Add an LTERM defined as a remote LTERM (RCNT)
- Delete an LTERM record

# Adding an LTERM (DFSINSX1 in use)

The following example shows the control statement for adding an LTERM record when DFSINSX1 is used:

```
ZP <LTERM>
```

# Adding an LTERM defined as a printer

The following example shows the control statement for adding an LTERM record defined as a printer. Note that the node name should be supplied.

The parameter <LTERM> represents the message queue structure name for the printer LTERM.

The LTERM name must be 1 - 8 uppercase alphanumeric characters.

Character 1 must also be alphabetic or national (@#\$).

When adding a printer LTERM record, you can specify the following keyword parameters (in additional to the function and printer LTERM parameters):

#### ASOT=

Specifies the auto signoff time.

If specified, must contain 0, or within the range of 10 - 1440.

# **BYPLOGON**

Use this option to specify whether an AUTO-LOGON is performed when a message is inserted for this LTERM.

Υ

AUTO-LOGON is not performed when a message is inserted for this LTERM.

Ν

AUTO-LOGON is performed when a message is inserted for this LTERM.

**Note:** SKIP AUTO-LOGON should not be used for 3270-Printer devices. IMS ETO Support cannot distinguish a 3270-Printer from a 3270 terminal at logon time.

#### LDESC=

Specifies the logon descriptor.

The descriptor must be 1 - 8 alphanumeric characters.

Character 1 must be alphabetic or national (@#\$).

#### **MODETBL=**

Specifies the VTAM logon mode name.

The logon mode name must be 1 - 8 alphanumeric characters.

Character 1 must be alphabetic or national (@#\$).

#### MSGDEL=

Specifies the messages that are discarded by IMS for the specified terminal. Valid specifications are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

#### NODE=

Specifies the slutype1 node name.

The node name must be 1 - 8 uppercase alphanumeric characters.

Character 1 must be alphabetic or national (@#\$).

### REPLSTR=

The value used for remapping outbound messages. When a message is sent to IMS, IMS ETO Support remaps the destination LTERM name to this name by using the value specified in REPLACEMENT STRING.

If mask characters are used in REPLACEMENT STRING, IMS ETO Support merges the original LTERM name with the REPLACEMENT STRING value to build the resulting name. If no mask characters are used, the new name is built from the REPLACEMENT STRING value.

# Example 1:

In this example (which assumes an empty options data set), the control statement adds an LTERM record for PRTLTRM1 and a slutype1 node record for PRTNODE1.

ZP PRTLTRM1 NODE=PRTNODE1 ASOT=30 MSGDEL=NOTERM

# Example 2:

This example updates the node record for LTERM PRTLTRM1 (just created in example 1) with a new value for ASOT.

ZP PRTLTRM1 ASOT=50

# **Deleting a printer LTERM**

The control statement format for deleting a printer LTERM is:

ZP <lterm> DELETE

# **Example:**

ZP RTLTRM1 DELETE

**Note:** If all IZL LTERM records related to a particular IZN slutype1 printer node record have been deleted, the IZN printer node record are also deleted.

# Adding an LTERM defined as a remote LTERM (RCNT)

The following example shows a control statement for adding an LTERM record defined as a remote LTERM (RCNT):

ZP <LTERM> MSNAME=<MSNAME>

# **MSNAME**

Specifies the MSNAME defined on an IMS MSC Link.

When a message arrives for this LTERM, it is enqueued to the MSNAME.

# **ZU - User ID record control statements**

This reference topic describes how to add, modify, or delete a user ID record.

# Adding a user ID

The control statement format for adding a user ID record is:

ZU <userid> <keyword-parameters>

# **Example:**

ZU AA010 USER=AA010LTM

When adding a user ID record, you can specify the following keyword parameters (in addition to the function and user ID parameters):

#### ASOT=

Specifies the auto signoff time. If specified, must contain 0, or within the range of 10 - 1440.

# **BYPDEQ**=

Specifies whether the dequeuing of messages is bypassed as part of signoff cleanup for this user ID.

Υ

Signoff cleanup does not include dequeuing messages for this user ID.

N

Signoff cleanup includes dequeuing messages for this user ID.

#### DFS3650=

The following options can be specified:

- DFS3650=IMS (for IMS default)
- DFS3650=DFS058 (to get message DFS058)
- DFS3650=BLANK (to get a cleared panel)
- DFS3650=DFSGMSG1 (for user DFSGMSG1 greetings exit)
- DFS3650=MOD (for user-specified MFS mod name)

If DFS3650=MOD is specified, you must also specify MOD3650=<modname>.

- DFS3650=DFS2002 (to get message DFS2002)
- DFS3650=TRX (to insert a transaction)

If DFS3650=TRX is specified, you must also specify TRX3650=<trxname>.

#### MOD3650=

Specifies the 1 - 8 alphanumeric MFS mod name if DFS3650=MOD is also being specified.

#### MSGDEL=

Specifies the messages that are discarded by IMS for the specified terminal. Valid specifications are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

#### **ONAMING=**

The following options can be specified for the LTERM / user message queue naming structure to be used:

- QNAMING=IMS (for IMS default)
- QNAMING=NUL (for NODE=USER=LTERM)
- QNAMING=USER (to specify a user from the table)
- QNAMING=SUFFIXED (to specify a suffixed user ID)
- QNAMING=DFSSGNX1 (to specify the user's DFSSGNX1 exit)
- QNAMING=APPEND@ (to specify user ID plus "@" character)

If QNAMING=USER is specified, you must also provide the user's SPQB / LTERM name.

# RESP=

Specifies the terminal response option. Valid specifications are:

- RESP=NORESP
- RESP=FORCRESP
- RESP=TRANRESP

# **SECURITY=**

Specifies the 1 - 8 alphanumeric security group with the first character being alphabetic or national (@#\$).

# **Example:**

ZU AA010 USER=AA010LTM

# TRX3650=

Specifies the name of the IMS transaction to schedule after a successful signon, instead of presenting the usual DFS3650I successful signon message. Specifying this option means that no values for options MOD3650= can be specified.

#### **USER=**

Specifies the 1 - 8 alphanumeric user ID with the first character being alphabetic or national (@#\$). Specify this parameter only if QNAMING=USER was also specified.

# **Deleting a user ID**

The control statement format for deleting a user ID record is:

ZU <userid> DELETE

# **Example:**

ZU AA010 DELETE

To delete all LTERMs related to a particular user ID (but not the user ID record itself), the control statement format is:

ZU <userid> DELETE LTERMS

# **Example:**

ZU AA020 DELETE LTERMS

# ZN - LUNAME record control statements

This reference topic describes how to add, modify, or delete an LUNAME record.

# **Adding an LUNAME**

To add an LUNAME record, you must model it after an existing LUNAME record already added using IZTRAN. The format of the control statement for doing this is:

ZN <node> <keyword-parameters>

# **Example:**

ZN TRM001 USER=USR001

When adding an LUNAME record, you can specify the following keyword parameters (in addition to the function and LUNAME (node) parameters):

# ASOT=

Specifies the auto signoff time. If specified, must contain 0, or within the range of 10 - 1440.

#### ALOT=

Specifies the auto logoff time. If specified, must contain 0, or within the range of 1 - 1440.

# **BYPDEQ**=

Specifies whether the dequeuing of messages is bypassed as part of signoff cleanup for this device.

Υ

Signoff cleanup does not include dequeuing messages for this device.

Ν

Signoff cleanup includes dequeuing messages for this device.

# **DEVICE=**

Specifies the device/model of the terminal. The 1 - 8 characters must be alphanumeric. Character 1 must be alphabetic or national (@#\$).

#### DFS3649=

The following options can be specified for the signon panel:

• DFS3649=IMS (for the IMS default)

- DFS3649=DFS2002 (to get message DFS2002)
- DFS3649=ETOS (to use the IMS ETO Support logon)

If DFS3649=ETOS is specified, you can also use the PASSSIZE= parameter to specify whether to use the IMS ETO Support password signon or the passphrase signon.

- DFS3649=DFSGMSG1 (for the user DFSGMSG1 greetings exit)
- DFS3649=MOD (for the user-specified MFS mod name)

If DFS3649=MOD is specified, you must also specify MOD3649=<modname>.

#### DFS3650=

The following options can be specified for the session status panel:

- DFS3650=IMS (for the IMS default)
- DFS3650=DFS058 (to get message DFS058)
- DFS3650=BLANK (to get a cleared panel)
- DFS3650=DFSGMSG (for the user DFSGMSG1 greetings exit)
- DFS3650=MOD (for the user-specified MFS mod name)

If you specify DFS3650=MOD, you must also specify MOD3650=<modname>.

- DFS3650=DFS2002 (to get message DFS2002)
- DFS3650=TRX (to insert a transaction)

If you specify DFS3650=TRX, you must also specify TRX3650=<trxname>.

## LDESC=

Specifies the logon descriptor. The descriptor must be 1 - 8 alphanumeric characters. Character 1 must be alphabetic or national (@#\$).

#### LOGON=

Specify one of the following options for the type of logon process that are used for the node:

- LOGON=ETOS (to use the IMS ETO Support process)
- LOGON=DFSLGNX1 (to use the DFSLGNX1 user exit)
- LOGON=AUTO (to use auto signon)
- LOGON=USERID (to use auto signon with a user ID specified with the USERID= option)
- LOGON=USRACF (to use auto signon and RACF with a user ID specified with the USERID= option)

  An online or batch refresh is required after the change is made to activate the change dynamically.

  Example:

```
ZN SI3TCP30 LOGON=USRACF USERID=userid
```

**Note:** IMS ETO Support first matches the LUNAME at the signon with a specific LUNAME in the "LUNAME OPTIONS for SLU2/3270" table before it attempts to match any wildcard.

#### MOD3649=

Specifies the 1- to 8-character alphanumeric MFS mod name if DFS3649=MOD is also being specified.

#### MOD3650=

Specifies the 1- to 8-character alphanumeric MFS mod name if DFS3650=MOD is also being specified.

#### MSGDEL=

Specifies the messages that are discarded by IMS for the specified terminal. Valid specifications are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

#### PASSSIZE=

You can specify one of the following options if DFS3649=ETOS is also specified.

- PASSSIZE=P (to use IMS ETO Support passphrase signon panel)
- PASSSIZE=W (to use IMS ETO Support password signon panel)
- PASSSIZE= (to specify that the signon panel is to be determined by the MFSPPDEF parameter of the DFSDCxxx PROCLIB member).
  - MFSPPDEF=Y (to use IMS ETO Support passphrase signon panel)
  - MFSPPDEF=N (to use IMS ETO Support password signon panel)

If this parameter is not specified and DFS3649=ETOS, the default is PASSSIZE=.

## **QNAMING=**

The following options can be specified for the LTERM/user message queue naming structure to be used:

- QNAMING=IMS (for the IMS default)
- QNAMING=NUL (for NODE=USER=LTERM)
- QNAMING=USER (to specify a user from the table)
- QNAMING=SUFFIXED (to specify a suffixed user ID)
- QNAMING=DFSSGNX1 (to specify the user's DFSSGNX1 exit)
- QNAMING=APPEND@ (to specify user ID plus "@" character)

If QNAMING=USER is specified, you must also provide the user SPQB / LTERM name.

## RESP=

Specifies the terminal response option. Valid specifications are:

- RESP=NORES
- RESP=FORCRES
- RESP=TRANRES

#### **SECURITY=**

Specifies the 1 - 8 alphanumeric security group with the first character being alphabetic or national (@#\$).

## TRX3650=

Specifies the name of the IMS transaction to schedule after a successful signon, instead of presenting the usual DFS3650I successful signon message. Specifying this option means that no values for options MOD3650= can be specified.

## **USER=**

Specifies the 1- to 8-character alphanumeric user/LTERM message queue naming structure. The first character must be alphabetic or national (@#\$). Specify this only if QNAMING=USER was also specified.

## **USERID=**

Specifies the 1- to 8-character user ID to be used for auto signon for the node when option LOGON=USERID has also been specified.

## WTOAUTO=

Use this option to specify whether WTO message IZT9102I is displayed when the device does an auto signon.

Υ

An IZT9102I WTO message is displayed when the device does an auto signon.

N

Message IZT9102I is not issued for the device.

## **Deleting an LUNAME**

The control statement format for deleting an LUNAME is:

```
ZN <node> DELETE
```

## **Example:**

```
ZN TRM001 DELETE
```

To delete all LTERMs related to a particular node, but without deleting the node, use this control statement format:

```
ZN <node> DELETE LTERMS
```

## **Example:**

```
ZN TRM001 DELETE LTERMS
```

## **ZL - LTERM definitions**

This reference topic describes how to define one or more LTERMs for a user, an SLU2 / 3270 LUNAME, an SLUP/3600/FINANCE LUNAME, an SLU1 console, or an LU 6.1 User ID.

In all cases, no more than 8 LTERMs can be specified for any user or LUNAME.

## Adding LTERMs for a new user or SLU2 / 3270 record

To add a new user record with up to 8 LTERMs, use the following format:

```
ZU <user>
ZL <lterm1>
ZL <lterm2>
ZL <lterm3>
```

To add a new SLU2 / 3270 record with up to 8 LTERMs, use the following format:

```
ZN <node>
ZL <lterm1>
ZL <lterm2>
ZL <lterm3>
```

## Adding LTERMs for a previously-defined user or SLU2 / 3270 record

To provide additional LTERMs for a user record already added with the ZU function, use the following format:

```
ZL <lterm> USER=<user>
```

To provide additional LTERMs for a SLU2 / 3270 record already added with the ZN function, use the following format:

```
ZL <lterm> NODE=<node>
```

## Adding LTERMs for a new SLUP / 3600 / FINANCE record

To add a new SLUP/3600/FINANCE record with up to 8 LTERMs, use the following format:

```
ZF <user>
ZL <lterm1> IC=<inum> OC=<onum> CASE=<case>
ZL <lterm2> IC=<inum> OC=<onum> CASE=<case>
```

```
ZL <1term8> IC=<inum> OC=<onum> CASE=<case>
```

# Adding LTERMs for a previously-defined SLUP/3600/FINANCE record

To provide additional LTERMs for a SLUP/3600/FINANCE record already added, use the following format:

```
ZL <1term> SLUP=<node> IC=<inum> OC=<onum> CASE=<case>
```

## **Example:**

The following example shows how to add LTERM SLUP002 to the existing SLUP/3600/FINANCE device SLUP001A:

```
ZL SLUP002 SLUP=SLUP001A IC=2 OC=2 CASE=1
```

## Adding LTERMS for a new SLU1 console record

To add a new SLU1 console record with up to 8 LTERMs, use the following format:

```
ZC <user>
ZL <lterm1> IC=<inum> OC=<onum> CASE=<case>
ZL <lterm2> IC=<inum> OC=<onum> CASE=<case>
...
ZL <lterm8> IC=<inum> OC=<onum> CASE=<case>
```

## Adding LTERMs for a previously-defined SLU1 console record

To provide additional LTERMs for a SLU1 console record already added, use the following format:

```
ZL <lterm> CONS=<node> IC=<inum> OC=<onum> CASE=<case>
```

## **Example:**

The following example shows how to add LTERM SLU1LTM2 to the existing SLU1 console SLU1C01:

```
ZL SLU1LTM2 CONS=SLU1C01 IC=2 OC=2 CASE=1
```

## Adding LTERMS for a new LU 6.1 (ISC) user ID record

To add a new LU 6.1 (ISC) user ID record with up to 8 LTERMs, use the following format:

```
ZV <user>
ZL <lterm1> IC=<inum> OC=<onum> CASE=<case>
ZL <lterm2> IC=<inum> OC=<onum> CASE=<case>
...
ZL <lterm8> IC=<inum> OC=<onum> CASE=<case>
```

# Adding LTERMs for a previously-defined LU 6.1 (ISC) user ID record

To provide additional LTERMs for an LU 6.1 (ISC) user ID record already added, use the following format:

```
ZL <lterm> LU61=<node> IC=<inum> OC=<onum> CASE=<case>
```

# Parameter specification for adding an LTERM record

When adding an LTERM record for a SLUP/3600/FINANCE, SLU1 console record, or an LU 6.1 (ISC) user ID record, a value for each of the following parameters must be specified:

## CASE=UC/ULC

Specify one of the following for the case of the device:

- CASE=UC if the device is to use only uppercase characters
- CASE=ULC if the device can accept both uppercase and lowercase characters

## IC=1/2/3/4

Specify a digit between 1 and 4 (inclusive) to represent the number of the input component to be used.

## 0C=1/2/3/4

Specify a digit between 1 and 4 (inclusive) to represent the number of the output component to be used.

## **Deleting LTERMs**

The following format should be used to delete an LTERM:

```
ZL <lterm> DELETE
```

## Example 1:

The following example shows how to delete all LTERMs currently defined to user ID USER1, and then define new LTERMs USERLTM1 and USERLTM2:

```
ZU USER1 DELETE LTERMS
ZL USERLTM1 USER=USER1
ZL USERLTM2 USER=USER1
```

## Example 2:

The following example shows how to delete all LTERMs currently defined to node NODE1, and then define new LTERMs NODELTM1 and NODELTM2:

```
ZN NODE1 DELETE LTERMS
ZL NODELTM1 USER=NODE1
ZL NODELTM2 USER=NODE1
```

## Example 3:

The following example shows how to delete all LTERMs currently defined to SLU1 console SLU1C01, and then define new LTERMs SLU1LTM1 and SLU1LTM2:

```
ZC SLU1C01 DELETE LTERMS
ZL SLU1LTM1 CONS=SLU1C01 IC=1 OC=1 CASE=1
ZL SLU1LTM2 CONS=SLU1C01 IC=2 OC=2 CASE=1
```

## Example 4:

The following example shows how to delete all LTERMs for SLUP/3600/FINANCE device SLUP001, and then define new LTERMs SLUP001 and SLUP002:

```
ZF SLUP001A DELETE LTERMS
ZL SLUP001 SLUP=SLUP001A IC=1 OC=1 CASE=1
ZL SLUP002 SLUP=SLUP001A IC=2 OC=2 CASE=1
```

## Respecifying a list of LTERMs

You might want to respecify the list of LTERMs for a particular user, SLU2 / 3270, SLUP/3600/FINANCE, or SLU1 console record, perhaps to change their sequence. This can be performed by first deleting the LTERMs associated with the record and then adding the LTERMs in the desired sequence.

#### Example 1:

The following example shows how to delete and respecify the LTERMs for a user record:

```
ZU <user> DELETE LTERMS
ZL <lterm1>
ZL <lterm2>
```

```
ZL <lterm3>
ZL <lterm4>
```

## Example 2:

The following example shows how to delete and respecify the LTERMs for a SLU2/3270 record:

```
ZN <node> DELETE LTERMS
ZL <lterm1>
ZL <lterm2>
ZL <lterm3>
ZL <lterm3>
```

## Example 3:

The following example shows how to delete and respecify the LTERMs for a SLUP/3600/FINANCE record:

```
ZF <node> DELETE LTERMS
ZL <lterm1> IC=<ic> OC=<oc> CASE=<case>
ZL <lterm2> IC=<ic> OC=<oc> CASE=<case>
ZL <lterm3> IC=<ic> OC=<oc> CASE=<case>
ZL <lterm4> IC=<ic> OC=<oc> CASE=<case>
```

## Example 4:

The following example shows how to delete and respecify the LTERMs for a SLU1 console record:

```
ZC <node> DELETE LTERMS
ZL <lterm1> IC=<ic> OC=<oc> CASE=<case>
ZL <lterm2> IC=<ic> OC=<oc> CASE=<case>
ZL <lterm3> IC=<ic> OC=<oc> CASE=<case>
ZL <lterm4> IC=<ic> OC=<oc> CASE=<case>
```

# **ZG - Global options control statements (dynamic refresh)**

This reference topic describes how to add or modify global options control record fields that are dynamically refreshed and do not require an IMS restart.

The following keyword parameters can be specified:

### ASOT=

This represents the automatic signoff time. The numeric value must be 0, or within the range of 10 - 1440.

## ALOT=

This represents the automatic logoff time. The numeric value must be 0, or 10 - 1440.

## **BYPDYNDEQ**=

Specifies whether the dequeuing of messages is included as part of signoff cleanup for dynamic SLU2/3270 devices.

Υ

Signoff cleanup does not include dequeuing messages for dynamic SLU2/3270 devices.

N

Signoff cleanup includes dequeuing messages for dynamic SLU2/3270 devices.

#### **BYPSTATDEQ**=

Specifies whether the dequeuing of messages is included as part of signoff cleanup for static SLU2/3270 devices.

Υ

Signoff cleanup does not include dequeuing messages for static SLU2/3270 devices.

N

Signoff cleanup includes dequeuing messages for static SLU2/3270 devices.

## CONVREC=

Specifies how IMS manages conversational status. The value you specify is overridden if the device default is also provided.

#### CONVREC=Y

Specifies that if SRMDEF global/local is set, conversational status is recoverable.

#### CONVREC=N

Specifies that conversational status is not recoverable.

## **CONVREC=**

If no option is specified, conversational recovery is managed based on the:

- Setting in the DFSDCxxx PROCLIB member
- · IMS system default

#### DFS3649=

Specify one of the following options for processing the DFS3649 signon panel:

- DFS3649=IMS (for the IMS default panel)
- DFS3649=DFS2002 (to get message DFS2002)
- DFS3649=ETOS (to get IMS ETO Support provided signon panel)

If DFS3649=ETOS is specified, you can also use the PASSSIZE= parameter to specify whether to use the IMS ETO Support password signon or the passphrase signon.

- DFS3649=DFSGMSG1 (for user DFSGMSG1 greetings exit)
- DFS3649=MOD (for user-supplied MFS mod name)

If DFS3649=MOD is specified, you must also specify MOD3649=<modname>.

#### DFS3650=

Specify the option for processing the DFS3650 session status panel:

- DFS3650=IMS (for the IMS default panel)
- DFS3650=DFS058 (to get message DFS058I)
- DFS3650=BLANK (to get a cleared panel)
- DFS3650=DFSGMSG1 (for user DFSGMSG1 greetings exit)
- DFS3650=MOD (for user-supplied MFS mod name)

If DFS3650=MOD is specified, you must also specify MOD3650=<modname>.

DFS3650=DFS2002 (to get message DFS2002)

## **DFSYPRXORC=**

Specifies the return code that is set in the IMS ETO Support version of IMS user exit DFSYPRXO. IMS ETO Support supports return codes 0, 4, and 8.

For more information about these return codes, see the topic "OTMA Destination Resolution exit routine (DFSYPRXO)" in *IMS Exit Routines*.

#### **DYTXCRE=**

Specifies whether IMS ETO Support allows transactions to be created dynamically.

## DYTXCRE=Y

IMS ETO Support allows transactions to be created dynamically.

## DYTXCRE=N

IMS ETO Support does not allow transactions to be created dynamically.

### FPREC=

Specifies how IMS manages Fast Past status and message disposition. The value you specify is overridden if the device default is also provided.

#### FPREC=Y

Specifies that if SRMDEF global/local is set, Fast Path status and messages are to be recoverable.

#### FPREC=N

Specifies that Fast Path status and messages are not recoverable.

#### FPREC=

If no option is specified, Fast Path status and message recovery is managed based on the:

- Setting in the DFSDCxxx PROCLIB member
- IMS system default

#### LOGON=

The following options can be specified:

- LOGON=ETOS (to use IMS ETO Support process)
- LOGON=DFSLGNX1 (to use DFSLGNX1 user exit)
- LOGON=AUTO (to use IMS ETO Support auto signon feature)

## MOD3649=

Specify the 1- to 8-character alphanumeric MFS mod name. This parameter is valid only if DFS3649=MOD is also specified.

#### MOD3650=

Specify the 1- to 8-character alphanumeric MFS mod name. This parameter is valid only if DFS3650=MOD is also specified.

#### PASSSIZE=

You can specify one of the following options if DFS3649=ETOS is also specified.

- PASSSIZE=P (to use IMS ETO Support passphrase signon panel)
- PASSSIZE=W (to use IMS ETO Support password signon panel)
- PASSSIZE= (to specify that the signon panel is to be determined by the MFSPPDEF parameter of the DFSDCxxx PROCLIB member).
  - MFSPPDEF=Y (to use IMS ETO Support passphrase signon panel)
  - MFSPPDEF=N (to use IMS ETO Support password signon panel)

If this parameter is not specified and DFS3649=ETOS, the default is PASSSIZE=.

#### **ONAMING=**

The following options can be used to determine the USER / LTERM structure names:

- QNAMING=IMS (for the IMS default)
- QNAMING=NUL (for NODE=USER=LTERM)
- QNAMING=USER (to specify a user from the table)
- QNAMING=SUFFIXED (to specify a suffixed user ID)
- QNAMING=DFSSGNX1 (for user-supplied DFSSGNX1 exit)
- QNAMING=APPEND@ (to specify user ID plus "@" character)

If QNAMING=USER is specified on the Global Options record, it merely sets the default action for ETO support processing. In order to actually obtain the USER / LTERM from the table, a User ID or Node record needs to be created defining the USER / LTERM names to be used.

#### **SOCLEAN=**

Specifies whether signoff cleanup is performed for SLU2/3270 devices.

Υ

Signoff cleanup is performed for dynamic SLU2/3270 devices, and signoff cleanup is performed for static SLU2/3270 devices if STATIC=Y is also specified.

Ν

Signoff cleanup is not performed.

## SOFLOGID=

Signon failure log record ID

Use this option to specify whether IMS ETO Support will create an IMS log record for certain signon failures. This option is used when a signon fails because the SLU2 / 3270 - "USER RECORD REQUIRED

FOR SIGNON" is set to "Y" and no record exists in the IMS ETO Support User table for the user ID attempting signon.

IMS ETO Support will create the log record when all of the following conditions are true:

- User Record Required For Signon in the SLU2 / 3270 device record is on (ZD SGNUSREC=Y)
- Signon Failure Log Record ID = a valid hexadecimal value (SOFLOGID=xx, where xx is any valid hexadecimal value)

IMS ETO Support does not create a log record if either of the above conditions is untrue.

If SOFLOGID= is specified, this field must contain 2 characters that can be converted to hexadecimal characters (such as 0 - 9, A - F). Valid values for this field are X'D0' - X'FF'.

#### SRCHPRTOTMA=

Specifies whether the Printer LTERM table is searched for CHNG calls to the alternate PCB for messages originating in OTMA.

Υ

A CHNG call to the alternate PCB for messages originating in OTMA results in searching the Printer LTERM table.

Ν

A CHNG call to the alternate PCB for messages originating in OTMA does not result in searching the Printer LTERM table.

### SRCHSEQ=

Specifies the IMS ETO Support table search sequence for SLU2/3270 devices. The options are:

### **SRCHSEQ=USERID**

The user ID table is searched before the Node table. The exact sequence is: User ID/Node/Device Global/Global.

#### **SRCHSEQ=LUNAME**

The Node table is searched before the user ID table. The exact sequence is: Node/User ID/Device Global/Global.

#### SRMAFF=

Specifies whether signon is allowed when an IMS Resource Manager (RM) affinity exists.

#### SRMAFF=Y

Signon is allowed even though an IMS Resource Manager (RM) affinity may exist.

## SRMAFF=N

Signon is not allowed if an IMS Resource Manager (RM) affinity exists.

## SRMAFF=

If no option is specified, sign-on with IMS Resource Manager (RM) affinity is determined based on:

- Setting in the DFSDCxxx PROCLIB member
- IMS system default

#### SRMDEF=

Specifies the status recovery mode. The value you specify is overridden if the device default is also provided.

### SRMDEF=GLOBAL

The IMS Resource Manager (RM) is to maintain terminal and user end-user status.

### SRMDEF=LOCAL

Terminal and user end-user status is to be maintained in local control blocks and log records.

### SRMDEF=NONE

Status is to be discarded at signoff/logoff/IMS restart.

### SRMDEF=

If no option is specified, status is maintained based on the:

Setting in the DFSDCxxx PROCLIB member

• IMS system default

#### STATIC=

Specifies how IMS ETO Support deals with statically SYSGENed SLU2 / 3270 terminals.

#### STATIC=Y

IMS ETO Support processes static SLU2/3270 terminals.

Some of the tasks IMS ETO Support performs for static SLU2/3270 devices include:

- Displaying user-defined signon needed, and signon completed screens
- · Performing signoff cleanup processing

#### STATIC=N

IMS ETO Support does not perform any processing on statically SYSGENed terminals.

### STSNREC=

Specifies how IMS manages STSN (set and test sequence numbers).

### STSNREC=Y

Specifies that if SRMDEF global/local is set, STSN is recoverable.

#### STSNREC=N

Specifies that STSN is not recoverable.

#### STSNREC=

If no option is specified, STSN recovery is managed based on the:

- Setting in the DFSDCxxx PROCLIB member
- IMS system default

#### **UIDSUF=**

Specifies the user ID suffixing technique to be performed by IMS ETO Support. The options are:

#### UIDSUF=STD1

A 1- to 7-character user ID is suffixed with a single byte from the 0 - 9, A - Z range. IMS ETO Support returns to IMS the first user ID + suffix that creates a name unique within IMS.

## **UIDSUF=HEX3**

A 1- to 5-character user ID is suffixed with 3 bytes from the 000 - FFF range. IMS ETO Support returns to IMS the first user ID + suffix that creates a name unique within IMS.

For a 6-character user ID, IMS ETO Support appends a value in the 00 - FF range.

For a 7-character user ID, IMS ETO Support uses a suffix with a value in the 0 - 9, A - Z range.

## UIDSUF=X40STD1

For all but the initial signon, a 1-character suffix is appended to the user ID to create the USER/LTERM blocks. The initial signon will not have a value appended.

The appended values consist of 1 to 9, and A to Z.

#### **UIDSUF=X40HEX3**

For all but the initial signon, up to 3 characters are appended to the user ID to create the USER/LTERM blocks. The initial signon will not have a value appended.

If the user ID is 7 bytes, IMS ETO Support automatically switches to UIDSUF=X40STD1.

For user IDs of 5 characters or less, the appended values consist of 001 to FFF. For 6-character user IDs, the appended values consist of 01 to FF.

#### UMFS3650 =

Specifies whether (YES) or not (NO) IMS is to send the DFS3650I message to the User MOD. This option is relevant only when DFS3650=MOD is active for the device signing on.

### UMFS3650=YES

IMS sends the DFS3650I message to the user MFS MOD.

#### UMFS3650=NO

IMS does not send the DFS3650I message to the user MFS MOD.

### **Examples:**

The following control statement changes the default ASOT value to 90:

ZG ASOT=90

The following control statement changes the default signon panel to use the IMS default:

ZG DFS3649=IMS

The following control statement with blanks specified removes any values contained in this field, and thereby turn off signon failure log record creation.

ZG SOFLOGID=

The following control statement causes an IMS log record with a hex D0 (X'D0') to be written when signon fails because no matching entry exists in the IMS ETO Support USER table.

ZG SOFLOGID=D0

# **ZG - Global options control statements (requires IMS restart)**

This reference topic describes how to add or modify global options control record fields that require an IMS restart to take effect.

The following keyword parameters can be specified:

#### ALOTO=

Specifies how IMS is handle devices that are defined to use ALOT=0.

STD

If a device is defined to use ALOT=0, it is logged off immediately at logon.

ALT

If a device is defined to use ALOT=0, it is logged off when its ASOT time out limit is reached.

#### **DSTATISC=**

Specifies whether IMS is to disable resource sharing for static LU 6.1 (ISC) devices.

YES

IMS disables resource sharing for static LU 6.1 (ISC) devices.

NO

IMS does not disable resource sharing for static LU 6.1 (ISC) devices.

### **DVGRISC=**

Specifies how IMS ETO Support handles ISC nodes with VTAM generic resources.

#### **DVGRISC=Y**

IMS ETO Support disables VTAM generic resource handling for ISC links.

#### DVGRISC=N

IMS ETO Support allows VTAM generic resource handling for ISC links.

## LU3LOGON=

Specifies which flags IMS ETO Support sets in its Initialization exit (DFSINTX0). These flag are used by IMS to determine how LU3 devices are handled.

#### LU3LOGON=NONE

IMS ETO Support does not set any flags in the Initialization exit (DFSINTX0).

#### LU3LOGON=SLU1P

IMS ETO Support sets the flag that instructs IMS to treat LU3 devices as SLU1 Printers in its Initialization exit (DFSINTX0).

#### LU3LOGON=3270P

IMS ETO Support sets the flag that instructs IMS to treat LU3 devices as 3270 Printers in its Initialization exit (DFSINTX0).

# **ZD - Default device control statements (SLU2 / 3270)**

This reference topic describes how to add, modify, or delete the default SLU2 / 3270 device record.

The following keyword parameters can be specified:

#### ASOT=

This represents the automatic signoff time. The numeric value must be 0, or within the range of 10 - 1440.

#### ALOT=

This represents the automatic logoff time. The numeric value must be 0, or 10 - 1440.

#### BYPSEC=

Specify one of the following keyword options:

#### BYPSEC=YES

When the user ID attempting **/SIGN ON** matches the Node name, IMS ETO Support sets the bypass the security flag in DFSSGNXO. The **/SIGN ON** completes without RACF authentication.

#### BYPSEC=NO

No special message handling is done for the /SIGN ON command.

#### **CONVREC=**

Specifies how IMS manages conversational status.

#### CONVREC=Y

Specifies that if SRMDEF global/local is set, conversational status is recoverable.

#### CONVREC=N

Specifies that conversational status is not recoverable.

#### CONVREC=

If no option is specified, conversational recovery is managed based on the:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

## **DEVICE=**

Represents the device/model of the terminal. This should be the name of a statically SYSGENed terminal. IMS ETO Support uses the definition of this terminal to obtain the device type (MODEL=2) or the screen size (that is, for 3270-Ann devices).

#### DFS3649=

Specify one of the following options for processing the DFS3649 signon panel:

- DFS3649=IMS (for the IMS default panel)
- DFS3649=DFS2002 (to get message DFS2002)
- DFS3649=ETOS (to get IMS ETO Support provided signon panel)

If DFS3649=ETOS is specified, you can also use the PASSSIZE= parameter to specify whether to use the IMS ETO Support password signon or the passphrase signon.

- DFS3649=DFSGMSG1 (for user DFSGMSG1 greetings exit)
- DFS3649=MOD (for user-supplied MFS mod name)

If DFS3649=MOD is specified, you must also specify MOD3649=<modname>.

## DFS3650=

Specify the option for processing the DFS3650 session status panel:

• DFS3650=IMS (for the IMS default panel)

- DFS3650=DFS058 (to get message DFS058I)
- DFS3650=BLANK (to get a cleared panel)
- DFS3650=DFSGMSG1 (for user DFSGMSG1 greetings exit)
- DFS3650=MOD (for user-supplied MFS mod name)

If DFS3650=MOD is specified, you must also specify MOD3650=<modname>.

- DFS3650=DFS2002 (to get message DFS2002)
- DFS3650=TRX (to input a transaction)

If DFS3650=TRX is specified, you must also specify TRX3650=<trxname>.

#### FPREC=

Specifies how IMS manages Fast Past status and message disposition.

#### FPREC=Y

Specifies that if SRMDEF global/local is set, Fast Path status and messages are to be recoverable.

#### FPREC=N

Specifies that Fast Path status and messages are not recoverable.

#### FPREC=

If no option is specified, Fast Path status and message recovery is managed based on the:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

## LOGON=

Specify one of these options:

- LOGON=ETOS (to use IMS ETO Support process)
- LOGON=DFSLGNX1 (to use DFSLGNX1 user exit)
- LOGON=AUTO (to use IMS ETO Support auto signon feature)

## MOD3649=

Specify the 1- to 8-character alphanumeric MFS mod name. This parameter is valid only if DFS3649=MOD is also specified.

### MOD3650=

Specify the 1- to 8-character alphanumeric MFS mod name. This parameter is valid only if DFS3650=MOD is also specified.

## MSGDEL=

Represents the messages that are discarded by IMS for the specified terminal. The options are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

#### PASSSIZE=

You can specify one of the following options if DFS3649=ETOS is also specified.

- PASSSIZE=P (to use IMS ETO Support passphrase signon panel)
- PASSSIZE=W (to use IMS ETO Support password signon panel)
- PASSSIZE= (to specify that the signon panel is to be determined by the MFSPPDEF parameter of the DFSDCxxx PROCLIB member).
  - MFSPPDEF=Y (to use IMS ETO Support passphrase signon panel)
  - MFSPPDEF=N (to use IMS ETO Support password signon panel)

If this parameter is not specified and DFS3649=ETOS, the default is PASSSIZE=.

#### ONAMING=

The following options can be used to determine the USER/LTERM structure names:

- QNAMING=IMS (for the IMS default)
- QNAMING=NUL (for NODE=USER=LTERM)
- QNAMING=USER (to specify a user from the table)
- QNAMING=SUFFIXED (to specify a suffixed user ID)
- QNAMING=DFSSGNX1 (for user-supplied DFSSGNX1 exit)
- QNAMING=APPEND@ (to specify user ID plus "@" character)

If QNAMING=USER is specified on the Device Default Options record, it merely sets the default action for ETO support processing. In order to actually obtain the USER/LTERM from the table, a user ID or Node record needs to be created defining the USER/LTERM names to be used.

#### RC3649A=

Specifies whether IMS ETO Support will append error text to message DFS3649A if a signon failure occurs when DFS3649=MOD is used.

#### RC3649A=Y

IMS ETO Support will append error text to message DFS3649A if a signon failure occurs when DFS3649=MOD is used.

#### RC3649A=N

IMS ETO Support will not append error text to message DFS3649A if a signon failure occurs when DFS3649=MOD is used.

#### RESP=

This represents the terminal response option. Valid specifications are:

- RESP=NORESP
- RESP=FORCRESP
- RESP=TRANRESP

#### SECURITY=

Specify the name of the Security Group assigned to these devices. This option is used only if IMS ETO Support Security Table Lookup option is selected.

#### SGNUSREC=

Specifies whether a user ID record must be defined for a signon to be successful.

## SGNUSREC=YES

The IMS ETO Support user ID table is searched at signon time. The signon fails if there is not a matching entry in the table.

## SGNUSREC=NO

Signon continues even if there is not a matching entry in the user ID table.

## SRMAFF=

Specifies whether signon is allowed when an IMS Resource Manager (RM) affinity exists.

#### SRMAFF=Y

Signon is allowed even though an IMS Resource Manager (RM) affinity may exist.

#### SRMAFF=N

Signon is not allowed if an IMS Resource Manager (RM) affinity exists.

### SRMAFF=

If no option is specified, signon with IMS Resource Manager (RM) affinity is determined based on:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

#### SRMDEF=

Specifies the status recovery mode.

#### **SRMDEF=GLOBAL**

The IMS Resource Manager (RM) is to maintain terminal and user end-user status.

#### SRMDEF=LOCAL

Terminal and user end-user status is to be maintained in local control blocks and log records.

#### SRMDEF=NONE

Status is to be discarded at signoff/logoff/IMS restart.

### SRMDEF=

If no option is specified, status is maintained based on the:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

### **TODCHECK=**

Specify one of the following keyword options:

## **TODCHECK=NONE**

Time-of-day checking is not done.

## **TODCHECK=LOGON**

Time-of-day checking is performed at logon.

## **TODCHECK=SIGNON**

Time-of-day checking is performed at signon.

#### TRX3650=

Specifies the name of the IMS transaction to schedule after a successful signon, instead of presenting the usual DFS3650I successful signon message. Specifying this option means that no values for options MOD3650= can be specified.

## Deleting a default device record

The control statement format for deleting the default device record for SLU2/3270 devices is:

ZD DELETE

## **Examples:**

The following control statement changes the default ASOT value for SLU2/3270 devices:

ZD ASOT=90

The following control statement deletes the default device record for SLU2/3270 devices:

ZD DELETE

## ZC - SLU1 console LUNAME record control statements

This reference topic describes how to add, modify, or delete an SLU1 console LUNAME record.

## Adding a SLU1 console LUNAME

The control statements for adding a SLU1 console LUNAME record follow:

ZC <node> <keyword-parameters>

### **Example:**

ZC SLU1CON1 QNAMING=USER USER=LTERM01

When adding a SLU1 console LUNAME record, you can specify the following keyword parameters (in addition to the function and node parameters):

#### ASOT=

Specifies the auto signoff time. If specified, must contain 0, or within the range of 10 - 1440.

#### ALOT=

Specifies the auto logoff time. If specified, must contain 0, or within the range of 1 - 1440.

#### DFS3650=

The following options can be used in place of the IMS DFS3650I session status message:

- DFS3650=IMS (for the IMS default)
- DFS3650=DFS058 (to send message DFS058)
- DFS3650=BLANK (to send a 1-byte blank message)
- DFS3650=DFSGMSG1 (for the DFSGMSG1 user exit)

#### LDESC=

Specifies the logon descriptor. The descriptor must be 1 - 8 alphanumeric characters. Character 1 must be alphabetic or national (@#\$).

#### LOGON=

Specify one of the following options for the type of logon process that is to be used for the node:

- LOGON=ETOS (for the IMS ETO Support default)
- LOGON=DFSLGNX1 (to use the DFSLGNX1 user exit)
- LOGON=AUTORACF (for IMS ETO Support to perform automatic RACF signon)
- LOGON=USERID (to use auto signon with a user ID specified with the USERID= option)

#### MSGDEL=

Specifies the messages that are discarded by IMS for the specified SLU1 console. Valid specifications are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

#### **ONAMING=**

The following options can be used to set the LTERM name for this SLU1 console:

- QNAMING=NUL (to have the LTERM name match the NODE name)
- QNAMING=USER (to specify the LTERM name from the table)
- QNAMING=DFSSGNX1 (for the DFSSGNX1 user exit)

If QNAMING=USER is specified, you must supply an LTERM name in the USER= parameter.

#### RFSP=

Specifies the terminal response option. Valid specifications are:

- RESP=NORESP
- RESP-FORCRESP
- RESP=TRANRESP

## SECURITY=

Specifies the 1- to 8-character alphanumeric security group with the first character being alphabetic or national (@#\$).

#### **USER=**

Specifies the 1- to 8-character alphanumeric LTERM name to be used for this SLU1 console. Specify this only if QNAMING=USER was also specified.

#### **USERID=**

Specifies the 1- to 8-character user ID to be used for auto signon for the node when option LOGON=USERID has also been specified.

## WTOAUTO=

Use this option to specify whether WTO message IZT9102I is displayed when the device does an auto signon.

Υ

An IZT9102I WTO message is displayed when the device does an auto signon.

Ν

Message IZT9102I is not issued for the device.

## Deleting a SLU1 console LUNAME

The control statement format for deleting a SLU1 console LUNAME is:

ZC <node> DELETE

### **Example:**

ZC SLU1CON1 DELETE

To delete all LTERMs related to a particular SLU1 console, but without deleting the SLU1 console, use the following format:

ZC <node> DELETE LTERMS

## **Example:**

ZC SLU1CON1 DELETE LTERMS

# **ZF - SLUP/3600/FINANCE LUNAME record control statements**

This reference topic describes how to add, modify, or delete an SLUP/3600/FINANCE LUNAME record.

## Adding a SLUP/3600/FINANCE LUNAME

The control statements for adding a SLUP/3600/FINANCE LUNAME record follow:

ZF <node> <keyword-parameters>

## **Example:**

ZF SLUP001 QNAMING=USER USER=LTERMP1

When adding a SLUP/3600/FINANCE LUNAME record, you can specify the following keyword parameters (in addition to the function and node parameters):

### ASOT=

Specifies the auto signoff time. If specified, must contain 0, or within the range of 10 - 1440.

#### ALOT=

Specifies the auto logoff time. If specified, must contain 0, or within the range of 1 - 1440.

## DFS3650=

The following options can be used in place of the IMS DFS3650I session status message:

• DFS3650=IMS (for the IMS default)

- DFS3650=DFS058 (to send message DFS058)
- DFS3650=BLANK (to send a 1-byte blank message)
- DFS3650=DFSGMSG1 (for the DFSGMSG1 user exit)

#### LDESC=

Specifies the logon descriptor. The descriptor must be 1 - 8 alphanumeric characters. Character 1 must be alphabetic or national (@#\$).

#### I OGON=

Specify one of the following options for the type of logon process to be used for the node:

- LOGON=ETOS (for the IMS ETO Support default)
- LOGON=DFSLGNX1 (to use the DFSLGNX1 user exit)
- LOGON=AUTORACF (for IMS ETO Support to perform automatic RACF signon)
- LOGON=USERID (to use auto signon with a user ID specified with the USERID= option)

#### MSGDEL=

Specifies the messages that are discarded by IMS for the specified SLUP/3600/FINANCE device. Valid specifications are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

### **QNAMING=**

The following options can be used to set the LTERM name for this SLUP/3600/FINANCE:

- QNAMING=NUL (to have the LTERM name match the NODE name)
- QNAMING=USER (to specify the LTERM name from the table)
- QNAMING=DFSSGNX1 (for the DFSSGNX1 user exit)

If QNAMING=USER is specified, you must supply an LTERM name in the USER= parameter.

## RESP=

Specifies the terminal response option. Valid specifications are:

- RESP=NORESP
- RESP=FORCRESP
- RESP=TRANRESP

#### SECURITY=

Specifies the 1- to 8-character alphanumeric security group.

#### USER=

Specifies the 1- to 8-character alphanumeric LTERM name to be used for this SLUP/3600/FINANCE. Specify this only if QNAMING=USER was also specified.

## **USERID=**

Specifies the 1- to 8-character user ID to be used for auto signon for the node when option LOGON=USERID has also been specified.

## WTOAUTO=

Use this option to specify whether WTO message IZT9102I is displayed when the device does an auto signon.

Υ

Message IZT9102I is displayed when the device does an auto signon.

N

Message IZT9102I is not issued for the device.

## **Deleting a SLUP/3600/FINANCE LUNAME**

The control statement format for deleting a SLUP/3600/FINANCE LUNAME is:

ZF <node> DELETE

## **Example:**

ZF SLUP001 DELETE

To delete all LTERMs related to a particular SLUP/3600/FINANCE, but without deleting the SLUP/3600/FINANCE, use the following format:

ZF <node> DELETE LTERMS

## **Example:**

ZF SLUP001 DELETE LTERMS

# **ZV - LU 6.1 (ISC) User ID record control statements**

This reference topic describes how to add, modify, or delete an LU 6.1 user ID.

## Adding an LU 6.1 User ID record

The control statement for adding an LU 6.1 user ID is:

ZV <userid> NODE=<node>

### **Example:**

ZV H001 NODE=CICSPROD

When adding an LU 6.1 user ID record, you can specify the following keyword parameters (in addition to the function and user ID parameters):

## ASOT=

Specifies the auto signoff time. The numeric value specified must be from 0 - 1440.

#### LDESC=

Specifies the logon descriptor. The descriptor must be 1 - 8 alphanumeric characters. Character 1 must be alphabetic or national (@#\$).

## LOGON=

Specify one of the following options for the type of logon process to be used for this LU 6.1 user ID:

- LOGON=ETOS (for the IMS ETO Support default)
- LOGON=DFSLGNX1 (to use DFSLGNX1 user exit)
- LOGON=AUTO (to use a non-RACF auto signon)

#### **MODETBL=**

Specifies the VTAM logon mode name. The logon mode name must be 1 - 8 alphanumeric characters. Character 1 must be alphabetic or national (@#\$).

#### **MSGDEL=**

Specifies the messages that are discarded by IMS for the specified user. Valid specifications are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

#### NODE=

Specifies the name of connecting node. The name must be 1 - 8 alphanumeric characters. Character 1 must be alphabetic or national (@#\$).

## QNAMING=

The following options can be specified for the LTERM naming convention to be used:

- QNAMING=LTRMUSER (LTERM name is user ID)
- QNAMING=USER (LTERM names must be specified by separate ZL < lterm> record control statements)
- QNAMING=DFSSGNX1 (LTERM name is supplied by the user's DFSSGNX1 ETO exit)

#### RESP=

Specifies the terminal response option. Valid specifications are:

- RESP=NORESP
- RESP=FORCRESP
- RESP=TRANRESP

## **REMOTEID=**

Specifies the name of remote ID for the connecting node. The name must be 1 - 8 alphanumeric characters.

#### SECURITY=

Specifies the name of the IMS ETO Support Security Profile group. The name must be 1 - 8 alphanumeric characters.

## Deleting an LU 6.1 User ID record

The control statement for deleting an LU 6.1 user ID is:

ZV <userid> DELETE

## **Example:**

ZV H001 DELETE

The control statement for deleting all manually specified LTERM records (added by the ZL < lterm> record control statement) for an LU 6.1 user ID follows:

ZV <userid> DELETE LTERMS

### **Example:**

ZV H001 DELETE LTERMS

## Z1 - Default device control statements for SLU1 console

This reference topic describes how to add, modify, or delete the default SLU1 console device record.

The following keyword parameters can be specified:

## ASOT=

Specifies the auto signoff time. The numeric value must be 0, or 10 - 1440.

## ALOT=

Specifies the auto logoff time. The numeric value must be 0, or 10 - 1440.

## CONVREC=

Specifies how IMS manages conversational status.

#### CONVREC=Y

Specifies that if SRMDEF global/local is set, conversational status is recoverable.

#### CONVREC=N

Specifies that conversational status is not recoverable.

#### **CONVREC=**

If no option is specified, conversational recovery is managed based on the:

- · Setting from the IMS ETO Support global record
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

#### DFS3650=

Specify one of the following options to be used in place of the IMS DFS3650 session status message:

- DFS3650=IMS (for the IMS default)
- DFS3650=DFS058 (to send message DFS058)
- DFS3650=BLANK (to send a 1-byte blank message)
- DFS3650=DFSGMSG1 (for the DFSGMSG1 user exit)

#### FPREC=

Specifies how IMS manages Fast Past status and message disposition.

## FPREC=Y

Specifies that if SRMDEF global/local is set, Fast Path status and messages are to be recoverable.

#### FPREC=N

Specifies that Fast Path status and messages are not recoverable.

### FPREC=

If no option is specified, Fast Path status and message recovery is managed based on the:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

#### LOGON=

Specify one of the following options for the type of logon to be used as the default for SLU1 console devices:

- LOGON=ETOS (to use the IMS ETO Support process)
- LOGON=DFSLGNX1 (to use DFSLGNX1 user exit)
- LOGON=AUTORACF (for IMS ETO Support to perform auto RACF signon)

### MSGDEL=

Specifies the messages that are discarded by IMS by default for the SLU1 console devices. Valid specifications are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

## **QNAMING=**

The following options can be used to set the LTERM naming default for SLU1 console devices:

- QNAMING=NUL (to have LTERM name match NODE name)
- QNAMING=USER (to specify the LTERM name from the table)
- QNAMING=DFSSGNX1 (for the DFSSGNX1 user exit)

QNAMING=USER can be set in the SLU1 console Device Default record, but in order for it to take effect, there must be a matching SLU1 console LUNAME record that specifies the LTERMs. If there is not a corresponding SLU1 console LUNAME record, QNAMING=NUL is used.

#### RESP=

Specifies the terminal response options. Valid specifications are:

- RESP=NORESP
- RESP=FORCRESP
- RESP=NONIOPCB

## SECURITY=

Specifies the 1- to 8-character alphanumeric security group.

#### SRMAFF=

Specifies whether signon is allowed when an IMS Resource Manager (RM) affinity exists.

#### SRMAFF=Y

Signon is allowed even though an IMS Resource Manager (RM) affinity may exist.

## SRMAFF=N

Signon is not allowed if an IMS Resource Manager (RM) affinity exists.

## **SRMAFF=**

If no option is specified, signon with IMS Resource Manager (RM) affinity is determined based on:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

## SRMDEF=

Specifies the status recovery mode.

#### **SRMDEF=GLOBAL**

The IMS Resource Manager (RM) is to maintain terminal and user end-user status.

## SRMDEF=LOCAL

Terminal and user end-user status is to be maintained in local control blocks and log records.

## **SRMDEF=NONE**

Status is to be discarded at signoff/logoff/IMS restart.

## SRMDEF=

If no option is specified, status is maintained based on the:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

## Deleting a SLU1 console default device record

The control statement format for deleting the default device record for SLU1 console devices is:

Z1 DELETE

## **Examples:**

• The following control statement changes the default ASOT value for SLU1 console devices:

Z1 ASOT=90

• The following control statement deletes the default device record for SLU1 console devices:

Z1 DELETE

# Z3 - Default device control statements for SLUP/3600/FINANCE

This reference topic describes how to add, modify, or delete the default device record for SLUP/3600/FINANCE devices.

The following keyword parameters can be specified:

#### ASOT=

Specifies the default auto signoff time for SLUP/3600/FINANCE devices. This numeric value must be 0, or 10 - 1440.

#### ALOT=

Specifies the default auto logoff time for SLUP/3600/FINANCE devices. This numeric value must be 0, or 10 - 1440.

#### CONVREC=

Specifies how IMS manages conversational status.

#### CONVREC=Y

Specifies that if SRMDEF global/local is set, conversational status is recoverable.

## CONVREC=N

Specifies that conversational status is not recoverable.

#### CONVREC=

If no option is specified, conversational recovery is managed based on the:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

## SPQBNAME=

Specifies how the name of the USER (SPQB) control block is determined.

## SPQBNAME=NODE

The name of the USER (SPOB) control block must match the VTAM NODE name.

### SPOBNAME=LTERM1

The name of the USER (SPQB) control block is obtained from the first LTERM assigned to this NODE.

## DFS3650=

Specifies the default option for sending a message in place of the IMS DFS3650I session status. Valid specifications are:

- DFS3650=IMS (for the IMS default)
- DFS3650=DFS058 (to send message DFS058)
- DFS3650=BLANK (to send a 1-byte blank message)
- DFS3650=DFSGMSG1 (for the DFSGMSG1 user exit)

### FPREC=

Specifies how IMS manages Fast Past status and message disposition.

#### FPREC=Y

Specifies that if SRMDEF global/local is set, Fast Path status and messages are to be recoverable.

#### FPREC=N

Specifies that Fast Path status and messages are not recoverable.

#### FPREC=

If no option is specified, Fast Path status and message recovery is managed based on the:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

#### LOGON=

Specify one of these options:

- LOGON=ETOS (to use the IMS ETO Support process)
- LOGON=DFSLGNX1 (to use the DFSLGNX1 user exit)
- LOGON=AUTORACF (for IMS ETO Support to perform automatic RACF signon)

## **MSGDEL=**

Specifies the default for messages that are discarded by IMS for the SLUP/3600/FINANCE. Valid specifications are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

## QNAMING=

Specifies the default option to set the LTERM name for the SLUP/3600/FINANCE. Valid specifications are:

- QNAMING=NUL (to have the LTERM name match the NODE name)
- QNAMING=USER (to specify the LTERM name from the table)
- QNAMING=DFSSGNX1 (for the DFSSGNX1 user exit)

QNAMING=USER can be set in the SLUP/3600/FINANCE Device Default record, but in order for it to take effect there must be a matching SLUP/3600/FINANCE LUNAME record that specifies the LTERMs. If there is no corresponding SLUP/3600/FINANCE LUNAME record, QNAMING=NUL is used.

#### RESP=

Specifies the default terminal response option for SLUP/3600/FINANCE devices. Valid specifications are:

- RESP=NORESP
- RESP=FORCRESP
- RESP=TRANRESP

## SECURITY=

Specifies the name of the security group. The name must consist of 1 - 8 alphanumeric characters.

#### SPMAFF-

Specifies whether signon is allowed when an IMS Resource Manager (RM) affinity exists.

#### SRMAFF=Y

Signon is allowed even though an IMS Resource Manager (RM) affinity may exist.

#### SRMAFF=N

Signon is not allowed if an IMS Resource Manager (RM) affinity exists.

#### SRMAFF=

If no option is specified, signon with IMS Resource Manager (RM) affinity is determined based on:

- · Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

#### SRMDEF=

Specifies the status recovery mode.

### SRMDEF=GLOBAL

The IMS Resource Manager (RM) is to maintain terminal and user end-user status.

## SRMDEF=LOCAL

Terminal and user end-user status is to be maintained in local control blocks and log records.

#### SRMDEF=NONE

Status is to be discarded at signoff/logoff/IMS restart.

#### SRMDEF=

If no option is specified, status is maintained based on the:

- Setting from the IMS ETO Support global options
- Setting in the DFSDCxxx PROCLIB member
- IMS system default

## Z6 - Default device control statements for LU 6.1

This reference topic describes how to add, modify, or delete the default device record for LU 6.1 devices.

## Adding the default device record for LU 6.1 devices

The control statement format for adding the default device record for LU 6.1 devices is:

Z6 <keyword-parameters>

**Example:** The following control statement changes the default ASOT value for LU 6.1 devices:

Z6 AS0T=90

The following keyword parameters can be specified:

#### ASOT=

Specifies the automatic signoff time. The numeric value must be 0, or within the range of 10 - 1440.

#### ALOT=

Specifies the automatic logoff time. The numeric value must be 0, or within the range of 10 - 1440.

#### LOGON=

Specify one of these options:

- LOGON=ETOS (to use the IMS ETO Support process)
- LOGON=DFSLGNX1 (to use the DFSLGNX1 user exit)
- LOGON=AUTO (to use the IMS ETO Support auto signon feature)

## LUDEFREQ=

Specifies whether an LU name record must be defined for a logon to be successful.

#### YES

The IMS ETO Support LU name table is searched at logon time. The logon fails if there is no matching entry in the table.

#### NO

Logon continues even if there is no matching entry in the LU name table.

## MSGDEL=

Specifies the messages that are discarded by IMS for the specified terminal. The options are:

- MSGDEL=SYSINFO
- MSGDEL=NOTERM
- MSGDEL=NONIOPCB

## RESP=

Specifies the terminal response option. Valid specifications are:

- RESP=NORESP
- RESP=FORCRESP
- RESP=TRANRESP

#### SECURITY=

Specifies the name of the security group assigned to these devices.

This option is used only if the IMS ETO Support Security Table Lookup option is selected.

### **SGNUSREC=**

Specifies whether a user ID record must be defined for a signon to be successful.

#### YES

The IMS ETO Support user ID table is searched at signon time. The signon fails if there is no matching entry in the table.

#### NO

Signon continues even if there is no matching entry in the user ID table.

## Deleting a default device record

The control statement format for deleting the default device record for LU 6.1 devices is:

Z6 DELETE

## Z7 - LU 6.1 LUNAME record control statements

This reference topic describes how to add, modify, or delete an LU 6.1 LUNAME record.

## Adding an LU 6.1 LUNAME record

The control statement format for adding an LU 6.1 LUNAME record is:

Z7 <node> <keyword-parameters>

## **Examples:**

Z7 IMS0 LDESC=DFSLU61

Z7 IMS0

#### <node>

Specifies the LU 6.1 type node name. The node name must be 1 - 8 uppercase alphanumeric characters. Character 1 must be alphabetic or national (@#\$). You can use wildcards if you do not want to use specific LUNAMEs. Wildcards include:

- Percent sign (%) represents a one-to-one relationship with character positions in your LUNAMEs. For example, L1%%% captures those members beginning with L1 followed by any 3 characters.
- Question mark (?) represents a one-to-one relationship with numeric positions in your LUNAMEs.

For example, L1??? captures those members beginning with L1 followed by 3 numeric digits.

• Asterisk (\*) - represents any characters (from 0 to many) in the LUNAME.

For example, L1\* captures all members starting with L1.

Note: An asterisk must be the last character in the name.

When adding an LU 6.1 LUNAME record, you can specify the following keyword parameter in addition to the function and node parameters:

#### LDESC=

Specifies the logon descriptor. The descriptor must be 1 - 8 alphanumeric characters. Character 1 must be alphabetic or national (@#\$).

If IZTFAIL is specified as the logon descriptor, IMS ETO Support will reject the logon attempt.

## Deleting an LU 6.1 LUNAME record

The control statement format for deleting an LU 6.1 LUNAME record is:

Z7 <node> DELETE

## **Example:**

The following control statement deletes an LU 6.1 LUNAME record:

Z7 IMS0 DELETE

# ZM - DFS3649 error messages

This reference topic describes how to customize the error message text for message DFS3649 return codes.

## Adding/replacing message text

The control statement format for adding or replacing message text for a specific DFS3649 return code is:

ZM <rc> <message text>

The second parameter **<rc>** represents the DFS3649 decimal return code, while the rest of the control statement is the customized message text.

### **Example:**

This example adds DFS3649 message text for decimal return code 28.

ZM 28 See your security administrator to have your access restored

## **Deleting message text**

The control statement format for deleting message text for a specific DFS3649 return code is:

ZM <rc> DELETE

## **Example:**

ZM 28 DELETE

# **ZR - Routing data for ETO table refreshes**

This reference topic describes how to specify the APPC symbolic destinations for each of the MVS systems on which IMS systems using IMS ETO Support are running.

# Adding a symbolic destination

The control statement format for adding a new symbolic destination is:

ZR <symdest>

The second parameter <symdest> represents the symbolic destination of the MVS image on which the IMS system using IMS ETO Support is running.

#### Example

This example adds symbolic destinations SYST, SYSU, and SYSV to the current list of symbolic destinations.

ZR SYST ZR SYSU ZR SYSV

## **Deleting a symbolic destination**

The control statement format for deleting a symbolic destination from the list is:

ZR <symdest> DELETE

## Example 1:

This example deletes SYSU from the list of symbolic destinations.

ZR SYSU DELETE

## Example 2:

This example deletes all symbolic destinations.

ZR DELETE

# **ZS - Security options**

This reference topic describes how to specify the security options that should be in effect.

The control statement format for specifying security options is:

ZS <kwd=value>

Multiple <kwd=value> specifications can be made on one control statement.

The following keyword parameters can be specified:

#### **DYNAOPTS=**

Specify one of the following options for securing dynamic terminals:

- DYNAOPTS=RACF (use RACF, or IMS default if RACF is not active)
- DYNAOPTS=DFSCCMD1 (use installation exit)
- DYNAOPTS=SECGROUP (use security group lookup)

## STATOPTS=

Specify one of the following options for securing static terminals:

- STATOPTS=RACF (use RACF, or IMS default if RACF is not active)
- STATOPTS=DFSCCMD1 (use installation exit)
- STATOPTS=SECGROUP (use security group lookup)

#### LU620PTS=

Specify one of the following options for securing LU 6.2 devices:

- LU62OPTS=RACF (use RACF, or IMS default if RACF is not active)
- LU620PTS=DFSCCMD1 (use installation exit)
- LU62OPTS=SECGROUP (use security group lookup)

## LU610PTS=

Specify one of the following options for securing LU 6.21 (ISC) devices:

- LU610PTS=RACF (use RACF, or IMS default if RACF is not active)
- LU610PTS=DFSCCMD1 (use installation exit)
- LU610PTS=SECGROUP (use security group lookup)

#### OTMAOPTS=

Specify one of the following options for securing OTMA devices:

- OTMAOPTS=RACF (use RACF, or IMS default if RACF is not active)
- OTMAOPTS=DFSCCMD1 (use installation exit)
- OTMAOPTS=SECGROUP (use security group lookup)

## ICMDOPTS=

Specify one of the following options for securing ICMD-interface commands:

- ICMDOPTS=RACF (use RACF, or IMS default if RACF is not active)
- ICMDOPTS=DFSCCMD1 (use installation exit)
- ICMDOPTS=SECGROUP (use security group lookup)

#### CMDOPTS=

Specify one of the following options for securing AOI programs that issue the IMS CMD call:

- CMDOPTS=RACF (use RACF, or IMS default if RACF is not active)
- CMDOPTS=DFSCCMD1 (use installation exit)
- CMDOPTS=SECGROUP (use security profile lookup)

#### CMD1WTOR

Specify whether exit routine DFSCCMD1 is called for commands that are entered using Write To Operator with Reply (WTOR).

#### CMD1WTOR=Y

Exit routine DFSCCMD1 is called for commands that are entered using WTOR. Authorization to the command is determined by exit routine DFSCCMD1.

#### CMD1WTOR=N

Exit routine DFSCCMD1 is not called for commands that are entered using WTOR. IMS ETO Support allows access to all commands from the WTOR.

#### CMD1MTO

Specify whether exit routine DFSCCMD1 is called for commands that are entered from the IMS Master Terminal Operator (MTO).

## CMD1MT0=Y

Exit routine DFSCCMD1 is called for commands that are entered from the MTO. Authorization to the command is determined by exit routine DFSCCMD1.

## CMD1MT0=N

Exit routine DFSCCMD1 is not called for commands that are entered from the MTO. IMS ETO Support allows access to all commands from the MTO.

## CMD1TCO

Specify whether exit routine DFSCCMD1 is called for commands that are entered from Time Controlled Operations (TCO).

## CMD1TCO=Y

Exit routine DFSCCMD1 is called for commands that are entered from TCO. Authorization to the command is determined by exit routine DFSCCMD1.

## CMD1TCO=N

Exit routine DFSCCMD1 is not called for commands that are entered from TCO. IMS ETO Support allows access to all commands from TCO.

## CMD1EMCS

Specify whether exit routine DFSCCMD1 is called for commands that are entered from Multiple Console Support (MCS) or Extended Multiple Console Support (EMCS) consoles.

#### CMD1EMCS=Y

Exit routine DFSCCMD1 is called for commands that are entered from MCS or EMCS consoles. Authorization to the command is determined by exit routine DFSCCMD1.

#### CMD1EMCS=N

Exit routine DFSCCMD1 is not called for commands that are entered from MCS or EMCS consoles. IMS determines authorization to the command.

## **ECMDKWDS=**

Specify whether enhanced command+keyword security is to be active:

#### **ECMDKWDS=Y**

Enhanced command+keyword security is to be active.

#### **ECMDKWDS=N**

Enhanced command+keyword security is not to be active.

#### TRANLTRM=

Specify whether RACF ETV is active for Transaction/LTERM authorization.

#### TRANLTRM=Y

IMS ETO Support performs a RACF call to verify that the LTERM that is attempting the transaction is authorized to process this transaction.

#### TRANLTRM=N

IMS ETO Support does not perform RACF calls for Transaction/LTERM authorization.

### TRANPSWD=

Specify whether RACF ETV is active for Transaction/PASSWORD authorization.

## TRANPSWD=Y

IMS ETO Support performs a RACF call to verify that the proper PASSWORD was entered for the entered transaction.

#### TRANPSWD=N

IMS ETO Support does not perform RACF calls for Transaction/PASSWORD authorization.

#### **SUPPICH=**

Specify whether RACF error message ICH408I is displayed in the IMS control region for failed ETV authorization. The SUPPICH= parameter applies only when either TRANLTRM or TRANPSWD are active.

## **SUPPICH=Y**

RACF ICH408I error messages is suppressed.

#### SUPPICH=N

RACF ICH408I error messages are displayed in the IMS control region for failed ETV accesses. This value has an impact only when either TRANLTRM or TRANPSWD are active.

**Note:** If IMS ETO Support MATRIX ETV is active, this option is used to determine whether message IZT0008I should be suppressed for authorization failures.

## **RACFPREFIX=**

Specify the prefix name of the RACF rule that is used for ETV processing. You must specify the name as 4 characters (A-Z, 0-9, #, @, or \$) and the name is valid only if either TRANLTRM or TRANPSWD are also active.

## **ETOSMATRIX=**

Specify whether ETOS MATRIX ETV is active for Transaction/LTERM authorization.

#### ETOSMATRIX=Y

IMS ETO Support performs a matrix lookup to verify that the LTERM that is attempting the transaction is authorized to process this transaction.

#### ETOSMATRIX=N

IMS ETO Support will not perform a matrix lookup for transaction/LTERM authorization.

#### **Example:**

ZS DYNAOPTS=RACF ECMDKWDS=Y

# **ZS - Command+keyword selection**

This reference topic describes how to specify the IMS command keywords that are to be secured when enhanced command+keyword security is used.

## **Specifying commands**

The control statement format for specifying the commands that are to be secured when using enhanced command+keyword security is shown below. A plus sign (+) is put in front of the command+keyword to be activated.

```
ZS +</cmd><kwd>
```

There is no space between <cmd> and <kwd>. Multiple </cmd><kwd> specifications can be made on one control statement.

### **Example:**

```
ZS +/SWIOLDS +/CHEFREEZ
```

## **Removing commands**

The control statement format for removing selected commands that are secured when using enhanced command+keyword security is shown below. A minus sign (-) is put in front of the command+keyword to be deactivated.

```
ZS -</cmd><kwd>
```

There is no space between <cmd> and <kwd>. Multiple </cmd><kwd> specifications can be made on one control statement.

#### **Example:**

```
ZS -/SWIOLDS -/CHEFREEZ
```

# **ZS - Security profile definitions**

This reference topic describes how to define security profiles and specify the IMS command and command+keywords that are to be authorized.

# Specifying profile type

The following example shows the control statement for specifying the security profile type:

```
ZS <secgroup> <type> .....
```

The value specified for secgroup is the installation defined 1- to 8-character name for the security profile.

The value specified for profile *type* must be one of the following:

- SGRP (security group)
- TRAN (transaction name for AOI program that issues the IMS CMD call)
- PROG (program name for AOI program that issues the IMS CMD call prior to GU to IOPCB)
- T/P (transaction and program name (combination of TRAN and PROG above))

**Note:** A secgroup name cannot be defined to more than one profile type.

## Specifying commands (using enhanced command+keyword security)

The control statement format for specifying a security group and the selected commands to be authorized to that group (when using Enhanced Command+Keyword Security) is shown below. A plus sign (+) is put in front of the command+keyword to be selected.

```
ZS <secgroup> +</cmd><kwd>
```

The value specified for <secgroup> is the installation-defined 1- to 8-character name for the security group. There is no space between <cmd> and <kwd>. Multiple </cmd><kwd> specifications can be made on one control statement.

## Example:

```
ZS OPERGRP1 +/SWIOLDS +/CHEFREEZ
```

## Removing commands (using enhanced command+keyword security)

The control statement format for removing selected commands that are secured (when using Enhanced Command+Keyword Security) is shown below. A minus sign (-) is put in front of the command+keyword to be removed.

```
ZS <secgroup> -</cmd><kwd>
```

There is no space between <cmd> and <kwd>. Multiple </cmd> <kwd> specifications can be made on one control statement.

## **Example:**

```
ZS OPERGRP1 -/SWIOLDS -/CHEFREEZ
```

# **Specifying commands (using standard IMS command security)**

The control statement format for specifying a security group and the selected commands to be authorized to that group when using standard IMS command security (instead of Enhanced Command+Keyword Security) is shown below. A plus sign (+) is put in front of the command to be selected.

```
ZS <secgroup> +</cmd>
```

## **Example:**

```
ZS OPERGRP1 +/SWI +/CHE
```

# Removing commands (using standard IMS command security)

The control statement format for removing selected commands that are secured when using standard IMS command security is shown below. A minus sign (-) is put in front of the command to be removed.

```
ZS <secgroup> -</cmd>
```

## Example:

```
ZS OPERGRP1 -/SWI -/CHE
```

# J1 - Time-of-day table entries

This reference topic describes how to define time-of-day table entries for NODEs and users.

## Adding a time-of-day table entry for a NODE

The format of the control statement to add a time-of-day table entry for a NODE is as follows:

J1 <node> TYPE=NODE FROM=<hhmm> TO=<hhmm>

## **Example:**

J1 NODE0001 TYPE=NODE FROM=0800 T0=1800

## Adding a time-of-day table entry for a user ID

The format of the control statement to add a time-of-day table entry for a user ID is as follows:

J1 <userid> TYPE=USER FROM=<hhmm> TO=<hhmm>

## **Example:**

J1 IMSUSR1 TYPE=USER FROM=0900 T0=1700

## Deleting a time-of-day table entry for a NODE

The format of the control statement to delete a time-of-day table entry for a NODE is as follows:

J1 <node> TYPE=NODE DELETE

## **Example:**

J1 NODE0001 TYPE=NODE DELETE

## Deleting a time-of-day table entry for a user ID

The format of the control statement to delete a time-of-day table entry for a user ID is as follows:

J1 <userid> TYPE=USER DELETE

## **Example:**

J1 IMSUSR1 TYPE=USER DELETE

# Specifying keywords for Time-of-day table entries

When adding a NODE or user ID table entry, you can specify the following keywords (in addition to the J1 function and NODE or user ID parameters:

#### TYPE=

Specify one of the following keyword options:

- TYPE=NODE (to add a table entry for a NODE)
- TYPE=USER (to add a table entry for a user ID)

#### FROM=

Specify the starting time in *hhmm* format where *hh* represents the hour 00-23 and *mm* represents the minutes after the hour from 00 to 59.

#### TO=

Specify the ending time in *hhmm* format where *hh* represents the hour 00-23 and mm represents the minutes after the hour from 00 to 59.

#### **DELETE**

Specify this parameter with the NODE or USER parameter and the TYPE= keyword to have the table entry deleted.

# LM - Logon Descriptor by Logon mode table entries

This reference topic describes how to define logon descriptor by logon mode table entries.

## Adding a Logon Descriptor by Logon mode table entry

The format of the control statement to add a Logon Descriptor by Logon mode is as follows:

```
LM <logon mode> LOGOND=<logond>
```

## **Examples:**

Deleting entry for Logon mode MODE001:

```
LM MODE001 DELETE
```

## Specifying keywords for Logon Descriptor by Logon mode table entries

When you add a Logon Descriptor by Logon mode table entry, you can specify the following keywords in addition to the LM function and Logon mode positional parameters:

#### LOGOND=

Specify the name of the Logon Descriptor.

#### **DELETE**

Specify this parameter to delete the table entry.

# VN - VTAM userdata node options

This reference topic describes how to specify the various options related to extracting node-related characteristics from information stored in the VTAM userdata section.

# Adding node name prefixes where VTAM userdata should be present

The following example shows the format of the control statements to add 1-to-8 node prefixes:

```
VN NODEPFX1=refix1>
VN NODEPFX2=vrefix2>
VN NODEPFX3=cprefix3>
VN NODEPFX4=vrefix4>
VN NODEPFX5=vrefix5>
VN NODEPFX6=vrefix6>
VN NODEPFX7=vrefix7>
VN NODEPFX8=vrefix8>
```

## **Example:**

```
VN NODEPFX1=TRM NODEPFX2=ADM
```

## Adding node name offset information

The following example shows the format of the control statement to specify the offset into VTAM userdata where the node name is present:

```
VN OFFNODE=<nn>
```

In the above, *nn* represents 2 decimal digits for the node name offset.

Note: If the OFFNODE= option is specified, then the KWDNODE= option cannot be specified.

## **Example:**

VN OFFNODE=04

## Adding node name keyword prefix information

The following example shows the format of the control statement to specify the keyword prefixing the node name in the VTAM userdata:

VN KWDNODE=<xxxxxxxxxx

**Note:** If the KWDNODE= option is specified, then the OFFNODE= option cannot be specified.

## **Example:**

VN KWDNODE=NODE

# **VU - VTAM userdata various options**

This reference topic describes how to specify the various miscellaneous options related to extracting various IMS ETO Support options from information stored in the VTAM userdata section.

## **Adding user ID offset information**

The following example shows the format of the control statement to specify the offset into VTAM userdata where the user ID can be found:

VU OFFUSER=<nn>

In the above, *nn* represents 2 decimal digits for the user ID offset.

Note: If the OFFUSER= option is specified, then the KWDUSER= option cannot be specified.

## **Example:**

VU OFFUSER=04

# Adding user ID keyword prefix information

The following example shows the format of the control statement to specify the keyword prefixing the user ID in the VTAM userdata:

VU KWDUSER=<xxxxxxxxx

Note: If the KWDUSER= option is specified, then the OFFUSER= option cannot be specified.

## Example:

VU KWDUSER=USER

# Adding password offset information

The following example shows the format of the control statement to specify the offset into VTAM userdata where the password can be found:

VU OFFPSWD=<nn>

In the above, *nn* represents 2 decimal digits for the password offset.

Note: If the OFFPSWD= option is specified, then the KWDPSWD= option cannot be specified.

## **Example:**

VU OFFPSWD=04

# Adding password keyword prefix information

The following example shows the format of the control statement to specify the keyword prefixing the password in the VTAM userdata:

VU KWDPSWD=<xxxxxxxxxx

**Note:** If the KWDPSWD= option is specified, then the OFFPSWD= option cannot be specified.

## **Example:**

VU KWDPSWD=PSWD

# Adding password keyword prefix information

The following example shows the format of the control statement to specify the keyword prefixing the password in the VTAM userdata:

VU KWDPSWD=<xxxxxxxxxx

**Note:** If the KWDPSWD= option is specified, then the OFFPSWD= option cannot be specified.

## **Example:**

VU KWDPSWD=PSWD

# Adding DFS3649 MFS format name offset information

The following example shows the format of the control statement to specify the offset into VTAM userdata where the name of the DFS3649 MFS format can be found:

VU 0FF3649=<nn>

In the above, nn represents 2 decimal digits for the offset to the MFS format name.

Note: If the OFF3649= option is specified, then the KWD3649= option cannot be specified.

## Example:

VU 0FF3649=04

# Adding DFS3649 MFS format name keyword prefix information

The following example shows the format of the control statement to specify the keyword prefixing the name of the DFS3649 MFS format in the VTAM userdata:

VU KWD3649=<xxxxxxxxxxx

Note: If the KWD3649= option is specified, then the OFF3649= option cannot be specified.

## Example:

VU KWDTRAN=FMT3649

## Adding DFS3650I MFS format name offset information

The following example shows the format of the control statement to specify the offset into VTAM userdata where the name of the DFS3650I MFS format can be found:

VU 0FF3650=<nn>

In the above, nn represents 2 decimal digits for the offset to the MFS format name.

**Note:** If the OFF3650= option is specified, then the KWD3650= option cannot be specified.

#### Example:

VU 0FF3650=04

## Adding DFS3650I MFS format name keyword prefix information

The following example shows the format of the control statement to specify the keyword prefixing the name of the DFS3650I MFS format in the VTAM userdata:

VU KWD3650=<xxxxxxxxxx

**Note:** If the KWD3650= option is specified, then the OFF3650= option cannot be specified.

#### Example:

VU KWDTRAN=FMT3650

## Adding transaction offset information

The following example shows the format of the control statement to specify the offset into VTAM userdata where the transaction can be found:

VU OFFTRAN=<nn>

In the above, nn represents 2 decimal digits for the transaction offset.

Note: If the OFFTRAN= option is specified, then the KWDTRAN= option cannot be specified.

#### Example:

VU OFFTRAN=04

## Adding transaction keyword prefix information

The following example shows the format of the control statement to specify the keyword prefixing the transaction in the VTAM userdata:

 $\verb"VU KWDTRAN" = <\!\! xxxxxxxxxx\! >\!\! >$ 

Note: If the KWDTRAN= option is specified, then the OFFTRAN= option cannot be specified.

#### Example:

VU KWDTRAN=TRAN

## Specifying VTAM userdata processing options for SLU2/3270 devices if VTAM userdata is present

The following example shows the format of the control statement to specify VTAM userdata processing options for SLU2/3270 devices:

VU S2IFVUD=<IMS/ETOS/DELETE>

Specify S2IFVUD=IMS if IMS should process the VTAM userdata for the logon.

Specify S2IFVUD=ETOS if IMS ETO Support should process the VTAM userdata for the logon.

Specify S2IFVUD=DELETE if the VTAM userdata should be deleted for the logon.

#### Example:

VU S2IFVUD=ETOS

## Specifying VTAM userdata processing options for SLU2/3270 devices if VTAM userdata is not present

The following example shows the format of the control statement to specify VTAM userdata processing options for SLU2/3270 devices if no VTAM userdata is present:

VU S2NOVUD=<IMS/REJECT/DFS2002>

Specify S2NOVUD=IMS if the standard DFS3650I logon processing should occur whenever VTAM userdata is not present.

Specify S2NOVUD=REJECT if IMS should reject the logon attempt whenever VTAM userdata is not present.

Specify S2NOVUD=DFS2002 if the standard DFS3650I logon processing should occur (using message DFS2002I instead of message DFS3650I) whenever VTAM userdata is not present.

#### Example:

VU S2NOVUD=IMS

#### OT - OTMA destination control statements

This reference topic describes how to add, modify or delete an OTMA Destination record.

## Adding/modifying an OTMA destination record

The control statement format for adding and modifying an OTMA destination record is:

OT <destination> MEMBER=

#### **Example:**

OT LTERMOO1 MEMBER=MQSERIES

When adding an OTMA destination record, the MEMBER= keyword parameter is required. All other keyword parameters are optional.

When modifying an existing OTMA destination record, all keyword parameters are optional.

#### HOLDQ=

Specifies, if a TPIPE session needs to be created, and whether a synchronized session is created.

Υ

The TPIPE session is synchronized.

Ν

The TPIPE session is not synchronized.

#### **MEMBER=**

Specifies the 1- to 16-byte OTMA member, or OTMA pattern descriptor (OPD) name.

#### PERSISTENT=

Specifies whether or not messages for this OTMA destination are persistent.

Υ

Messages for this OTMA destination are persistent.

Ν

Messages for this OTMA destination are not persistent.

#### PRFXIMSID=

Specifies whether the name specified for USERDATA is prefixed with the IMSID.

Υ

The name specified for USERDATA is prefixed with the IMSID to obtain the member name in ddname IZTUDATA.

Ν

The name specified for USERDATA, if any, is used without modification to obtain the member name in ddname IZTUDATA.

#### SUPER=

Specifies the 1- to 4-character HOLDQ super member name.

#### SYNC=

Specifies whether or not a synchronized TPIPE is created.

Υ

Specifies, if a TPIPE needs to be created, that a synchronized TPIPE is created.

Ν

Specifies, if a TPIPE needs to be created, that the TPIPE will not be synchronized.

**Note:** If IMS PROCLIB member DFSPBxxx specified OTMASP=Y, a synchronized TPIPE is always created.

#### TPIPE=

Specifies the 1- to 8-character TPIPE name.

#### **USERDATA=**

Specifies the 1- to 8-character USERDATA name that is used to obtain a member from ddname IZTUDATA.

If PRFXIMSID=Y is specified, this field must be 1 - 4 characters, and is appended to the IMSID to create the name that is used to obtain a member from ddname IZTUDATA.

## Deleting an OTMA destination record

The control statement format for deleting an OTMA destination record is:

OT <destination> DELETE

#### **Example:**

OT LTERMO01 DELETE

## AL - Message origin abend control statements

This reference topic describes how to add, modify or delete a message origin abend record.

## Adding and modifying a message origin abend record

The control statement format for adding and modifying a message origin abend record is:

#### **Example:**

```
AL LTERM001
AL LTERM001/U/1000
```

When adding and modifying a message origin abend record, you can specify the following keyword parameters:

#### LTRM= APPC=

#### ОТМА-

Specifies the disposition of the message that caused the abend based upon the specified message origin.

#### **DEFAULT**

Specifies that IMS is to determine the disposition of the message that caused the abend based upon the specified message origin.

#### DISCARD

Specifies that IMS is to discard the input message that caused the abend based upon the specified message origin.

#### **SUSPEND**

Specifies that IMS is to put the input message that caused the abend in the suspend queue.

#### REQUEUE

Specifies that IMS is to requeue the input message that caused the specified abend.

#### LTRMDEST=

APPCDEST=

#### OTMADEST=

Specifies the 1- to 8-character transaction name where IMS is to queue the input message that caused the abend.

#### LTRMSUPP=

APPCSUPP=

#### OTMASUPP=

Specifies whether message DFS555I is to be suppressed from the device where the message that caused the abend originated.

Υ

Suppress message DFS555I from being returned to the device where the input message that caused the abend originated.

Ν

Allow message DFS555I to be sent to the device where the input message that caused the abend originated.

#### LTRMWTO=

APPCWTO=

#### OTMAWTO=

Specifies whether WTO IZT9201I is issued when message DFS555I is suppressed for an abend.

Υ

Issue WTO IZT9201I when message DFS555I is suppressed.

Ν

Do not issue WTO IZT9201I when message DFS555I is suppressed.

## LTRMNOUSTP= APPCNOUSTP=

OTMANOUSTP=

Specifies whether IMS (U)stops the transaction or PSB.

Υ

The transaction or PSB is not (U)stopped following an abend.

Ν

IMS determines if the transaction or PSB should be (U)stopped following an abend.

## Deleting a message origin abend record

The control statement format for deleting a message origin abend record is:

```
AL <lterm> DELETE <tpipe> <luname>
```

#### **Example:**

```
AL LTERM001 DELETE
AL LTERM001/U/1000 DELETE
```

### AT - Transaction abend control statements

This reference topic describes how to add, modify or delete a transaction abend record.

### Adding and modifying a transaction abend record

The control statement format for adding and modifying a transaction abend record is:

```
AT <transaction> <transaction/type/code>
```

**Note:** When a transaction name contains \*NOGU, the entry is used for abends that occur prior to a GU call being issued to the IOPCB.

#### **Example:**

```
AT PART
AT PART/U/1000
```

When adding and modifying a transaction abend record, you can specify the following keyword parameters:

LTRM= APPC= OTMA=

Specifies the disposition of the message that caused the specified transaction to abend. The disposition can be specified based upon the message point of origin (LTRM, APPC, or OTMA).

#### **DEFAULT**

Specifies that IMS is to determine the disposition of the message that caused the specified transaction to abend.

#### **DISCARD**

Specifies that IMS is to discard the input message that caused the specified transaction to abend.

#### SUSPEND

Specifies that IMS is to put the input message that caused the specified transaction to abend in the suspend queue.

#### **REQUEUE**

Specifies that IMS is to requeue the input message that caused the specified transaction to abend.

#### LTRMDEST=

APPCDEST=

#### OTMADEST=

Specifies the 1- to 8-character transaction name where IMS is to queue the input message that caused the specified transaction to abend. The new transaction destination can be specified based upon the input message point of origin (LTRM, APPC, or OTMA).

#### LTRMSUPP=

APPCSUPP=

#### OTMASUPP=

Specifies whether message DFS555I is to be suppressed for the device where the message that caused the specified transaction to ABEND originated. Suppressing message DFS555I can be specified based upon the input message point of origin (LTRM, APPC, or OTMA)

Υ

Suppress message DFS555I from being returned to the device where the input message that caused the specified transaction to abend originated.

Ν

Allow message DFS555I to be sent to the device where the input message that caused the specified transaction to abend originated.

## Deleting a transaction abend record

The control statement format for deleting a transaction abend record is:

```
AT <origin> DELETE
```

#### **Example:**

```
AT PART DELETE
AT PART/U/1000 DELETE
```

## TX - transaction/return code statements (DFSBSEX0)

This reference topic describes how to add, modify, or delete a transaction/return code (DFSBSEX0) record.

## Adding or modifying a transaction/return code record

The format of the control statement to add or modify a transaction/return code (DFSBSEX0) record is as follows:

```
TX <transaction> RETCODE=<rc>
```

#### **Example:**

TX PART RETCODE=4

### Deleting a transaction/return code record

The format of the control statement to delete a transaction/return code (DFSBSEX0) record is as follows:

```
TX <transaction> DELETE
```

#### **Example:**

TX PART DELETE

## PS - PSB/return code statements (DFSBSEX0)

This reference topic describes how to add, modify, or delete a PSB/return code (DFSBSEX0) record.

## Adding or modifying a PSB/return code record

The format of the control statement to add or modify a PSB/return code (DFSBSEX0) record is as follows:

```
PS <PSB> RETCODE=<rc>
```

#### **Example:**

PS DFSSAM02 RETCODE=4

## Deleting a PSB/return code record

The format of the control statement to delete a PSB/return code (DFSBSEX0) record is as follows:

```
PS <PSB> DELETE
```

#### **Example:**

PS DFSSAM02 DELETE

## **Example JCL (DLIBATCH)**

If you are using the DLIBATCH procedure delivered in IMS.PROCLIB (or a similar procedure), the job step should be similar to that shown in the following example.

Figure 80. JCL for Batch Update utility (DLIBATCH)

## **Example JCL (IMSBATCH)**

If you are using the IMSBATCH procedure delivered in IMS.PROCLIB (or a similar procedure), the job step should be similar to that shown in the following figure.

Figure 81. JCL for Batch Update utility (IMSBATCH)

# Chapter 11. Listing the options data set (batch list utility)

The batch list utility (IZTLIST) creates a report of the contents of the options data set, and optionally creates control cards that can be used as input to the batch update utility (IZTUD1U0).

Batch update utility (IZTUD1U0) control cards can be created for for SLU1 console, SLU2/3270, SLUP/3600/FINANCE, user, Printer LTERM, APPC routing, time-of-day, DSF3649 RC message, IMS ETO Support security, and Global records in the options data set.

The creation of control cards for the batch update utility is controlled by PARM statement input. If no PARM data is entered, IZTLIST does not create Batch Update utility control cards. If PARM data is supplied, IZTLIST creates control cards for only the requested entries.

#### PARM statement syntax and entry values

The first 6 bytes of the PARM statement must contain PUNCH (, and the PARM statement must end with a closing parenthesis ")". The remainder of the PARM data must contain the names of the options data set entries for which the batch update utility control cards are to be created. Each entry name must be separated by a comma.

The following values can be entered in the PARM statement:

#### **ALL**

Use this statement to create Batch Update utility control cards for all options data set records.

#### APPC

Use this value to create the Batch Update utility control cards for the APPC Refresh Routing table entries.

#### **CONSOLE**

Use this value to create the Batch Update utility control cards for the SLU1 CONSOLE table entries. This includes the SLU1 CONSOLE device default entry, as well as the SLU1 CONSOLE LUNAME entries.

#### **GLOBAL**

Use this value to create the Batch Update utility control cards for the GLOBAL entry.

#### LOGON MODE

Use this value to create the Batch Update Utility control cards for the Logon Descriptor by Logon mode table entries.

#### LTMABD

Use this value to create the Batch Update Utility control statements for LTERM ABEND table entries.

#### **LU61**

Use this value to create batch update utility control cards for LU 6.1 (ISC) device, LUNAME, and user ID table entries.

#### MSG

Use this value to create the Batch Update utility control cards for the DFS3649A RC Error Message table entries.

#### **OTMA**

Use this value to create the Batch Update Utility control statements for OTMA table entries.

#### **PRINTER**

Use this value to create the Batch Update utility control cards for PRINTER LTERM table entries.

#### **PSBRC**

Use this value to create Batch Update Utility control statements for PSB/return code (DFSBSEX0) table entries.

#### **SECURITY**

Use this value to create the Batch Update utility control cards for the IMS ETO Support Security table entries.

#### SLU<sub>2</sub>

Use this value to create the Batch Update utility control cards for the SLU2/3270 table entries. This includes the SLU2/3270 device default entry, as well as the SLU2/3270 LUNAME entries.

#### **SLUP**

Use this value to create the Batch Update utility control cards for the SLUP/3600/FINANCE table entries. This includes the SLUP/3600/FINANCE device default entry, as well as the SLUP/3600/FINANCE LUNAME entries.

#### TOD

Use this value to create the Batch Update utility control cards for the time-of-day table entries.

#### TRXABD

Use this value to create the Batch Update Utility control statements for transaction ABEND table entries.

#### **TRXRC**

Use this value to create Batch Update Utility control statements for transaction/return code (DFSBSEX0) table entries.

#### **USER**

Use this value to create the Batch Update utility control cards for the USER table entries.

#### **VTAMU**

Use this value to create the Batch Update Utility control statements for VTAM userdata entries.

#### **Example JCL and JCL specifications**

The options data set can be specified in the JCL or dynamically allocated. The JCL specification takes precedence over dynamic allocation.

If you want dynamic allocation, the options data set DFSMDA member needs to be included in the STEPLIB concatenation.

The following example JCL creates only the report listing:

```
//STEP01 EXEC PGM=IZTLIST
//STEPLIB DD DISP=SHR,DSN=IZT.SIZTLINK
//IZTPRINT DD SYSOUT=*
```

The following example JCL creates the report listing and Batch Update Utility control cards for the entries specified on the PARM statement (SLU2, USER, SLUP, GLOBAL, PRINTER, CONSOLE):

```
//STEP01 EXEC PGM=IZTLIST,
// PARM='PUNCH(SLU2,USER,SLUP,GLOBAL,PRINTER,CONSOLE)'
//STEPLIB DD DISP=SHR,DSN=IZT.SIZTLINK
//IZTPRINT DD SYSOUT=*
//IZTPUNCH DD DISP=OLD,DSN=anydsn
```

The IZTPUNCH data set has an LRECL of 80 and DSORG=PS. Any valid BLKSIZE is supported.

# Chapter 12. Refreshing E/CSA tables (batch refresh utility)

Use the E/CSA batch refresh utility (SIZTLINK) to refresh tables on the z/OS image that you run the utility on. When you use this utility, you refresh the IMS ETO Support E/CSA tables without using the online IMS transaction IZTRAN.

To start the batch refresh process, use member IZTREFRE in the SIZTSAMP library. Make sure the STEPLIB points to an APF-authorized distribution load library. The options data set can be specified in the JCL or allocated dynamically.

• To specify the options data set in the JCL, add the following DD statement to your JCL:

```
//DBIZT1 DD DISP=SHR, DSN=options_data_set_name
```

• To dynamically allocate the options data set, the dynamic allocation member (DBIZT1) can reside in a data set in either the IMSDALIB or STEPLIB concatenation.

The following list shows the search sequence for the options data set:

- 1. DBIZT1 DDNAME in JCL
- 2. IMSDALIB DDNAME
- 3. STEPLIB DDNAME

You can use SIZTLINK to allocate and load a new set of E/CSA tables, making them the active tables, and to mark the original tables as inactive. Optionally, you can use SIZTLINK to free the inactive tables by coding one of the following parameter statements:

#### PARM='FREE'

After a new set of tables is allocated and loaded, SIZTLINK waits the default amount of time (3 seconds) and then frees the inactive tables.

## PARM='FREE,n'

After a new set of tables is allocated and loaded, SIZTLINK waits for the specified number of seconds (n) and then frees the inactive tables. Valid values for n are 3 through 9.

#### PARM='FREEONLY'

SIZTLINK frees the inactive tables without loading a new active set.

#### **Return codes for SIZTLINK**

After completion, the SIZTLINK utility issues one of the following return codes:

Table 1. SIZTLINK return codes		
Return code	Description	
0	All tables were loaded and updated successfully.	
8	A table was not successfully loaded. Refer to the JES log for this job for error messages.	
12	No tables were loaded. See the JES log for this job for error messages.	

#### **Example IMS batch refresh job**

The following example shows the JCL for IMS batch refresh utility (member IZTREFRE):

```
//IZTREFRE JOB (ACCT),IZTREFRE,CLASS=A,REGION=OM,
// MSGCLASS=H,MSGLEVEL=(1,1),NOTIFY=&SYSUID
//*
```

```
SET IZTLINK=IZT.SIZTLINK
SET MDALIB=IMS.MDALIB
// SET MDALIB=IMS.FIDE...
//* DD STATEMENTS:
//* STEPLIB - THE APF AUTHORIZED DISTRIBUTION LOAD LIBRARY
//* IMSDALIB OR STEPLIB
- THE IMS DYNAMIC ALLOCATION LIBRARY CONTAINING
- THE IMS DYNAMIC ALLOCATION DATA SET IS TO
                           - THE IMS DYNAMIC ALLOCATION LIBRARY CONTAINING
 //*
//*
 //*
//*
                              THE MDALIB MUST BE APF AUTHORIZED IF IT IS INCLUDED IN THE STEPLIB CONCATENATION.
                           - THE OPTIONS DATA SET THAT IS TO BE LOADED INTO
            DBIZT1
 //*
//*
                              E/CSA (WILL BE USED IF SPECIFIED, OTHERWISE IT WILL BE DYNAMICALLY ALLOCATED USING MEMBER
            DBIZT1 FROM STEPLIB)
SYSUDUMP - SYSTEM DUMP OUTPUT
//* MESSAGES:
//* All ***
            ALL MESSAGES ARE WRITTEN TO THE JES LOG OF THIS JOB (AND
 //*
            THE MVS SYSLOG)
 //*
//* RETURN CODES:
           0 - ALL TABLES LOADED/UPDATED SUCCESSFULLY
8 - SOME TABLE(S) WERE NOT SUCCESSFULLY LOADED/UPDATED.
SEE THE JES LOG FOR THIS JOB FOR ERROR MESSAGES.
 //*
//*
            12 - NO TABLES WERE LOADED/UPDATED. SEE THE JES LOG FOR
 //*
                    THIS JOB FOR ERROR MESSAGES.
 //*
//IZTLOAD EXEC PGM=IZTLOAD
                  DD DISP=SHR, DSN=&IZTLINK
 //STEPLIB
 //IMSDALIB DD DISP=SHR,DSN=&MDALIB
//SYSUDUMP DD SYSOUT=*
```

# Chapter 13. Refreshing the OTMA user data table (OTMA user data batch refresh utility)

The OTMA user data batch refresh utility (IZTUDATO) can be used to dynamically reload the OTMA user data tables for a specific IMS region.

To start the OTMA User data batch refresh utility, run sample member IZTUDATO in the SIZTSAMP library. Ensure that you modify the following information:

- Point the STEPLIB to an APF-authorized distribution load library
- · Specify ddname IZTUDATA
- · Adjust the PARM statement to specify the IMSID for which the tables are to be refreshed

The OTMA User data batch refresh utility uses the active IMS ETO Support E/CSA tables to determine which member names to load from ddname IZTUDATA.

#### **Return codes for IZTUDATO**

After completion, the SIZTLINK utility issues one of the following return codes:

Table 2. IZTUDAT0 return codes		
Return code	Description	
0	The OTMA User data tables were successfully refreshed.	
4	One of the member names defined in the active IMS ETO Support E/CSA tables was not found in the data set referenced by ddname IZTUDATA.	
12	A critical error occurred, and OTMA user data tables were not updated. Refer to the z/OS job log for additional messages.	

## **Example IMS OTMA user data batch refresh utility job**

The following example shows the JCL for the IMS OTMA user data batch refresh utility (IZTSAMP member IZTUDATO):

## **DDNAME specification for IZTUDATO**

The following table provides descriptions for the ddname specifications for the IMS OTMA user data batch refresh utility (IZTUDAT0):

Table 3. DDNAME specification for IZTUDATO		
Return code	Meaning	
STEPLIB	Must specify the dataset name of the APF-authorized IMS ETO Support distribution load library.	
IZTUDATA	Must specify the data set name of the load library where the OTMA User data members are stored. This data set name should match the data set name specified in the IMS control region.	
IZTPRINT	The data set used to write information messages from the OTMA user data batch refresh utility. This dd statement should be specified as SYSOUT=*.	
PARM statement	Specify the IMSID of the IMS region for which the OTMA user data tables are to be refreshed.	

## Part 5. Supplemental resources

The topics in this section provide you with technical information for IMS ETO Support supplemental resources.

#### **Topics:**

- Chapter 14, "Converting IMS Sysgen macros to database definitions," on page 223
- Chapter 15, "Enabling Enhanced Transaction Verification (ETV)," on page 235
- Chapter 16, "Transaction text descriptor (TTD) control statements," on page 241
- Chapter 17, "OTMA pattern descriptor (OPD) control statements," on page 245
- Chapter 18, "Creating user tables at IMS initialization (SCDINTXP)," on page 247
- Chapter 19, "Search subroutine (IZTSRCH0)," on page 249

## Chapter 14. Converting IMS Sysgen macros to database definitions

The IZTGEN process described in this topic takes your IMS sysgen terminal definitions and logon descriptors, and creates control statements used by the batch update utility to populate the IMS ETO Support database.

The following subsections describe the process of converting IMS sysgen source macro statements to IMS ETO Support database definitions.

#### **Topics:**

- "IZTGEN process" on page 223
- "IZTGEN macros" on page 223
- "IMS sysgen source" on page 229
- "Running the IZTGEN process" on page 230
- "IZTGEN process output" on page 232
- "IZTGEN process messages and codes" on page 233

## **IZTGEN** process

The IZTGEN process provides a method to convert from IMS sysgen source macro statements to IMS ETO Support database definitions.

You can use this process to simplify the initial ETO implementation process. The IZTGEN process reads existing IMS sysgen source and it can provide the following two sets of output:

 First, the IZTGEN process can produce control cards for input to the IMS ETO Support batch database update process.

The control cards define the node and LTERM definitions for IMS ETO Support that duplicate the characteristics of the IMS sysgen terminal definitions.

 Second, the IZTGEN process can recreate IMS sysgen source, but exclude the terminal and LTERM definitions that were defined to the IMS ETO Support database.

The updated IMS sysgen source also defines model terminals used to specify 3270 terminal sizes for IMS ETO Support dynamic terminals.

## **IZTGEN** macros

You control the IZTGEN process with macro definitions similar to IMS sysgen macros.

There are four types of definitions for the IZTGEN process. The following sections describe the macros you can use to control the IZTGEN process.

#### **IZTGEN** macro

The IZTGEN macro initializes the environment to prepare for the IZTGEN process.

You must include the IZTGEN macro first in the IZTGEN process. This macro has one optional parameter:

IZTGEN DCTNAME=A

The description of the DCTNAME parameter is as follows:

#### **DCTNAME**

This parameter specifies the 1- to 5-character prefix used for node names and LTERM names added to the IMS sysgen by the IZTGEN process.

The node names added to the IMS sysgen are used to define the valid 3270 screen sizes.

For a description of the IMS device characteristics tables that these added terminals represent, see the SIZE= keyword of the TERMINAL macro in *IMS System Definition*.

The default value for this prefix (A) results in nodes being added to the IMS sysgen with names such as A01, A02, A03, through A15.

## **\$IZTDESC** macro

You must provide the IZTGEN process with information about the ETO Logon Descriptors present in the DFSDSCxx members of the IMS PROCLIB library.

When initially converting from system generated terminals to ETO, the IMSCTRL macro provides an option for IMS to generate logon descriptors for your environment. For more information about generating an initial set of ETO logon descriptors, see the description of the ETOFEAT= keyword of the IMSCTRL macro in *IMS System Definition*.

When ETO logon descriptors are in place, you must define them to the IZTGEN process. There are two ways to define the logon descriptors to the IZTGEN process:

- Use COPY statements to include your logon descriptor members from the IMS PROCLIB data set
- Manually convert your logon descriptors into \$IZTDESC macros

### Using automatic logon descriptor definitions

To automatically include your logon descriptors, add one or more assembler COPY statements following the IZTGEN macro. You can include both the DFSDSCMx member created by the IMS sysgen process, as well as the DFSDSCTx member you create manually.

When you use the COPY statements, you should not code any \$IZTDESC macros because the COPY statement (and assembler library exit IZTGENX) create the macros and include them in your source.

Perform the following procedure to use automatic inclusion of logon descriptors:

1. Include COPY DFSDSCxx assembler statements following the IZTGEN macro in your source statements.

You should COPY the DFSDSCMx member used by IMS (where x is the nucleus suffix).

You should also COPY the DFSDSCTx member if you use one (where x is specified by the DSCT= parameter in your DFSPBxxx member of PROCLIB).

- 2. Remove all \$IZTDESC macros from your source statements.
- 3. Add a PROCLIB DD to your IZTGEN assembly JCL job step.

The data set referenced by the PROCLIB DD should be the library containing the DFSDSCxx members specified in the COPY statements.

- 4. Ensure that the IZTGEN assembly JCL includes EXIT(LIBEXIT(IZTGENX)) in the PARM field for the ASMA90 program.
- 5. Add a STEPLIB DD to the IZTGEN assembly step JCL that refers to the SIZTLINK library.

The JCL changes described in steps <u>"3" on page 224</u>, <u>"4" on page 224</u>, and <u>"5" on page 224</u> are shown in the example JCL later in this topic.

#### Using manual logon descriptor definitions

To use manual inclusion of logon descriptors, you must code an \$IZTDESC macro to represent each logon descriptor used by IMS.

Ensure that you do not include COPY statements for the DFSDSCxx members in your source.

The format of the \$IZTDESC macro is as follows.

Code one \$IZTDESC macro for each ETO Logon Descriptor. Keyword parameters for the \$IZTDESC macro are as follows:

#### **LGNDESC**

The name of the ETO Logon Descriptor.

This is the name specified in column 3 of the logon descriptor definition.

#### COMPT1-4

The component keywords (COMPT1=, COMPT2=, COMPT3=, and COMPT4=) might be present in ETO logon descriptors for UNITYPE=3270 (if UNIT=3275 is specified) along with UNITYPES SLUTYPE1, FINANCE, and SLUTYPEP.

Code the \$IZTDESC keyword values exactly as the keyword values are coded in the logon descriptor.

Do not code any of these keywords in the \$IZTDESC macro that are not present in the logon descriptor.

#### **EDIT**

The EDIT keyword may be present for any unit type.

Code the \$IZTDESC EDIT= value exactly as the EDIT= value is coded in the logon descriptor.

If the EDIT= keyword is not present in the logon descriptor, do not code the EDIT= keyword in the \$IZTDESC macro.

#### **FEAT**

The FEAT keyword might be present for UNITYPEs 3270, SLUTYPE2, SLUTYPEP, and FINANCE.

If the FEAT keyword is present in the logon descriptor, the FEAT= keyword must be included in the \$IZTDESC macro with the same value.

#### **MODETBL**

The MODETBL keyword might be present for UNITYPES SLUTYPE1, SLUTYPE2, and SLUTYPEP.

If it is present in the logon descriptor, the MODETBL= keyword must also be included in the \$IZTDESC macro with the same value.

#### **OPTIONS**

The OPTIONS keyword might be present for any UNITYPE.

If it is present in the logon descriptor, the OPTIONS= keyword must also be included in the \$IZTDESC macro with the same values.

#### **OUTBUF**

The OUTBUF keyword might be present for any UNITYPE.

If it is present in the logon descriptor, the OUTBUF= keyword must also be included in the \$IZTDESC macro with the same value.

#### **PTRSIZE**

The PTRSIZE keyword might be present for UNITYPE=3270.

If it is present in the logon descriptor, the PTRSIZE= keyword must also be included in the \$IZTDESC macro with the same value.

#### **SEGSIZE**

The SEGSIZE keyword might be present for UNITYPES SLUTYPE1 and SLUTYPEP.

If it is present in the logon descriptor, the SEGSIZE= keyword must also be included in the \$IZTDESC macro with the same value.

#### UNIT

The UNIT keyword might be specified for UNITYPE=3270 ETO logon descriptors.

Valid values are 3275, 3277, 3284, and 3286. The default is 3277 if this keyword is omitted from either the \$IZTDESC macro or the ETO logon descriptor.

#### **UNITYPE**

The UNITYPE keyword is specified in each ETO logon descriptor.

Valid values for UNITYPE= include 3270, SLUTYPE1, SLUTYPE2, SLUTYPEP, FINANCE, and NTO.

Note that \$IZTDESC macro definitions for UNITYPE NTO and LUTYPE6 are not required, because these unit types are not supported by IMS ETO Support.

If this keyword is not specified, the default value of SLUTYPE2 is used (in the \$IZTDESC macro and in the ETO logon descriptor).

#### **Example**

Logon descriptor to be emulated:

```
L DFSSLU12 UNITYPE=SLUTYPE1 COMPT1=PRINTER OUTBUF=768
L DFSSLU12 EDIT=(,DFSPIXT0) OPTIONS=(SHARE,RELRQ) ALOT=30
L DFSSLU12 ASOT=30
```

\$IZTDESC macro for the above logon descriptor:

```
$IZTDESC LGNDESC=DFSSLU12,UNITYPE=SLUTYPE1,COMPT1=PRINTER, X
OUTBUF=768,EDIT=(,DFSPIXT0),OPTIONS=(SHARE,RELRQ)
```

Note that there are two keywords which might be present in the logon descriptor (ASOT= and ALOT=) that cannot be included in the \$IZTDESC macro.

All keywords except ASOT= and ALOT= must be reproduced in the \$IZTDESC macro exactly as they are coded in the logon descriptor.

### **\$IZTTYPE** macro

The IZTGEN process must be provided with information about which terminal types should be converted from system generated terminals to ETO terminals.

There are two macros you can use to describe which terminals should be converted:

\$IZTTYPE macro

The \$IZTTYPE macro describes which device types should be left in the IMS sysgen and which device types should be converted to ETO.

\$IZTNODE macro

The \$IZTNODE macro described next, provides an option to override the device type specification for a specific node name.

In addition, the \$IZTTYPE macro can also be used to request that ASOT values for printer devices be generated for printer definitions. Use the ASOT= keyword described below to generate printer terminal signoff values.

The following example shows the \$IZTTYPE macro skeleton:

```
$IZTTYPE parm, X
UNITYPE=, X
UNIT=, X
COMPT1=, X
ASOT=, X
DFSINSX=
```

Keyword parameters for the \$IZTTYPE macro are as follows:

#### parm

Specify either GEN or ETO to designate whether this device type remains in the IMS sysgen (GEN) or is converted to IMS ETO Support definitions.

#### **UNITYPE**

Specifies the unit type for which this macro applies. Valid UNITYPE= values are as follows:

- 3270
- SLUTYPE1
- SLUTYPE2
- SLUTYPEP
- 3601
- FINANCE
- LUTYPE6
- NTO

#### UNIT

This parameter is valid only for UNITYPE=3270. The UNIT= keyword allows you to specify GEN or ETO by 3270 unit.

Valid values for UNIT= are:

- 3277
- 3284
- 3286
- 3275

Note that because IMS ETO Support does not support 3275 devices, the *parm* value for UNIT=3275 must be GEN.

#### COMPT1

You can specify this parameter (that is valid only for UNITYPE SLUTYPE1, COMPT1) as either CONSOLE or PRINTER1. This allows you to specify the conversion of SLU1 printers only, but not SLU1 console devices.

#### **ASOT**

The ASOT parameter is used to define the automatic sign off time for printers.

This parameter is valid only for the following devices:

- UNITYPE=SLUTYPE1 with COMPT1=PRINTER
- UNITYPE=3270 with UNIT=3284
- UNITYPE=3270 with UNIT=3286

When specified, the IZTGEN conversion process adds the ASOT= keyword to the ZP batch update utility control statement.

#### **DFSINSX**

This parameter is valid only for the following printers:

- UNITYPE=SLUTYPE1 with COMPT1=PRINTER
- UNITYPE=3270 with UNIT=3284

UNITYPE=3270 with UNIT=3286

This parameter allows user-written Destination Creation exit routine, DFSINSX1, to control options for each printer LTERM as it is created. Valid specifications are DFSINSX=YES and the default, DFSINSX=NO.

#### **Example of \$IZTTYPE macros all unit types**

```
$IZTTYPE ETO,UNITYPE=3270,UNIT=3277
$IZTTYPE ETO,UNITYPE=3270,UNIT=3284,DFSINSX=YES
$IZTTYPE ETO,UNITYPE=3270,UNIT=3286,ASOT=1440
$IZTTYPE GEN,UNITYPE=3270,UNIT=3275
$IZTTYPE ETO,UNITYPE=SLUTYPE1,COMPT1=CONSOLE
$IZTTYPE ETO,UNITYPE=SLUTYPE1,COMPT1=PRINTER1,DFSINSX=NO,ASOT=1440
$IZTTYPE ETO,UNITYPE=SLUTYPE2
$IZTTYPE ETO,UNITYPE=SLUTYPEP
$IZTTYPE ETO,UNITYPE=SLUTYPEP
$IZTTYPE ETO,UNITYPE=SLOTYPEP
$IZTTYPE ETO,UNITYPE=FINANCE
$IZTTYPE GEN,UNITYPE=NTO
$IZTTYPE GEN,UNITYPE=LUTYPE6
```

#### **\$IZTNODE** macro

The \$IZTNODE macro allows you to use node-name-specific overrides of the specifications in the \$IZTTYPE macro.

For example, you can use the \$IZTNODE macro to exclude the master terminal and secondary master terminal from being converted to ETO.

The following example shows the \$IZTNODE macro skeleton:

```
$IZTNODE parm, X
NAME=, X
LGNDESC=, X
DFSINSX=
```

Keyword parameters for the \$IZTNODE macro are as follows:

#### parm

Specify whether this device type remains in the IMS sysgen (GEN) or is converted to IMS ETO Support definitions (ETO).

#### **NAME**

The node name of the terminal.

#### **LGNDESC**

Optionally, the name of a logon descriptor to be used for this node name.

If you do not specify one, a logon descriptor is assigned based on the attributes of the device as specified in the IMS sysgen.

No validation is done of the descriptor for this node.

#### **DFSINSX**

This parameter is valid only for the following printers:

- UNITYPE=SLUTYPE1 with COMPT1=PRINTER
- UNITYPE=3270 with UNIT=3284
- UNITYPE=3270 with UNIT=3286

This parameter allows user-written Destination Creation exit routine, DFSINSX1, to control options for each printer LTERM as it is created. Valid specifications are DFSINSX=YES and the default, DFSINSX=NO.

#### **Specifications of the \$IZTNODE macro**

```
$IZTNODE GEN,NAME=MTO
$IZTNODE GEN,NAME=MTO2
$IZTNODE ETO,NAME=NODE101,LGNDESC=D101,DFSINSX=NO
```

#### **\$IZTRPT** macro

The \$IZTRPT macro is an optional macro that produces a listing of the specifications that you provided for the preceding \$IZTDESC, \$IZTTYPE, and \$IZTNODE macros.

The report that is included in the SYSPRINT output of the IZTGEN assembly step lists the following items that are defined to the IZTGEN process and the options associated with each:

- · All logon descriptors
- · All device types
- · All node names

There are no keywords associated with the \$IZTRPT macro, and this macro is not required.

The following example shows how you specify the \$IZTRPT macro:

\$IZTRPT

## **Organizing the IZTGEN macros**

The IZTGEN process is executed by a batch assembly, similar to the IMS stage 1 sysgen process.

You must include the macros described in the previous sections in the assembly input in a specific order, and they must precede all IMS sysgen source macros.

Include the input to the IZTGEN process in the following order:

- IZTGEN macro
- · Logon descriptor definitions.

You can use automatic definition by coding appropriate COPY statements, or you can include \$IZTDESC statements that describe each logon descriptor.

· All \$IZTTYPE macros

One \$IZTTYPE macro for each device type. It is recommended that all device types be included in this definition, even if there are no such terminals defined in the IMS system.

Any \$IZTNODE macros

These macros are optional, but you can include them as required. For example, to exclude IMS master and secondary master terminals from conversion to ETO.

- Optionally, the \$IZTRPT macro if you want a report of the preceding specifications
- · IMS sysgen source

The following section provides additional details on the IMS sysgen source requirements.

· The END statement

An example of the first five steps above is included in the SIZTSAMP data set in member IZTGEN\$S. You can use this sample and customize it for your environment.

## **IMS** sysgen source

The IMS sysgen source is required to provide the IZTGEN process with the details of the terminal configuration in use for a particular IMS environment.

The following macros are used by the IZTGEN process:

- TYPE
- TERMINAL
- NAME

In addition, if there are any 3270 BTAM line definitions that include the TYPE and SIZE keywords on the TERMINAL macro, you must also provide these LINEGRP, LINE, TERMINAL, and NAME macros.

The other IMS sysgen macros (for example, DATABASE and TRANSACT macros) might be included in the IZTGEN process, but they are not required.

Include all IMS data communications definitions for a single IMS system in each execution of the IZTGEN process. This is important because IMS device characteristics table information is created in the IMS gen source output.

These definitions must be included in the IMS sysgen source for the real IMS sysgen, because these terminals define the 3270 screen sizes that are available for that IMS system. The node names of these terminals are included in each 3270/SLUTYPE2 terminal IMS ETO Support definition that is used to define the screen size of each of these terminals.

When multiple IMS systems share the same IMS ETO Support database, the 3270/SLUTYPE2 SIZE and TYPE names must be defined identically in each IMS system definition.

See the SIZE keyword of the TERMINAL macro in *IMS System Definition* for the IMS-recommended values for the TYPE names.

## **Running the IZTGEN process**

The IZTGEN process is enacted by running the high level assembler.

The order of input for the assembler is described in "Organizing the IZTGEN macros" on page 229.

The following example shows the JCL for the assembly. This JCL is included in the SIZTSAMP sample library in member IZTGEN\$J. It includes steps for generating both updated IMS sysgen source with converted terminals removed (the GEN step), and for generating ETO batch utility control statements (the ETO step).

```
PREFIX=IZT
         PROCLIB=IMS.PROCLIB
    SET
    SET OUTGEN=IZT.OUTGEN
SET OUTETO=IZT.OUTETO
    SET SRCIZT=IZT.SIZTSAMP(IZTGEN$S)
SET SRCIMS=IZT.STAGE1(GENSRC)
//GEN
           EXEC PGM=ASMA90, REGION=4M,
PARM='SYSPARM(GEN), DECK, NOOBJECT, EXIT(LIBEXIT(IZTGENX))'
///STEPLIB DD DSN=&PREFIX..SIZTLINK,DISP=SHR
//SYSLIB
                 DSN=&PREFIX..SIZTSAMP, DISP=SHR
            DD
//PROCLIB DD
                 DSN=&PROCLIB, DISP=SHR
                                                      IMS PROCLIB
//SYSPRINT DD
                 SYSOUT=*
//SYSABEND DD
                 SYSOUT=*
//SYSPUNCH DD DSN=&OUTGEN,DISP=OLD
                                                      UPDATED GEN SOURCE
                 UNIT=SYSDA, SPACE=(CYL, (100, 100)),
//SYSUT1
            DCB=BLKSIZE=27920
//SYSIN
            DD DSN=&SRCIZT, DISP=SHR
DD DSN=&SRCIMS, DISP=SHR
                                                      YOUR $IZT MACROS
YOUR GEN SOURCE
//*
//ETO
           EXEC PGM=ASMA90, REGION=4M,
           PARM='SYSPARM(ETO), DECK, NOOBJECT, EXIT(LIBEXIT(IZTGENX))'
//STEPLIB DD DSN=&PREFIX..SIZTLINK,DISP=SHR
//SYSLIB
            DD
                 DSN=&PREFIX..SIZTSAMP, DISP=SHR
//PROCLIB DD
                 DSN=&PROCLIB, DISP=SHR
                                                      IMS PROCLIB
//SYSPRINT DD
                 SYSOUT=*
//SYSABEND DD
                 SYSOUT=*
//SYSPUNCH DD
                 DSN=&OUTGEN,DISP=OLD
                                                      UPDATED GEN SOURCE
//SYSUT1
            DD UNIT=SYSDA, SPACE=(CYL, (100, 100)),
            DCB=BLKSIZE=27920
            DD DSN=&SRCIZT, DISP=SHR
DD DSN=&SRCIMS, DISP=SHR
//SYSIN
                                                       YOUR $IZT MACROS
                                                      YOUR GEN SOURCE
```

Note that this sample JCL includes two job steps:

- · Updating IMS sysgen source
- Generating IMS ETO Support control statements

If you only want to generate IMS ETO Support control statements, you do not need to execute the first step (step GEN) in this sample JCL.

The REGION= size specified might need to be increased significantly depending on the number of logon descriptors and terminal definitions present in the source. In one case, 60,000 terminals required REGION=256M.

## PARM keywords

The following PARM keywords specified in the JCL are required:

#### **SYSPARM**

This keyword can be specified as either SYSPARM(GEN) or SYSPARM(ETO).

Specifying GEN requests the IZTGEN process to create updated IMS sysgen source that removes the TERMINAL definitions that are to be converted to ETO.

Specifying ETO requests the IZTGEN process to create IMS ETO Support batch utility control statements that can be used by the batch update utility to define terminals that are to be converted to ETO.

#### **DECK, NOOBJECT**

This required keyword directs the output from the assembler to the SYSPUNCH DD instead of the SYSLIN DD.

#### **EXIT(LIBEXIT(IZTGENX))**

This keyword requests that the assembler include the IMS ETO Support library exit routine that converts logon descriptors to \$IZTDESC macros automatically.

If you use the automatic definition method to define logon descriptors, this keyword is required.

If you use the manual method of converting logon descriptors, this parameter is optional.

#### **DD** statements

The following DD statements are used in each job step:

#### **STEPLIB**

The STEPLIB DD is required only if you specify the LIBEXIT keyword in the PARM field. It must reference the IMS ETO Support SIZTLINK data set.

#### **SYSLIB**

The SYSLIB DD is required to include the IZTGEN process macro definitions.

The DD must reference the IMS ETO Support sample library, SIZTSAMP, where the IZTGEN macro is distributed.

You can add additional libraries to the SYSLIB DD if your IMS sysgen requires it (for example, if your IMS sysgen source uses COPY statements to include other IMS sysgen source members).

#### **PROCLIB**

The PROCLIB DD is required when automatic logon descriptors are used.

The DD must reference the IMS PROCLIB data set where the logon descriptor members are stored.

#### **SYSPRINT**

The SYSPRINT DD specifies the assembler print output file, which includes source statements and error messages.

#### SYSABEND

The SYSABEND DD captures dump output in the event that the IZTGEN process exit experiences an abend.

#### **SYSPUNCH**

The output from the IZTGEN process.

If SYSPARM(ETO) was specified, then this DD will contain IMS ETO Support batch update utility control statements.

If SYSPARM(GEN) was specified, then this DD will contain updated IMS sysgen source with converted IMS terminal definitions removed.

In either case, this DD must have an LRECL of 80 and be a sequential output file.

#### SYSUT1

The SYSUT1 file is a work file used by the assembler.

A significant amount of work file space may be required, depending on the number of terminal definitions and logon descriptor definitions present in the gen source.

The SPACE= and BLKSIZE= specified are specified in the sample to prevent out of space conditions.

#### **SYSIN**

The SYSIN DD must reference both the IZTGEN macros coded for the IZTGEN process, as well as your IMS sysgen source.

The IMS sysgen source can include only the terminal definitions if desired, as only the TYPE, TERMINAL, and NAME macros are required to generate the IMS ETO Support batch update utility statements.

Any other IMS sysgen macros can be included in the SYSIN source statements, and is ignored during SYSPARM(ETO) processing, or is written to the output file if SYSPARM(GEN) was specified.

## **IZTGEN** process output

Each IZTGEN process job step produces two sets of output.

The SYSPRINT DD contains the source statements and error messages, and the SYSPUNCH DD contains either the IMS ETO Support batch update utility control statements (when SYSPARM (ETO) is used) or IMS sysgen source with converted terminal definitions removed (when SYSPARM(GEN) is used).

The SYSPRINT DD shows source statements presented to the IZTGEN process. This includes both the IZTGEN process macros as well as your IMS sysgen source macros. When automatic definition of logon descriptors is used, the SYSPRINT DD will show both logon descriptor source, as well as the automatically generated \$IZTDESC macros.

For example:

```
** ASMA700I LIBRARY: DFSDSCM0 INPUT >>>L DFS327P UNITYPE=3270 UNIT=3284

** ASMA435I Record 148 in P390.PDS.CNTL(DFSDSCM0) on volume: DEV002

6416= $IZTDESC DSC=M0,LGNDESC=DFS327P,UNITYPE=3270,UNIT=3284
```

Each descriptor definition record read from a DFSDSCxx PROCLIB member is shown in the SYSPRINT with an ASMA700I message, and an ASMA435I message describing the record number and data set and member name where the logon descriptor source was encountered.

After the logon descriptor statements, a \$IZTDESC macro generated by the IMS ETO Support library exit is shown.

When the \$IZTRPT macro is present in the IZTGEN process source, a report showing the IZTGEN process configuration is shown. For example:

```
3277
     3270
            3284
                    ET0
                         YES
     3270
            3286
                    ET0
*,SLUTYPE2
                    ET0
*, SLUTYPE1
            CONSOLE
*,SLUTYPE1
                    ET0
*,SLUTYPE1
           PRINTER
                    ET0
                         NO
     3601
                    ET0
*, FINANCE
                    ET0
*,SLUTYPEP
                    ET0
*,NODENAME
           GEN
                DESCRIPTOR DFSINSX
*,MTOTEST1
           GEN
*,MTOTESR1
           GEN
*,MT01 GEN
*,MT02
       GEN
*,MTOTEST2 GEN
*,MTOTESR2
           GEN
*,USER2 ETO SLU11 NO
*,****************
                LOGON DESCRIPTOR REPORT
*,*
*,**********************************
*, NAME TYPE PARAMETERS
*,DFSFIN FINANCE
               OPTIONS=NOASR NOFES NOSIGNON NOMFS PAGDEL
               SCAN RELRQ FPACK
*,DFS3270 3270
                FEAT=PFK CARD PEN
                OPTIONS=NOASR NOFES NOSIGNON PAGDEL OPNDST
                TRS0SI
*, DFSSLU1 SLUTYPE1
```

The first section of the report shows the definitions from the \$IZTTYPE and \$IZTNODE macros that were processed. The \$IZTTYPE definitions are shown as each unit type and the options selected for that unit type. The \$IZTNODE definitions are shown as each node name specified in a \$IZTNODE statement, and the options specified for that node.

Following this information is the logon descriptor report. It shows all the logon descriptors defined to the IZTGEN process, either through the automatic or manual logon descriptor definitions. The report shows each logon descriptor name, its unit type, and the options specified for that logon descriptor.

## **IZTGEN** process messages and codes

The IZTGEN process might produce warning and error messages in the SYSPRINT listing.

Error messages, which are all IZTM000, are produced when invalid or inconsistent macro options are provided on IZTGEN process macros or on IMS sysgen macros (such as TERMINAL and TYPE macros).

The assembly step that produces error messages results in condition code 8.

The IZTGEN process might also produce error messages if a terminal that should be migrated to an ETO definition cannot be migrated because a suitable logon descriptor cannot be found. These error messages also list the characteristics that a suitable logon descriptor would have.

When this condition occurs, the terminal is not migrated to ETO, and the terminal definition remains in the IMS sysgen source. Condition code 8 is returned when this condition occurs.

# Chapter 15. Enabling Enhanced Transaction Verification (ETV)

Enhanced Transaction Verification (ETV) is a function that is intended to replace transaction authorization previously provided by the IMS Security Maintenance Utility (SMU).

IMS ETO Support provides two forms of ETV:

#### **RACF** verification

RACF verification can be used to provide Transaction/LTERM and Transaction/PASSWORD authorization by issuing calls to RACF.

All access rules are stored in RACF.

IMS ETO Support provides a conversion program (IZTSMU00) that can be used to create the initial RACF rules from your existing SMU deck. All subsequent changes are made directly in RACF.

#### **ETOS MATRIX verification**

ETOS MATRIX verification can be used to provide Transaction/LTERM authorization by using a security matrix created by an IMS ETO Support MATRIX build utility program (IZTSMU).

Using ETOS MATRIX verification requires that all access rules be maintained as control cards. Whenever changes are required, the control cards will need to be updated, and the IMS ETO Support MATRIX build utility program (IZTSMU) will need to be run.

## **Determining the appropriate type of ETV processing**

The type of ETV processing you want can depend on several factors.

You might want to consider the following reasons for using ETOS MATRIX verification:

- You do not want to add a very large SMU deck to the RACF FACILITY RCLASS.
- You want to maintain control of the security definitions in the IMS support group.
- Your security group does not want to maintain the access rules.
- ETOS MATRIX verification performs a simple binary search and index routine to determine authorization.

This action might perform better than calling RACF.

If any of these concerns apply to your situation, you might want to use MATRIX verification. Otherwise, you might want to use RACF verification.

## **Activating RACF verification (ETV)**

RACF verification can be used to provide Transaction/LTERM and Transaction/PASSWORD authorization by issuing calls to RACF.

Summary of activation steps for the RACF form of Enhanced Transaction Verification (ETV):

- 1. Define security profiles in RACF
- 2. Configure the IMS execution parameters
- 3. Activate ETV in IMS ETO Support

## 1. Defining security profiles in RACF

Part of the conversion to the IMS ETO Support RACF verification option of ETV is to move the security definitions from IMS SMU into RACF.

To ease this conversion, IMS ETO Support provides a utility program (IZTSMU00) that reads the existing SMU input and pulls out the control cards to create the RACF definitions. It creates a new SMU deck, minus the control cards that were used to define the RACF environment.

The type of processing that is performed by this utility depends upon which DD statements are present in your JCL. The SMUIN, SMUOUT and SYSPRINT DD statements are required, You must specify the other DD statements only if you want their particular output data sets created.

If you do not want to create a specific output data set, simply omit the DD statement. However, you must provide at least one of the optional DD statements.

Do not include any DD DUMMY statements.

The following are the steps you must complete to define security profiles (details are provided in the following sections):

- 1. Run the IZTSMU00 utility
- 2. If the RACFLTRM or RACFPSWD DD statements were present, run TSOBATCH to add the definitions to RACF
- 3. If the ETOCMD DD statement was present, run the IMS ETO Support batch update (IZTUD1U0) to add the IMS Command groups to the IMS ETO Support options data set.
- 4. Run the IMS Security Maintenance Utility (SMU) using the new SMU deck.

## **IZTSMU00** utility JCL usage

The following JCL is required to run IZTSMU00.

```
//STEP01 EXEC PGM=IZTSMU00,
// PARM='PREFIX=name'
//*
//STEPLIB DD DISP=SHR,DSN=SIZTLINK
//SYSPRINT DD SYSOUT=*
//SMUIN DD DISP=SHR,DSN=SMU.STAGE1
//SMUOUTDD DISP=OLD,DSN=SMU.OUTPUT
//RACFLTRM DD DISP=OLD,DSN=RACF.LTERM
//RACFPSWD DD DISP=OLD,DSN=RACF.PSWD
//ETOCMDDD DISP=OLD,DSN=ETO.OUTPUT
```

#### **PARM** statement syntax:

Use the PARM statement to inform the SMU conversion utility of the 4-character resource name that you use to uniquely identify the RACF rules for ETV checking. This name is the prefix for the Transaction/LTERM and Transaction/PASSWORD rules in the RACF Facility class.

This must be the same name that you specified for the batch update utility RACFPREFIX=parameter, or the option PREFIX NAME FOR RACF RULES on the ETV SECURITY OPTIONS (SMU) screen in IZTRAN.

The format of the PARM statement must be

```
PREFIX=name
```

where name contains a 4-character value.

Valid values for name: 0-9 A-Z # @ \$

#### **DD** statement reference:

The following list describes the DD statement names and their contents:

#### **SYSPRINT**

An LRECL 80 data set to which IMS ETO Support writes error and warning messages. This DD statement typically is defined as SYSOUT=\*.

#### **SMUIN**

An LRECL 80 input data set from where the input from the Security Maintenance Utility (SMU) is read.

#### SMUOUT

An LRECL 80 output data set where the new control cards for the Security Maintenance Utility (SMU) are written. After this job completes, this data set becomes the new input to the SMU job.

#### RACFLTRM

An optional LRECL 80 output data set where the RACF Facility class rules for Transaction/LTERM checking are written. After this job completes, this data set is used as input to the TSOBATCH job that is described later in this chapter.

#### **RACFPSWD**

An optional LRECL 80 output data set where the RACF Facility class rules for Transaction/PASSWORD checking are written. After this job completes, this data set is used as input to the TSOBATCH job that is described later in this chapter.

#### **ETOCMD**

An optional LRECL 80 output data set where the IMS ETO Support command groups are written. After this job completes, this data set is used as input to the IMS ETO Support batch update utility (IZTUD1U0).

#### **TSOBATCH sample JCL**

```
//STEP01 EXEC PGM=IKJEFT01
//SYSTSPRT DD SYSOUT=*
//SYSTSIN DD DISP=SHR,DSN=RACF.LTERM and/or RACF.PSWD
```

The data sets that are used for DD statement SYSTSIN are the output data sets from the IZTSMU00 DD statements RACFLTRM and/or RACFPSWD.

## IMS ETO Support batch update utility (IZTUD1U0)

In the batch update JCL, the DD statement that is used for IZTIN is the data set that is created by IZTSMU00 DD statement ETOCMD.

## 2. Configuring the IMS execution parameters

Update the following parameters in IMS.PROCLIB (DFSPBxxx):

#### HIOP=

IMS ETO Support uses the IMS high I/O pool (HIOP) as the work area for its calls to RACF.

You can either use the following formula or set the HIOP value to the maximum and let IMS determine the size requirements:

```
((Current HIOP) + (736 * maximum number of concurrent transactions))
```

#### TRN=Y

This parameter tells IMS to call the Transaction Authorization exit DFSCTRNO.

## 3. Activating ETV in IMS ETO Support

There are four definitions in the options data set that pertain to the RACF verification of ETV. You can specify these four options using either the batch update utility (IZTUD1U0) or the online transaction program (IZTRAN).

#### **ZS TRANLTRM= TRANPSWD= SUPPICH= RACFPREFIX= definitions**

The descriptions of the control card values for the batch update utility (IZTUD1U0) are as follows:

#### TRANLTRM=Y/N

Υ

Specifies that IMS ETO Support calls RACF to perform ETV processing for Transaction/LTERM names.

Ν

Specifies that IMS ETO Support does not call RACF to perform ETV processing for Transaction/LTERM names.

#### TRANPSWD=Y/N

Υ

Specifies that IMS ETO Support calls RACF to perform ETV processing for Transaction/PASSWORD names.

N

Specifies that IMS ETO Support does not call RACF to perform ETV processing for Transaction/PASSWORD names.

#### SUPPICH=Y/N

Υ

Specifies that ICH408I informational messages will be suppressed from the IMS control region JES log.

N

N specifies that RACF ICH408I informational messages be displayed in the IMS control region JES log when ETV denies authorization.

#### RACFPREFIX=

Specifies the 4-character prefix name that IMS ETO Support uses to build the RACF rules.

Valid values for the 4-character name: 0-9 A-Z # @ \$

## **Activating ETOS MATRIX verification (ETV)**

ETOS MATRIX verification can be used to provide Transaction/LTERM authorization by using a security matrix created by an IMS ETO Support MATRIX build utility program (IZTSMU).

Summary of activation steps for the ETOS MATRIX form of Enhanced Transaction Verification (ETV):

- 1. Create MATRIX modules
- 2. Configure IMS execution parameters
- 3. Configure IMS control region JCL
- 4. Activate ETV in IMS ETO Support

## 1. Creating MATRIX modules

Part of the conversion to the IMS ETO Support MATRIX verification option of ETV is to move the security definitions from IMS SMU to the ETOS MATRIX data set. The IMS ETO Support MATRIX build utility program (IZTSMU) creates the modules by reading your existing SMU deck.

### Required IZTSMU JCL

```
//STEP01 EXEC PGM=IZTSMU
//STEPLIB DD DISP=SHR,DSN=IZT.SIZTLINK
//IZTPRINT DD SYSOUT=*
//IZTGENDD SYSOUT=*
//IZTRPTDD SYSOUT=*
//MATRIXDD DISP=OLD,DSN=ETOS.MATRIX
//IZTSECDD DISP=SHR,DSN=SMU.STAGE1
```

#### **DD** statement reference:

The following list describes the DD statement names and their contents:

#### **IZTPRINT**

An LRECL 133 data set to which IMS ETO Support writes error and informational messages.

This DD statement is typically defined as SYSOUT=\*.

#### **IZTGEN**

An LRECL 133 data set to which IMS ETO Support writes the SMU records read from IZTSEC.

This DD statement is typically defined as SYSOUT=\*, but can also be defined as DD DUMMY if you want to reduce the amount of data written to the JES Spool.

#### **IZTRPT**

An LRECL 133 data set to which IMS ETO Support writes a listing of all resources that will take part in ETOS MATRIX security.

This DD statement is typically defined as SYSOUT=\*.

#### **MATRIX**

An output Partitioned data set (PDS) where the MATRIX modules are written.

The data set needs to be APF authorized, and must be allocated with the following characteristics:

```
BLKSIZE=32760, RECFM=U
```

## 2. Configuring IMS execution parameters

Update the following parameter in IMS.PROCLIB(DFSPBxxx):

#### TRN=Y

This parameter tells IMS to call the Transaction Authorization exit DFSCTRNO.

## 3. Configuring IMS control region JCL

Update the IMS control region JCL with the ETOS MATRIX data set.

Add the following DD statement to your IMS control region JCL:

```
//IZTMTRX DD DISP=SHR,DSN=MATRIX
```

Note: This data set must be APF authorized.

## 4. Activating ETV in IMS ETO Support

ETOS MATRIX verification activation is controlled using the SUPPICH= and ETOSMATRIX= parameters. This option can be specified using either the batch update utility (IZTUD1U0) or the online transaction program (IZTRAN).

#### **ZS SUPPICH= ETOSMATRIX= definitions**

The descriptions of the control card values for the batch update utility (IZTUD1U0) are as follows:

#### SUPPICH=Y/N

Υ

Specifies that ICH408I informational messages will be suppressed from the IMS control region JES log.

Ν

Specifies that RACF ICH408I informational messages be displayed in the IMS control region JES log when ETV denies authorization.

#### ETOSMATRIX=Y/N

Υ

Specifies that IMS ETO Support uses its MATRIX modules to perform Transaction/LTERM checking.

Ν

Specifies that IMS ETO Support will not perform Transaction/LTERM checking using the ETOS MATRIX data set.

## Chapter 16. Transaction text descriptor (TTD) control statements

Transaction text descriptor (TTD) allows you to create more meaningful input messages by inserting system-related information and user-defined literals into the message.

The default input transaction built by DFS3650 Transaction Replacement consists of the transaction code followed by a single blank character. TTDs can be used to increase the usefulness of this transaction by allowing you to add information to the message, such as:

- VTAM user data
- Node name
- IMSID
- · User name
- LTERM names
- User ID
- · IMS job name
- · Text literals

TTD information is read from an IMS PROCLIB member at IMS startup. The PROCLIB member must be named TTDimsid (where imsid is the IMS ID of the IMS region).

If there is no TTD*imsid* PROCLIB member present at IMS startup, TTD processing will not be available until IMS is restarted.

## Transaction text descriptor (TTD) control statement types

TTD PROCLIB members can contain the following statement types:

#### Transaction definition statement

A transaction definition statement contains keyword TRAN= in column 1, followed by the transaction name. This statement signifies the start of a set of TTDs for a specific transaction code.

#### **Transaction descriptor statement**

A transaction descriptor statement contains literals or keywords and must start in column 2, with column 1 containing a blank character.

#### **Comment statement**

A comment statement contains an asterisk (\*) in column 1.

## **Transaction definition statement syntax**

A transaction definition statement signifies the start of a set of TTDs for a specific transaction code.

A transaction definition statement must start in column 1.

The following example shows the format of a transaction definition statement:

TRAN=tranname, MSGLEN=len

#### tranname

Specifies the name of the IMS transaction code for which the subsequent parameter statements apply.

#### len

Specifies the length of the input message to be built for the transaction *tranname*.

The minimum value for len must is the length of tranname plus 1. The maximum value is 252.

The message presented to the transaction program will have 4 bytes added for the IMS LLZZ field.

#### **Transaction descriptor statement syntax**

A transaction descriptor statement must start in column 2, with column 1 containing a blank.

The following example shows the format of transaction descriptor statements:

```
NODE
       ,POS=pos
                   .LTH=len
IMSID
UDATA
USER
LTERM1
LTERM2
LTERM3
LTERM4
LTERM5
LTERM6
LTERM7
LTERM8
USERTD
JOBNAME
'literal'
```

#### NODE

Moves the IMS node name to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### **IMSID**

Moves the IMSID to the input message at the location specified by POS=*pos*, for the length specified by LTH=*len*.

#### **UDATA**

Moves the VTAM user data to the input message at the location specified by POS=pos, for the length specified by LTH=len.

This is the user data as it appears after fields might have been extracted by IMS ETO Support.

#### **USER**

Moves the IMS User (SPQB) name to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### LTERM1

Moves the name of the 1st LTERM to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### LTERM2

Moves the name of the 2nd LTERM to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### LTERM3

Moves the name of the 3rd LTERM to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### LTERM4

Moves the name of the 4th LTERM to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### LTERM5

Moves the name of the 5th LTERM to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### LTERM6

Moves the name of the 6th LTERM to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### LTERM7

Moves the name of the 7th LTERM to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### LTERM8

Moves the name of the 8th LTERM to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### **USERID**

Moves the name of the RACF user ID to the input message at the location specified by POS=pos, for the length specified by LTH=len.

#### **JOBNAME**

Moves the job name of the IMS control region to the input message at the location specified by POS=*pos*, for the length specified by LTH=*len*.

#### 'literal'

Moves the value specified between quotation marks to the input message at the location specified by POS=*pos*.

**Note:** You cannot have imbedded quotation marks.

#### POS=

Specify the starting position of the transaction descriptor.

This parameter is required for all transaction descriptor statements.

#### LTH=

Specify the length of the keyword data to be moved to the transaction.

This parameter is required for all transaction descriptor statements except 'literal' statements, for which the length of the literal is used.

#### Sample PROCLIB member for IMS1

The following sample JCL is located in SIZTDATA(IZTTDIMS).

# Chapter 17. OTMA pattern descriptor (OPD) control statements

OTMA pattern descriptors are used to dynamically construct the OTMA member name by combining literal and keyword control statements.

OTMA pattern descriptors are read from IMS PROCLIB member OPD*imsid* at IMS restart, and loaded into E/CSA.

They can be refreshed dynamically using batch job SIZTSAMP(IZTUDATO).

## OTMA pattern descriptor (OPD) control statement types

Member OPDimsid can contain the following statement types:

#### **Pattern definition statement**

A pattern definition statement contains keyword PATTERN= in column 1, followed by the pattern name.

#### **Pattern descriptor statements**

A pattern descriptor statement contains literals or keywords and must start in column 2, with column 1 containing a blank character.

#### **Comment statement**

A comment statement contains an asterisk (\*) in column 1.

#### Pattern definition control statement

#### PATTERN=

Specify the 1- to 16-character OTMA pattern descriptor name.

This must match the name specified as the MEMBER NAME on the OTMA DESTINATION OVERRIDE panel (IZTRAN option **J**, and then **3**).

## Pattern descriptor control statements

#### 'literal' | keyword, POS= ,LTH=

#### 'literal'

Uses the value specified between quotation marks as part of the OTMA member name at the location specified by POS=pos. Specify a 1- to 16-character literal string within quotation marks.

The starting quotation mark is required in column 2.

#### keyword

Specify the name of a keyword that is used by IMS ETO Support to construct the OTMA member name.

Keyword values include:

#### **IMSID**

Uses the IMSID value as part of the OTMA member name at the location specified by POS=pos, for the length specified by LTH=len.

#### **LTERM**

Uses the destination LTERM name as part of the OTMA member name at the location specified by POS=pos, for the length specified by LTH=len.

#### **JOBNAME**

Uses the job name of the IMS control region as part of the OTMA member name at the location specified by POS=pos, for the length specified by LTH=len.

#### POS=

Specify the starting position of the pattern descriptor.

This parameter is required for all pattern descriptor statements.

#### LTH=

Specify the length of the keyword data to be moved to the member name.

This parameter is required for all pattern descriptor statements except literal statements.

## Example

The following sample JCL is located in SIZTDATA(IZTOPD). If the IMSID and JOBNAME were IMSO and IMSOCTL, respectively, the OTMA member constructed by IMS ETO support would be MOSIMSOXIMSOCTL.

```
1...5...0...5...1...5...2...5

PATTERN=PATTERN1
'MQS',POS=1
IMSID,POS=4,LTH=4
'X',POS=8
JOBNAME,POS=9,LTH=8
```

# Chapter 18. Creating user tables at IMS initialization (SCDINTXP)

This section contains product sensitive programming interface information.

IMS ETO Support uses its Initialization exit to return the address of its E/CSA tables. If the user Initialization exit DFSINTX1 also returns the address of a user table, IMS ETO Support saves this address in its own work area.

When IMS ETO Support passes control to the ETO exits, it also passes the address of the user table from DFSINTX1. It appears to your ETO exits as though IMS ETO Support is not involved. IMS ETO Support adjusts the address of the user table for the following user exits:

- DFSCCMD1
- DFSGMSG1
- DFSINSX1
- DFSLGFX0
- DFSLGNX1
- DFSSGFX1
- DFSSGNX1
- DFSSGNX2
- DFSLGNX2
- DFSINSX2

If any user exit other than these requires access to this user table, there are two options available:

- Obtain the address of the table loaded by DFSINTX1 from the IMS ETO Support table.
- Call the IMS ETO Support-supplied subroutine called IZTUTBLO.

The following code sample obtains the address of the table loaded by DFSINTX1. This code can be inserted into your code after you have established addressability to the IMS SCD control block.

The code first assumes that SCDINTXP points to the IMS ETO Support table. It verifies this by looking for the IMSID at offset 4 in the table. If offset 4 does not contain the IMSID, then SCDINTXP probably contains the address of your own table. If offset 4 does contain the IMSID, it is assumed that this is the IMS ETO Support table and it populates R15 with the address returned from DFSINTX1.

```
L R15,SCDINTXP
CLC SSCDIMID,4(R15)
BNE NOTETOS
L R15,16(,R15)
NOTETOS EQU *
```

The program requirements for subroutine IZTUTBL0 follow.

## Registers upon entry

- · Register 1 points to the IMS SCD
- Register 13 contains the address of the pre-chained save area
- Register 14 contains the return address
- Register 15 contains the entry point address of this module

<sup>\* -</sup> register 15 should now contain the address of the table from DFSINTX1.

## **Registers upon exit**

- Register 1 contains either the address of the user table (if present) or zeros
- Register 15 contains the following return codes:
  - 0 the address of the user table is also returned (this subroutine does nothing to verify that the address is correct)
  - 4 the address of the user table in IMSINXTP contains zeros (register 1 at exit also contains zeros)
  - 8 the address of the user table in SCDINTXP contains zeros (register 1 at exit also contains zeros)
  - 12 register 1 at entry does not point to the IMS SCD, or IZTUTBLO is being called from a release of IMS not supported by this release of IMS ETO Support.

# **Chapter 19. Search subroutine (IZTSRCH0)**

This section describes subroutine IZTSRCHO, which retrieves information about control block use in IMS and/or in the IMS ETO Support tables.

#### **Topics:**

- "Using the search subroutine" on page 249
- "Invoking the printer LTERM table search subroutine (IZTSRCH0)" on page 249
- "Parameter list of the printer LTERM table search subroutine (IZTSRCH0)" on page 250

## Using the search subroutine

The IZTSRCHO search subroutine lets you determine which USER/NODE is defined to a certain LTERM. With this subroutine, you can also determine the LTERMs that are assigned to a particular NODE.

This subroutine issues IMS command calls (ICMD/RCMD). It uses the AIB interface to issue these commands; this means that any IMS MPP or BMP program can use this subroutine.

Any user or job that uses this subroutine needs to be authorized to issue the ICMD and RCMD commands. Depending on your ICMD security setup, you may need to allow access to the **/DIS** command for these users or jobs. If you are using IMS TO Support enhanced keyword security, these users and jobs also need access to the DISASMT and DISNODE commands.

The IZTSRCHO subroutine can be called in any AMODE/RMODE combination.

**Note:** It is strongly recommended that you use dynamic calls to this subroutine.

Depending upon the parameters specified, this subroutine obtains the requested information from either the IMS ETO Support tables, or by issuing IMS commands. When this subroutine requires IMS commands, it issues them prior to searching any IMS ETO Support tables.

The following scenario illustrates the above steps:

- Your program requests information for node NODEPRT1.
- The subroutine issues a **/DIS NODE NODEPRT1** command.
- In this example, NODEPRT1 is a dynamic SLU1 (IZTSRCH0 determines this from information returned from IMS). So the subroutine issues a /DIS ASMT NODE NODEPRT1 command.
- IMS puts all known LTERMs in the parameter return area.
- Since NODEPRT1 is a dynamic SLU1 device, the IZTSRCH0 subroutine then searches the IMS ETO Support printer LTERM table and returns as many LTERM names that use this node and that fit into the parameter return area.

The invoking program can use this information in the parameter area as needed.

## **Invoking the printer LTERM table search subroutine (IZTSRCH0)**

Invoking the printer LTERM table search subroutine (IZTSRCH0) from an assembler program and Invoking the printer LTERM table search subroutine (IZTSRCH0) from a COBOL program are examples showing how to invoke the IMS ETO Support printer LTERM table search subroutine (IZTSRCH0) from an assembler program and a COBOL program.

A standard parameter list is used to make the request to the search subroutine; the parameter list layout is described after the examples.

```
LOAD
      EP=IZTSRCH0
LR
      R15,R0
      R1, PARMLIST
ΙΑ
BASR R14,R15
DELETE EP=IZTSRCHO
PARMLIST DC
                AL4(PARMLL+X'80000000')
PARMLL
                AL4(PARMLEN)
         DC.
PARMTYPE DC
                CL8
PARMNAME DC
                CL8
PARMIRET DC
                CL4
PARMIRSN DC
                CL4
PARMARET DC
                CL4
PARMARSN DC
                CL4
PARMBLK DC
PARMSTAT DC
                CL4
                CL8
PARMRES DC
                CL20
PARMDATA DS
                                ALLOW UP TO 8 RETURNED NAMES
               8018
               *-PARMLL
PARMLEN EQU
```

Figure 82. Invoking the printer LTERM table search subroutine (IZTSRCH0) from an assembler program

```
01 IZTSRCHO PIC X(08) VALUE 'IZTSRCHO'.

CALL IZTSRCHO USING PARMLL.
```

Figure 83. Invoking the printer LTERM table search subroutine (IZTSRCH0) from a COBOL program

# Parameter list of the printer LTERM table search subroutine (IZTSRCH0)

The search subroutine (IZTSRCH0) is called using a standard parameter list; the fields in the parameter list must reside in contiguous bytes of storage.

The parameter list of the search subroutine shows the layout of the search subroutine parameter list.

The PARMIRET field should be checked after each call to search subroutine IZTSRCHO. If this field contains hexadecimal zeros, processing is successful. If this field contains a nonzero value, the PARMIRSN, PARMARET, and PARMARSN fields should be analyzed to determine the cause of the failure.

The error values for PARMIRET and PARMIRSN are listed in <u>Chapter 22</u>, "Return codes for IZTSRCHO search subroutine," on page 465.

In Parameter list of the search subroutine in the Field Type column, the term Supplied means that the field must be supplied by the caller to the subroutine. The term Returned means that the field must be supplied and returned by the subroutine.

Table 4	Parameter	list of	f the searc	h subroutine
Tuble T.	i ai aii icici	usu o	Lite seare	ii Jubi Gullic

Field	Field type	Length	Description
PARMLL	Supplied	4 bytes	This field contains the binary length of the parameter list. The length of the parameter list consists of the length of the parameter prefix (68 bytes) plus the length of the parameter data area. The parameter data area should be able to accommodate the maximum number of LTERMs (at 8 bytes each) that are associated with a particular node. The minimum value of PARMLL is 76 bytes. This minimum value allows for one name to be returned.

Table 4. Parameter list of the search subroutine (continued)			
Field	Field type	Length	Description
PARMTYPE	Supplied	8 bytes	Based on the value specified in this field, IMS ETO Support determines where to obtain the requested information. The 4 valid values that can be specified are:
			• LTERM
			• NODE
			• TBLNODE
			• TBLUSER
			<b>Note:</b> These values must be 8 characters in length, padded with blanks.
			LTERM  The PARMNAME field must contain the LTERM name for which you are requesting information. IMS ETO Support first issues IMS commands to obtain the requested information. If necessary, IMS ETO Support then searches the IMS ETO Support tables.
			NODE
			The PARMNAME field must contain the NODE name for which you are requesting information. IMS ETO Support first issues IMS commands to obtain the requested information. If necessary, IMS ETO Support then searches the IMS ETO Support tables.
			TBLNODE  The PARMNAME field must contain the NODE name for which you are requesting information. IMS ETO Support searches only the IMS ETO Support tables for this information.
			TBLUSER  The PARMNAME field must contain the USER name for which you are requesting information. IMS ETO Support searches only the IMS ETO Support tables for this information.
PARMNAME	Supplied	8 bytes	This field contains the entry name of the data to be returned. This name is either the name of the node or LTERM, padded with blanks as needed.
PARMIRET	Returned	4 bytes	This field contains the IMS ETO Support return code. If this field contains hex zeros, the call was successful. A nonzero value in this field indicates an error was encountered.
PARMIRSN	Returned	4 bytes	This field contains the IMS ETO Support reason code. If PARMIRET contains a nonzero return code, this field can be used to further identify the cause of the failure.
PARMARET	Returned	4 bytes	This field contains the return code from the IMS AIB (application interface block).
PARMARSN	Returned	4 bytes	This field contains the reason code from the IMS AIB (application interface block).

Table 4. Parameter list of the search subroutine (continued)			
Field	Field type	Length	Description
PARMBLK	Returned	4 bytes	This field contains the type of node (SLU1, SLU2, 3277, and so on). If the device is known to IMS (determined by the <b>/DIS</b> command), this field contains the device type as known by IMS. If the device is not known to IMS but is found in the IMS ETO Support tables, this field indicates the table type where the block was found. For example, if information on NODEPRT1 is requested and NODEPRT1 is not known to IMS (through the <b>/DIS</b> command), this subroutine searches the IMS ETO Support tables. If it finds NODEPRT1 in the printer LTERM table, SLU1 is returned.
PARMSTAT	Returned	8 bytes	This field contains either STATIC or DYNAMIC, indicating whether this is a static or ETO device.
PARMRESV	Reserved	20 bytes	This field is reserved.
PARMDATA	Returned	variable length	This field contains the requested information. The search subroutine determines the length of this field by subtracting the length of the parameter prefix (64 bytes) from the value in the PARMLL field. This field must be at least 8 bytes long.
			This area is initialized with blanks, then populated with as much information as fits. For example, if information for node NODEPRT1 is requested, the subroutine returns as many LTERM names as will fit into this area.

# Part 6. Troubleshooting

The topics in this section provide you with technical references to help you troubleshoot and diagnose IMS ETO Support problems.

#### **Topics:**

- Chapter 20, "Runtime messages (IZT)," on page 255
- Chapter 21, "Abend codes," on page 461
- Chapter 22, "Return codes for IZTSRCH0 search subroutine," on page 465
- Chapter 23, "Return codes for options data set access module (IZTTDLI)," on page 467

## **Chapter 20. Runtime messages (IZT)**

This reference section provides detailed information about IMS ETO Support messages.

## **Message format**

IMS ETO Support runtime messages adhere to the following format:

IZTnnnnx

where:

#### **IZT**

Indicates that the message was issued by IMS ETO Support

#### nnnn

Indicates the message identification number

X

Indicates the severity of the message:

Α

Indicates that operator intervention is required before processing can continue.

Ε

Indicates that an error occurred, which might or might not require operator intervention.

I

Indicates that the message is informational only.

W

Indicates that the message is a warning to alert you to a possible error condition.

Each message also includes the following information:

#### **Explanation:**

The Explanation section explains what the message text means, why it occurred, and what its variables represent.

#### **System action:**

The System action section explains what the system will do in response to the event that triggered this message.

#### **User response:**

The User response section describes whether a response is necessary, what the appropriate response is, and how the response will affect the system or program.

#### Module:

The Module section lists the names of the modules that might have issued the message.

#### IZT0000W

## LOAD FAILED FOR ETO/S EXIT

## **Explanation**

A LOAD failed for module *nnnnnnn* during an attempt to set an intercept for an IMS ETO Support exit during IMS restart.

#### System action

Restart continues, but without the function provided by the exit that failed to LOAD. If module *nnnnnnn* is IZTYPRXn or IZTYDRUn, IMS ETO Support OTMA LTERM support will not be active.

If module *nnnnnnn* is IZTNDMXn, IMS ETO Support abend message disposition will not be active.

#### User response

Determine the reason for the LOAD failure, and restart IMS.

#### Module

**IZTUXITO** 

#### IZT0001E HOOK FAILED, \*NOGU PROCESSING NOT ACTIVE

## **Explanation**

A matching \*NOGU entry was found in the IMS ETO Support TRANSACTION ABEND TABLE, but an error was encountered during an attempt to determine whether the abending application program issued a GU to the IOPCB.

## **System action**

The application program ABEND continues, but the \*NOGU table entry is not used. IMS ETO Support searches the LTERM ABEND TABLE and TRANSACTION ABEND TABLE for a matching table entry.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTNDMX0** 

IZT0101I { ALOC | DEAL | INFO }
SVC99 RC=xx S99ERROR=xxxx
S99INFO=xxxx

## **Explanation**

A dynamic allocation function (allocate, deallocate, or information) failed with the indicated return and reason codes.

## **System action**

None. Depending on the function requested, additional error messages might follow.

## **User response**

None. This message is informational.

#### Module

**IZTDSNX0** 

IZTO102E NO DSNAME FOUND FOR DDNAME=xxxxxxxx

## **Explanation**

Extraction of the data set with DDNAME xxxxxxxx failed.

## **System action**

None. Depending on the function requested, additional error messages may follow.

#### User response

Review the z/OS syslog for any additional error messages that are related to this ddname, correct the reason for the failure, and rerun the operation.

## Module

**IZTDSNX0** 

IZT0134E LOAD FAILED FOR XXXXXXXX RC=rc
ABCODE=code

## **Explanation**

Batch utility IZTSMU encountered an error during an attempt to load module *xxxxxxxx*. The return code (*rc*) and abend code (*code*) can be used to determine the reason for the load failure.

## **System action**

The batch utility terminates.

## **User response**

Determine the reason for the LOAD failure, correct the error, and rerun the job.

#### Module

**IZTSMU** 

IZT0192E LOAD FAILED FOR XXXXXXXX RC=rc
ABCODE=code

#### **Explanation**

Batch utility IZTSMU encountered an error during an attempt to load module *xxxxxxxx*. The return code (*rc*) and abend code (*code*) can be used to determine the reason for the load failure.

## System action

The batch utility terminates.

## User response

Determine the reason for the LOAD failure, correct the error, and rerun the job.

**IZTDCB** 

IZT0202E FIND FAILED FOR ddn MEMBER mmmmmmmm

## **Explanation**

IMS ETO Support batch utility IZTSMU encountered an error during an attempt to read member *mmmmmmmm* from the data set represented by DDNAME *ddn*.

## **System action**

The batch utility terminates.

## **User response**

Ensure member *mmmmmmmm* is present in the data set represented by DDNAME *ddn*, and that it is allocated with the proper attributes. Correct all problems and rerun the job.

#### Module

IZTIOS00

IZT0205E INVALID PARM PASSED TO IZTIOS00

## **Explanation**

An internal error occurred in IZTIOS00.

## **System action**

The job terminates with a U4021 abend.

#### **User response**

Contact IBM Software Support for assistance.

#### Module

IZTIOS00

IZT0206E INTERNAL ERROR - INVALID
OPEN REQUEST

## **Explanation**

An internal error occurred in IZTIOS00.

## **System action**

The job terminates with a U4021 abend.

#### **User response**

Contact IBM Software Support for assistance.

#### Module

IZTIOS00

IZT0207E INTERNAL ERROR - INVALID GET REQUEST

## **Explanation**

An internal error occurred in IZTIOS00.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

IZTIOS00

IZT0208E MISSING OPCODE - STMT IGNORED

## **Explanation**

An internal error occurred in IZTIOS00.

#### **System action**

The job terminates with a U4021 abend.

#### User response

Contact IBM Software Support for assistance.

#### Module

IZTIOS00

IZT0209E INTERNAL ERROR - INVALID LENGTH

#### **Explanation**

An internal error occurred in IZTIOS00.

#### System action

The job terminates with a U4021 abend.

#### User response

Contact IBM Software Support for assistance.

IZTIOS00

IZT0210E INTERNAL PARM ERROR - GENTYPE NOT SPECIFIED

Module

IZTIOS00

**IZT0213E** 

TITLE MUST HAVE A SINGLE OPERAND ENCLOSED IN QUOTES

## **Explanation**

An internal error occurred in IZTIOS00.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

IZTIOS00

IZT0211E OPCODE EXCEEDS 8 CHARACTERS
- STMT IGNORED

## **Explanation**

An internal error occurred in IZTIOS00.

## **System action**

The job terminates with a U4021 abend.

#### **User response**

Contact IBM Software Support for assistance.

#### Module

IZTIOS00

IZTO212E BEGIN TO CONTINUE COLUMNS NOT BLANK

## **Explanation**

A macro statement was continued (as indicated by a non-blank character in column 72), but the first 15 columns on the following statement were not blank.

## System action

The statement is ignored.

#### **User response**

Review the macro statement in error and correct the problem.

## **Explanation**

A title statement was encountered containing more than one operand, or whose operand was not enclosed in quotation marks.

## **System action**

The statement is ignored.

## **User response**

Review the macro statement in error and correct the problem.

#### Module

IZTIOS00

IZT0214E TITLE VALUE EXCEEDS 100 BYTES

## **Explanation**

A title statement with title text exceeding 100 bytes was encountered.

#### **System action**

The statement is ignored.

#### User response

Reduce the length of the text to less than 100 bytes.

## Module

IZTIOS00

IZT0215E LABEL TOO LONG (EXCEEDS 63 CHARACTERS)

#### **Explanation**

A control statement had a label beginning in column 1 that exceeded 63 characters in length.

## System action

The statement is ignored.

Reduce the length of the label to less than 63 characters.

#### Module

IZTIOS00

IZT0216E TOO MANY CONTINUATION CARDS (EXCEEDS 10 CARDS)

## **Explanation**

A single macro was composed of more than ten source lines (or exceeded the maximum length available for a single macro statement, which is approximately 720 characters).

## System action

The statement is ignored.

## **User response**

Review the source macro that caused the error. Reduce the number of text lines comprising the macro, or reduce the entire length of the macro statement by eliminating parameters with default values.

#### Module

IZTIOS00

IZT0217E UNMATCHED QUOTE

## **Explanation**

A macro statement with a quoted value did not have a closing quotation mark.

## **System action**

The statement is ignored.

## **User response**

Review the macro statement in error and correct the problem.

#### Module

IZTIOS00

IZT0218E TOO MANY NESTED COPY STATEMENTS (EXCEEDS 10)

## **Explanation**

The number of active (open) COPY members exceeded the limit of ten.

## **System action**

The COPY statement is ignored.

## **User response**

Restructure the source code to reduce the number of nested COPY statements.

#### Module

IZTIOS00

IZT0219E COPY OPERAND EXCEEDS 8
CHARACTERS

#### **Explanation**

A COPY statement specified a member name more than 8 characters long.

## **System action**

The statement is ignored.

#### User response

Review the macro statement in error and correct the problem.

#### Module

IZTIOS00

IZT0220E RECURSIVE COPY MEMBER REQUESTED

## **Explanation**

A COPY statement was included in a COPIED member that referred back to a member already open. This results in an endless loop of COPY members.

#### System action

The statement is ignored.

#### User response

Review the COPY statements included in the GEN source, and correct the COPY statements to prevent a recursive loop.

IZTIOS00

IZT0221E COPY STATEMENT FOUND IN SEQUENTIAL INPUT

## **Explanation**

A COPY statement was encountered but the input data set is not a PDS.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Review the macro statement in error and correct the problem.

#### Module

IZTIOS00

IZT0222W WARNING - CONTINUED
STATEMENT DOES NOT END WITH
A COMMA

## **Explanation**

An input line had a non-blank continuation character, indicating that the statement is continued, but the statement does not end with a comma. While this is valid syntax, it might indicate that a comma is missing.

## **System action**

The remainder of the macro statement is treated as a comment.

## **User response**

Verify that the continued statement is coded correctly.

#### Module

IZTIOS00

IZT0223E COPY STATEMENT INVALID IN PROCLIB MEMBER

## **Explanation**

IMS ETO Support batch utility IZTSMU encountered an error while processing a COPY statement. When processing a PROCLIB member, a COPY statement is not supported.

## **System action**

The batch utility terminates.

#### User response

Remove the unsupported COPY statement, and rerun the job.

#### Module

IZTIOS00

IZT0321E INVALID PARM PASSED TO IZTDCB - ERROR CODE x

#### **Explanation**

IMS ETO Support batch utility IZTSMU encountered an internal error. An invalid parameter (x) was passed between programs.

## System action

The job step terminates with a U4021 abend code.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTDCB** 

IZT0322E CLOSE FAILED FOR type DDNAME

ddn RETURN CODE rc

CLOSE FAILED FOR type DDNAME

ddn ABEND CODE code RETURN

CODE rc

#### **Explanation**

An error was encountered during the attempt to close the specified DDNAME.

## System action

The job step terminates with a U4021 abend code.

#### User response

Additional error messages might be present in the z/OS log. Correct the reason for the failure and rerun the failed job.

#### Module

**IZTDCB** 

# IZT0323E OPEN FAILED FOR DDNAME XXXXXXXXX

## **Explanation**

An error was encountered during the attempt to open the specified DDNAME.

## **System action**

The job step completes normally.

## **User response**

Additional error messages might be present in the z/OS log. Correct the reason for the failure and try the failed operation again.

#### Module

**IZTDCB** 

IZT0331I jjjjjjjj WAITING FOR DATASET dsn

## **Explanation**

Job name jjjjjjjjj is waiting for an enqueue or reserve for an output data set. The data set name (dsn) and volume serial number (volser) are indicated in the message.

## **System action**

The job waits for the holder of the resource to release control.

## **User response**

None. This message is informational.

#### Module

IZTDCB

IZT0340E xxxxxxx ERROR FOR yyyyyyyy
RC=rc

## **Explanation**

An ENQ or RESERVE macro for QNAME *yyyyyyyy* failed with the indicated return code (*rc*).

## **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTDCB** 

IZT0342E UNNABLE TO LOCATE TIOT ENTRY FOR DDNAME xxxxxxxx

## **Explanation**

The specified ddname was not found in the TIOT.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Ensure that the indicated ddname is present in the JCL for the failing job.

#### Module

**IZTDCB** 

IZT0343E SWAREQ FAILED RC=rc

## **Explanation**

An SWAREQ macro failed with the indicated return code.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTDCB** 

IZT0351E xxxxxxxx FAILED FOR yyyyyy
STORAGE RC=rc

#### **Explanation**

A storage request for I/O related storage failed with the indicated return code. xxxxxxxx indicates whether the failure was for a GETMAIN or FREEMAIN. yyyyyy indicates the storage use: either DCB, DSNENT, or BUFFER.

## System action

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTDCB** 

IZT0368E DYNAMIC xxxxxx FAILED

RC=rc ERROR CODE=yyyy INFO

CODE=zzz

## **Explanation**

A dynamic allocation/concatenation/unallocation request failed. One or both IZT0368I messages might appear along with IZT0368E message.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Check the error and information codes returned, and correct the error.

#### Module

**IZTDCB** 

IZT0368I DSN=dsn
DDNAME=ddname

#### **Explanation**

A dynamic allocation/concatenation/unallocation request completed.

## **System action**

None.

#### **User response**

None. This message is informational.

#### Module

**IZTDCB** 

IZT0369W UNKNOWN DSORG RETURNED DURING DYNAMIC ALLOCATION DSORG=xxxx

## **Explanation**

Dynamic allocation information returned an unexpected value for the DSORG of the specified data set.

## System action

The job step terminates with return code 16.

## **User response**

Verify that the DSORG of the identified data set is valid.

#### Module

**IZTDCB** 

IZT0370E SOURCE DATA SETS HAVE INCONSISTENT DSORG

## **Explanation**

The data sets in the input concatenation were not allocated with the same data set organization (DSORG).

## **System action**

The job step terminates with a U4021 abend code.

## **User response**

Ensure all data sets in the input concatenation are allocated with the same data set organization (DSORG), and rerun the failed job.

#### Module

**IZTDCB** 

IZT0401I jjjjjjjj WAITING FOR DATASET dsn volser

## **Explanation**

Job name *jjjjjjjjj* is waiting for an enqueue or reserve for an output data set. The data set name (*dsn*) and volume serial (*volser*) are indicated in the message.

## System action

The job waits for the holder of the resource to release control.

## User response

If the wait continues, investigate which job is holding the required resource.

**IZTLMOD** 

**IZT0404E** 

STOW FAILED FOR MEMBER
xxxxxxxx IN DD yyyyyyyy RC=rc
SC=zzzz

## **Explanation**

A STOW request for the indicated member and ddname failed. The return code and subcode issued by the STOW macro appear in the message.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Review the JES log of the failing job for additional messages relating to the indicated DDNAME. Review the JCL for proper specification of the indicated ddname. Ensure there is sufficient space in both the data set and directory.

#### Module

**IZTLMOD** 

IZT0405E

XXXXXXXX FOR COMPRESS WORK AREA FAILED RC=rc

## **Explanation**

A GETMAIN or FREEMAIN, as indicated in the message, failed when attempting to access below the line storage for a work area to be used to perform a compress of the MATRIX data set.

## System action

The job terminates with a U4021 abend.

#### User response

Review storage available in the address space that experienced the problem. Because this is storage below the line, ensure that sufficient region is available.

#### Module

**IZTLMOD** 

IZT0406E NOTE MACRO FAILED FOR DDNAME xxxxxxxx RC=rc

#### **Explanation**

A NOTE macro request for the indicated ddname failed. The return code from NOTE appears in the message.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Review the JES log of the failing job for other messages relating to the indicated ddname. Review the JCL for proper specification of the indicated ddname.

#### Module

**IZTLMOD** 

IZTO407E INVALID PARAMETER PASSED TO IZTLMOD

## **Explanation**

An internal error occurred while passing a parameter to module IZTLMOD.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTLMOD** 

IZT0408E MODULE SIZE REQUESTED NOT DOUBLEWORD ALIGNED

## **Explanation**

An internal error occurred related to the size of the module to be written.

## System action

The job terminates with a U4021 abend.

#### User response

Contact IBM Software Support for assistance.

**IZTLMOD** 

IZTO416E ABEND Sxxx RC rc DDNAME ddn

#### **Explanation**

An abend was intercepted during an I/O operation for the indicated ddname.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Review the JES log of the failing job for other messages relating to the indicated DDNAME. For D37 or E37 abend codes, review the space available in the indicated data set and compress the data set as required.

#### Module

**IZTLMOD** 

IZTO417E TASK NOT APF AUTHORIZED UNABLE TO COMPRESS OUTPUT
LIBRARY

## **Explanation**

IMS ETO Support was unable to automatically compress the output library because the job step was not running APF authorized.

## **System action**

The job terminates with a U4021 abend.

#### **User response**

Ensure that the SIZTLINK data set, and any other data set in the STEPLIB, are APF authorized. Either APF authorize the appropriate data sets, or compress the library and try the operation again.

#### Module

**IZTLMOD** 

IZT0418E SPACE ABEND RECURRED
AFTER OUTPUT LIBRARY WAS
COMPRESSED

#### **Explanation**

The MATRIX data set experienced space problems even after it was compressed by IMS ETO Support.

## System action

The job terminates with a U4021 abend.

## **User response**

Enlarge the output data set and try the operation again.

#### Module

**IZTLMOD** 

IZT0419E COMPRESS FAILED - ATTACH
TO IEBCOPY FAILED RC = rc
COMPRESS FAILED - IEBCOPY
RETURN CODE xx

## **Explanation**

IMS ETO Support attempted to compress the MATRIX data set, but was unsuccessful.

#### System action

The job terminates with a U4021 abend.

## **User response**

Review the return/abend code and any messages in the z/OS syslog to determine the cause of the IEBCOPY failure. Contact IBM Software Support for assistance.

#### Module

**IZTLMOD** 

IZT0420I COMPRESS SUCCESSFUL MATRIX

#### **Explanation**

IMS ETO Support successfully compressed the data set associated with ddname MATRIX.

## System action

Processing continues.

#### User response

None. This message is informational.

#### Module

**IZTLMOD** 

IZT0561E PRINT WAS ATTEMPTED BEFORE OPEN

#### **Explanation**

A call to print a message was made before print functionality was available.

## **System action**

The job terminates with a U4021 abend.

#### **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTPRNT** 

IZT0562E INVALID DD INDICATOR PASSED TO PRINT ROUTINE

#### **Explanation**

A call to print a line included an invalid indicator specifying the ddname for the print output.

#### **System action**

The job terminates with a U4021 abend.

#### **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTPRNT** 

IZT0563E PRINT TO CURRENT DDNAME
REQUESTED BUT NO GEN
PROCESS WAS ACTIVE

#### **Explanation**

A call to print an input line failed because the indicator for the type of input in progress was not set properly.

#### **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTPRNT** 

IZT0564E MESSAGE EXCEEDS 132 BYTES

## **Explanation**

A message or header to be printed by IZTPRNT exceeded the maximum size (132 bytes).

#### System action

The job terminates with a U4021 abend.

#### **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTPRNT** 

IZT0566E INVALID PRINT FUNCTION REQUEST BYTE

#### **Explanation**

A request to IZTPRNT specified an invalid function indicator.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTPRNT** 

IZT0567E GETMAIN FAILED FOR MSG BUFF
IN IZTPRNT

#### **Explanation**

A GETMAIN for message buffers failed. Processing cannot continue.

#### System action

The job terminates with a U4021 abend.

#### User response

Contact IBM Software Support for assistance.

#### Module

**IZTPRNT** 

IZT0568E OPEN FAILED FOR PRINT DDNAME ddn

## **Explanation**

OPEN failed for the specified ddname.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Ensure the data set associated with specified ddname is allocated correctly. If output is directed to a data set instead of SYSOUT, ensure that the DCB attributes are RECFM=FBA,LRECL=133.

#### Module

**IZTPRNT** 

IZT0569E CLOSE FAILED FOR PRINT DDNAME ddn

## **Explanation**

An MVS CLOSE macro returned with RC=04, leaving the specified ddname open.

## **System action**

The job terminates with a U4021 abend.

#### **User response**

Review the z/OS syslog for any additional error messages related to this ddname. Contact IBM Software Support for assistance.

#### Module

**IZTPRNT** 

IZT0570E REQUESTED MESSAGE LENGTH EXCEEDS MAX LENGTH

## **Explanation**

A message or header to be printed by IZTPRNT exceeded the maximum size (132 bytes).

## **System action**

The job terminates with a U4021 abend.

#### **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTPRNT** 

IZTO601E INVALID LABEL IN COLUMN 1 - STMT IGNORED

## **Explanation**

The only valid characters that can appear in column 1 are a blank or a close parenthesis, followed by an open parenthesis, followed by a blank.

## **System action**

Syntax checking continues, but there are no IMS ETO Support MATRIX modules created by this program.

## **User response**

Correct the invalid control cards and rerun the job.

#### Module

**IZTSECB** 

IZT0602E LOGIC ERROR IN IZTSECB

## **Explanation**

An internal error occurred processing the security control statements.

#### **System action**

The job terminates with a U4021 abend.

#### User response

Contact IBM Software Support for assistance.

#### Module

**IZTSECB** 

IZT0603E OPCODE ERROR (INVALID OR OUT OF SEQUENCE - STMT IGNORED)

#### **Explanation**

The opcode on the preceding statement is not currently valid (either the opcode is spelled wrong or is out of sequence).

## **System action**

The statement is ignored. Syntax checking continues, but the IMS ETO Support MATRIX modules will not be created.

Review the security GEN source, and correct the error.

#### Module

**IZTSECB** 

IZT0604E MISSING REQUIRED OPERAND -STMT IGNORED

## **Explanation**

A required operand for the preceding statement was not specified.

## **System action**

The statement is ignored. Syntax checking continues, but the IMS ETO Support MATRIX modules are not created.

## User response

Review the security GEN source, and correct the error.

#### Module

**IZTSECB** 

IZT0605E NO DATA RECORDS FOR PRECEDING CONTROL CARD

## **Explanation**

A control record - one with a ")(" label - had no data records associated with it.

## **System action**

The statement is ignored. Syntax checking continues, but the IMS ETO Support MATRIX modules are not created.

## User response

Review the security GEN source, and correct the error.

#### Module

**IZTSECB** 

IZT0606E DATA RECORD SPECIFIED
WITHOUT PRECEDING CONTROL
RECORD

## **Explanation**

A data record - one without a ")(" label - was encountered before a control record.

## System action

The statement is ignored. Syntax checking continues, but the IMS ETO Support MATRIX modules are not created.

## **User response**

Review the security GEN source, and correct the error.

#### Module

**IZTSECB** 

IZT0607E ERROR PROCESSING xxx TABLE COUNTERS

## **Explanation**

An internal error occurred.

## System action

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTSECB** 

IZT0608E SECURITY STATEMENT XXXXXXXX

NOT SUPPORTED-STATEMENT
IGNORED

## **Explanation**

The indicated statement is not processed by IZTSMU.

#### System action

The statement is ignored, and processing continues.

#### User response

Review the indicated statement.

#### Module

**IZTSECB** 

IZT0610E STORAGE MANAGEMENT ERROR

#### **Explanation**

An internal storage management error occurred.

## System action

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTSECB** 

IZT0613E OPERAND EXCEEDS MAXIMUM VALID LENGTH

## **Explanation**

An internal programming error occurred.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTSECB** 

IZT0699E ROW REDUCTION ERROR

#### **Explanation**

An internal programming error occurred.

## **System action**

The job terminates with a U4021 abend.

#### **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTSECC** 

IZT0704E LOAD FAILED FOR XXXXXXXX RC=rc
ABCODE=code

## **Explanation**

Batch utility IZTSMU encountered an error during an attempt to load module *xxxxxxxx*. The return code (*rc*) and abend code (*code*) can be used to determine the reason for the load failure.

## **System action**

The batch utility terminates.

#### User response

Review the z/OS log for additional error messages, correct the reason for the load failure, and rerun the iob.

#### Module

**IZTSMU** 

IZT0706E IMS ETO SUPPORT SECURITY
PROCESS ENDED DUE TO MODULE
LINK ERROR(S)

## **Explanation**

Errors were encountered attempting to link-edit the IMS ETO Support MATRIX modules. Additional error messages should be displayed.

## System action

The job terminates with a U4021 abend.

## User response

Review the accompanying messages and take an appropriate action.

#### Module

**IZTSMU** 

IZT0708E IMS ETO SUPPORT SECURITY PROCESS ENDED DUE TO SECURITY SOURCE ERROR(S)

#### **Explanation**

Syntax errors were encountered in the security source statements. Additional error messages should be displayed.

#### **System action**

The job terminates with a U4021 abend.

## User response

Review the accompanying messages and take an appropriate action.

#### Module

IZTSMU

## IZT0712E REQUIRED DD STATEMENT ddn WAS NOT SPECIFIED

# IZT0803W FREEMAIN FAILED FOR module RC=rc

## **Explanation**

## The indicated ddname was not present in the IZT JCL.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Correct the JCL and rerun the job.

#### Module

**IZTSMU** 

# IZT0801E INVALID PARM PASSED TO IZTSTMG

## **Explanation**

An internal error occurred due to an invalid parameter being passed to IZTSTMG.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTSTMG** 

IZT0802E	GETMAIN FAILED FOR module
	RC=rc

## **Explanation**

A GETMAIN failed for the indicated module.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Increase the REGION size and rerun the job.

#### Module

**IZTSTMG** 

## **Explanation**

A FREEMAIN macro failed for the indicated module.

## **System action**

The job terminates with a U4021 abend.

## User response

Contact IBM Software Support for assistance.

#### Module

**IZTSTMG** 

IZT0806E	LOAD FAILED FOR XXXXXXXX RC=rc
----------	--------------------------------

## **Explanation**

Batch utility IZTSMU encountered an error during an attempt to load module *xxxxxxxxx*. The return code (*rc*) can be used to determine the reason for the load failure.

## System action

The batch utility terminates.

#### **User response**

Review the z/OS log for additional error messages, correct the reason for the load failure, and rerun the job.

#### Module

**IZTSTMG** 

IZT0808W	DELETE FAILED FOR XXXXXXXX
	RC=rc

## **Explanation**

Batch utility IZTSMU encountered an error during an attempt to delete module *xxxxxxxxx*. The return code (*rc*) can be used to determine the reason for the delete failure.

#### System action

The batch utility terminates.

Review the z/OS log for additional error messages, correct the reason for the delete failure, and rerun the job.

#### Module

**IZTSTMG** 

IZT0901E INVALID PARM PASSED TO IZTTIME

## **Explanation**

An internal error occurred because an invalid parameter was passed to module IZTTIME.

## **System action**

The job terminates with a U4021 abend.

## **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTTIME** 

IZT0902E TIME MACRO RETURNED RC=rc

#### **Explanation**

A TIME request to MVS returned a nonzero return code. Return codes from a TIME call are documented in MVS Programming: Assembler Services Reference.

#### **System action**

The job terminates with a U4021 abend.

#### **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTTIME** 

IZT1000W ETO-SUPPORT CLEANUP NOT AVAILABLE

#### **Explanation**

One of the IMS ETO Support modules required for user SIGNOFF CLEANUP was not found at IMS initialization.

## **System action**

Restart continues, but user SIGNOFF CLEANUP is not available.

#### User response

Make sure modules IZTCLNAO and IZTCLNIO are available, and restart IMS.

#### Module

**DFSINTX0** 

IZT1001W IZTRAN PFKEYS NOT AVAILABLE

#### **Explanation**

The module that enables use of PF keys by IMS ETO Support IMS online transaction (IZTRAN) was not available at IMS initialization.

## System action

Restart continues, but transaction IZTRAN cannot use PF keys.

## **User response**

Make sure module IZTPFKI0 is available, and restart IMS.

## Module

**DFSINTX0** 

IZT1002I E/CSA ANCHOR { FOUND |
ESTABLISHED } AT XXXXXXXX

#### **Explanation**

This is an informational message. It displays the address of IMS ETO Support's E/CSA anchor block.

## **System action**

Processing continues.

#### User response

None. This message is informational.

#### Module

DFSINTXO, IZTLOAD1

IZT1003W RC=xx RETURNED FROM E/CSA SEARCH {,RESTART CONTINUES}

#### **Explanation**

An error occurred in the E/CSA locate function. This could lead to over-utilization of E/CSA.

## **System action**

If this error occurs in the IMS control region, restart continues but ETO is disabled. If this error occurs in a batch load job, batch load processing terminates unsuccessfully.

## **User response**

Contact IBM Software Support. If this error occurs during IMS restart, try to perform a batch load of the database tables. You may need to take a console dump of the IMS control region.

#### Module

DFSINTXO, IZTLOAD1

IZT1004E

ERROR ENCOUNTERED IN E/CSA ANCHOR GETMAIN {RESTART CONTINUES | RC=xx}

## **Explanation**

A critical error occurred in IMS ETO Support's E/CSA acquire routine. IMS ETO Support cannot function when this error is encountered.

## **System action**

If this error occurs in the IMS control region, restart continues but ETO is disabled. If this error occurs in a batch load job, batch load processing terminates unsuccessfully.

#### **User response**

Make sure adequate E/CSA is available to run the IMS ETO Support product. If E/CSA appears to be overutilized or corrupted, contact IBM Software Support.

#### Module

DFSINTXO, IZTLOAD1

IZT1005E

ERROR ENCOUNTERED IN E/CSA IMSID GETMAIN, RESTART CONTINUES

#### **Explanation**

A critical error occurred in IMS ETO Support's E/CSA acquire routine. IMS ETO Support cannot function when this error is encountered.

## **System action**

Restart continues, but ETO is deactivated.

#### User response

Make sure adequate E/CSA is available to run the IMS ETO Support product. If E/CSA appears to be overutilized or corrupted, contact IBM Software Support.

#### Module

DFSINTX0

IZT1006E

LOCATE FAILED FOR IZTINTXO, RESTART CONTINUES

## **Explanation**

IMS ETO Support was unable to locate module IZTINTXO in the IMS control region STEPLIB concatenation during IMS restart. IMS ETO Support cannot function when this error is encountered.

## **System action**

Restart continues, but ETO is deactivated.

#### User response

Make sure the IMS ETO Support modules are installed properly in an IMS control region STEPLIB library.

#### Module

**DFSINTX0** 

IZT1007W

LOAD FAILED FOR USER
INITIALIZATION EXIT, DFSINTX1

#### **Explanation**

User exit DFSINTX1 was found at IMS startup, but an error occurred while trying to load the module.

#### **System action**

Restart continues.

#### User response

Correct the problem, and restart IMS.

**DFSINTX0** 

IZT1008I IMSID ANCHOR ESTABLISHED AT XXXXXXXX

## **Explanation**

This message displays the address of IMS ETO Support's IMSID E/CSA anchor block.

## **System action**

Restart continues.

#### **User response**

None. This message is informational.

#### Module

**DFSINTX0** 

IZT1009I DFSINTX1 RETURNED TABLE ADDRESS xxxxxxxx

## **Explanation**

This message displays the address returned by the user's DFSINTX1 exit. This is the same address that is passed to all user ETO exits (DFSxxxx1) and from subroutine IZTUTBLx.

#### **System action**

Restart continues.

#### **User response**

None. This message is informational.

#### Module

**DFSINTX0** 

IZT1010E RC=xxxxxxxxx FROM DFSINTX1
RETURNED TO IMS

#### **Explanation**

This message displays the return code from the user's DFSINTX1 exit.

#### **System action**

This same return code is passed to IMS.

#### User response

Determine the reason for the nonzero return code, and take corrective action.

#### Module

**DFSINTX0** 

IZT1011I ETO-SUPPORT INITIALIZATION COMPLETE

#### **Explanation**

This message indicates that IMS ETO Support initialization is complete.

## System action

None.

#### User response

None. This message is informational.

#### Module

**DFSINTX0** 

IZT1012I ETO-SUPPORT INIT FAILED, ETO DISABLED

#### **Explanation**

An error occurred that caused IMS ETO Support to deactivate ETO.

## System action

Restart continues without the use of ETO.

#### User response

Correct the error, and restart IMS.

#### Module

**DFSINTX0** 

IZT1013E ETO SUPPORT NOT INSTALLED FOR THIS RELEASE OF IMS - IMS ABEND FORCED

#### **Explanation**

The version of IMS ETO Support installed is incompatible with the version of IMS.

## **System action**

IMS terminates with a U4003 abend code.

## **User response**

Install the version of IMS ETO Support that supports this version of IMS.

#### Module

**DFSINTX0** 

IZT1014I

AUTO /TEST MFS REQUESTED FOR dddddddd

## **Explanation**

Auto /TEST MFS has been requested for the indicated device type. Auto /TEST MFS is enabled for the indicated device unless the IMS system generation included the NOTESTMFS parameter on the COMM macro.

## **System action**

Processing continues.

## User response

None. This message is informational.

#### Module

**IZTINTX0** 

IZT1015I

**IMS BACKEND FLAG SET** 

#### **Explanation**

This IMS region has been designated as a back-end system because DD statement IZTBKEND was present in the control region JCL.

## System action

Processing continues, but autologon data will not be provided for dynamic printer LTERMs.

#### **User response**

If autologon data is required for dynamic printers, remove DD statement IZTBKEND from the control region JCL, and restart IMS. If autologon data is not required, no action is needed.

#### Module

**DFSINTX0** 

#### IZT1016E

LOCATE FAILED FOR IZTDLA30, ETO-SUPPORT IS DEACTIVATED

## **Explanation**

During IMS restart, IMS ETO Support was unable to locate module IZTDLA30 in the IMS control region STEPLIB concatenation. IMS ETO Support does not function if this error is encountered.

## **System action**

IMS restart continues, but IMS ETO Support is deactivated.

## User response

Make sure the IMS ETO Support modules are installed properly in the IMS control region STEPLIB library.

#### Module

**DFSINTX0** 

IZT1017I

PRINTER LTERM NAME
REPLACEMENT OPTION HAS BEEN
ENABLED

## **Explanation**

The printer LTERM name replacement option has been enabled.

#### **System action**

None.

#### **User response**

None. This message is informational.

#### Module

**DFSINTX0** 

IZT1025E

INTERNAL ERROR SETTING CTRNO INTERCEPT

#### **Explanation**

An error was encountered while attempting to set the intercept for the IMS ETO Support Matrix security module. This is an error with IMS ETO Support and requires service.

#### **System action**

IMS terminates with a U4003 abend code.

Install the latest IMS ETO Support PTF level and restart IMS. If the problem persists, contact IBM Software Support.

#### Module

**DFSINTX0** 

IZT1059E NAME/TOKEN CREATION FAILED, RC = rc

## **Explanation**

IMS ETO Support received a bad return code (*rc*) when attempting to create an MVS NAME/TOKEN entry.

## **System action**

IMS abends.

## **User response**

Determine cause of the bad return code from the NAME/TOKEN creation routine (IEANTCR). The return codes are documented in MVS Programming: Authorized Assembler Services Reference.

#### Module

**IZTINTXZ** 

IZT1101E ERROR RELEASING HIOP STORAGE

## **Explanation**

An error was encountered while IMS ETO Support attempted to release storage from the high I/O pool (HIOP).

## **System action**

The control region terminates with a U4093 abend.

#### **User response**

Contact IBM Software Support and provide the storage dump.

#### Module

**IZTCTRNO** 

IZT1102E ERROR OBTAINING HIOP STORAGE

#### **Explanation**

An error was encountered while IMS ETO Support attempted to acquire storage for ETV (Enhanced Transaction Verification) processing. ETV processing is bypassed. This error is likely caused by an insufficient high I/O pool (HIOP) definition in the DFSPBxxx member of PROCLIB.

## System action

Processing continues.

## User response

Increase the HIOP parameter specification and restart IMS.

#### Module

**IZTCTRNO** 

IZT1201E IZTMTRX DDNAME NOT PRESENT

## **Explanation**

A request was made, using IZTRAN, to refresh the IMS ETO Support MATRIX tables, but the required ddname (IZTMTRX) was not present in the IMS control region.

## System action

Processing continues without IMS ETO Support MATRIX Enhanced Transaction Verification (ETV).

#### User response

Ensure that IMS ETO Support MATRIX Enhanced Transaction Verification (ETV) is properly installed.

#### Module

**IZTMTRX0** 

IZT1202E IZTMTRX DSN IN-USE, ENQUEUE FAILED

#### **Explanation**

A request was made, using IZTRAN, to refresh the IMS ETO Support MATRIX tables, but the data set was being updated by another task.

#### **System action**

Processing continues, but the IMS ETO Support MATRIX table is not refreshed.

Attempt the refresh operation after the task holding the MATRIX data set completes.

Module

IZTMTRX0

IZT1203E

OPEN FAILED FOR DDN IZTMTRX

## **Explanation**

An error was encountered attempting to OPEN the data set associated with ddname IZTMTRX.

## **System action**

If this message is displayed at IMS initialization, IMS restart continues, but without IMS ETO Support MATRIX Enhanced Transaction Verification (ETV). If this message is displayed while attempting a table refresh, processing continues but the refresh is not successful.

## **User response**

Review the z/OS syslog for additional messages describing the OPEN failure, correct the errors, and try the failed operation again. After the problem is corrected, either restart IMS or use the IMS ETO Support online transaction program (IZTRAN - option R) to refresh/load the IMS ETO Support MATRIX tables.

#### Module

**IZTMTRX0** 

IZT1204E

**NON-ZERO RETURN FROM BLDL** 

## **Explanation**

An error was encountered attempting a BLDL macro for DDNAME IZTMTRX.

## **System action**

If this message is displayed at IMS initialization, IMS restart continues, but without IMS ETO Support MATRIX Enhanced Transaction Verification (ETV). If this message is displayed while attempting a table refresh, processing continues but the refresh is not successful.

#### **User response**

Ensure the data set associated with ddname IZTMTRX was properly populated by the IMS ETO Support

MATRIX build utility (IZTSMU). After the problem is corrected, either restart IMS or use the IMS ETO Support online program to refresh/load the IMS ETO Support MATRIX tables.

#### Module

**IZTMTRX0** 

IZT1205E

**IZTMCNT IS INVALID** 

## **Explanation**

Module IZTMCNT was found in the data set associated with DDNAME IZTMTRX, but it was not created with the IMS ETO Support MATRIX build utility program (IZTSMU).

## System action

If this message is displayed at IMS initialization, IMS restart continues, but without IMS ETO Support MATRIX Enhanced Transaction Verification (ETV). If this message is displayed while attempting a table refresh, processing continues but the refresh is not successful.

#### **User response**

Ensure the data set associated with ddname IZTMTRX was properly populated by the IMS ETO Support MATRIX build utility (IZTSMU). After the problem is corrected, either restart IMS or use the IMS ETO Support online program to refresh/load the IMS ETO Support MATRIX tables.

#### Module

**IZTMTRX0** 

IZT1206E

**IZTMSMB IS INVALID** 

#### **Explanation**

Module IZTMSMB was found in the data set associated with ddname IZTMTRX, but it was not created with the IMS ETO Support MATRIX build utility program (IZTSMU).

## **System action**

If this message is displayed at IMS initialization, IMS restart continues, but without IMS ETO Support MATRIX Enhanced Transaction Verification (ETV). If this message is displayed while attempting a table refresh, processing continues but the refresh is not successful.

Ensure the data set associated with ddname IZTMTRX was properly populated by the IMS ETO Support MATRIX build utility (IZTSMU). After the problem is corrected, either restart IMS or use the IMS ETO Support online program to refresh/load the IMS ETO Support MATRIX tables.

#### Module

**IZTMTRX0** 

IZT1207E IZTMTX IS INVALID

## **Explanation**

Module IZTMTX was found in the data set associated with ddname IZTMTRX, but it was not created with the IMS ETO Support MATRIX build utility program (IZTSMU).

## **System action**

If this message is displayed at IMS initialization, IMS restart continues, but without IMS ETO Support MATRIX Enhanced Transaction Verification (ETV). If this message is displayed while attempting a table refresh, processing continues but the refresh is not successful.

#### **User response**

Ensure the data set associated with ddname IZTMTRX was properly populated by the IMS ETO Support MATRIX build utility (IZTSMU). After the problem is corrected, either restart IMS or use the IMS ETO Support online program to refresh/load the IMS ETO Support MATRIX tables.

#### Module

**IZTMTRX0** 

IZT1208E IZTMTRX MODULES DATE/TIME MISMATCH

## **Explanation**

The modules in the data set associated with ddname IZTMTRX were not created at the same time.

## **System action**

If this message is displayed at IMS initialization, IMS restart continues, but without IMS ETO Support MATRIX Enhanced Transaction Verification (ETV). If this message is displayed while attempting a table refresh, processing continues but the refresh is not successful.

## **User response**

Ensure the data set associated with ddname IZTMTRX was properly populated by the IMS ETO Support MATRIX build utility (IZTSMU). After the problem is corrected, either restart IMS or use the IMS ETO Support online program to refresh/load the IMS ETO Support MATRIX tables.

#### Module

**IZTMTRX0** 

IZT1209E GETMAIN FAILURE

#### **Explanation**

A request for above the line storage was unsuccessful.

## System action

If this message is displayed at IMS initialization, IMS restart continues, but without IMS ETO Support MATRIX Enhanced Transaction Verification (ETV). If this message is displayed while attempting a table refresh, processing continues but the refresh is not successful.

## **User response**

Increase the region size in the IMS control region JCL, and restart IMS.

#### Module

**IZTMTRX0** 

IZT1210I ETOS MATRIX SUCCESSFULLY LOADED

#### **Explanation**

The IMS ETO Support MATRIX Enhanced Transaction Verification (ETV) tables were successfully initialized or refreshed.

#### System action

Processing continues.

#### User response

None. This message is informational.

IZTMTRX0

IZT1301W TRAN TEXT DESC RECORD SKIPPED, COLUMN 72 IS NOT

**BLANK** 

## **Explanation**

While reading PROCLIB member TTD*imsid*, an invalid transaction text descriptor (TTD) control statement was encountered. The statement did not contain a blank in position 72.

## System action

The invalid statement is ignored, and processing continues.

## **User response**

Correct the invalid statement, and restart IMS.

#### Module

**IZTBTTD0** 

IZT1302W TRAN TEXT DESC RECORD SKIPPED, TRAN KEYWORD EXPECTED

## **Explanation**

While reading PROCLIB member TTD*imsid*, an invalid transaction text descriptor (TTD) control statement was encountered. A statement was encountered that was not a comment or a transaction definition statement (TRAN). The transaction definition statement must be the first TTD control statement.

## **System action**

The invalid statement is ignored, and processing continues.

## **User response**

Correct the invalid statement, and restart IMS.

#### Module

**IZTBTTD0** 

IZT1303W TRAN TEXT DESC RECORD SKIPPED, FAILED EDITING

#### **Explanation**

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. The statement failed standard editing.

## **System action**

The invalid statement is ignored, and processing continues.

#### User response

Ensure that all statements in PROCLIB member TTD*imsid* are valid as described in <u>Chapter</u> 16, "Transaction text descriptor (TTD) control statements," on page 241, and restart IMS.

#### Module

IZTBTTD0

IZT1304W TRAN TEXT DESC RECORD SKIPPED, INVALID TRANSACTION NAME

## **Explanation**

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. The transaction definition statement contained a transaction name that was longer than 8 bytes, or was not followed by a comma.

## System action

The invalid statement is ignored, and processing continues.

## **User response**

Correct the length of the transaction name, or add a comma following the transaction name, and restart IMS.

#### Module

**IZTBTTD0** 

IZT1305W TRAN TEXT DESC RECORD
SKIPPED, MSGLEN= PARAMETER
MISSING

#### **Explanation**

While reading PROCLIB member TTD*imsid*, an invalid transaction text descriptor (TTD) control statement

was encountered. The transaction definition statement did not contain the MSGLEN= parameter.

## **System action**

The invalid statement is ignored, and processing continues.

## **User response**

Add the MSGLEN= parameter to the transaction definition statement, and restart IMS.

#### Module

IZTBTTD0

IZT1306W tttttttt - TRAN TEXT DESC
CONTAINED INVALID MSGLEN
VALUE

**Explanation** 

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. The transaction definition statement for transaction *tttttttt* contained an invalid MSGLEN value. The MSGLEN value was either non-numeric, contained more than 3 digits, or was greater than 252.

## **System action**

The invalid statement is ignored, and processing continues.

## **User response**

Ensure that the value specified for MSGLEN is numeric, contains 3 digits or less, and is not greater than 252, and then restart IMS.

#### Module

IZTBTTD0

IZT1307W tttttttt - TRAN TEXT DESC
CONTAINED INVALID NUMERIC
DATA

#### **Explanation**

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. The transaction descriptor statement that follows transaction definition statement ttttttt contained invalid numeric data in either its LTH= or POS= field.

## **System action**

The invalid statement is ignored, and processing continues.

#### User response

Ensure that the LTH= and POS= parameters contain numeric values, and restart IMS.

#### Module

**IZTBTTD0** 

IZT1308W ttttttt - TRAN TEXT DESC LENGTH FIELD SPECIFIED AS ZERO

## **Explanation**

While reading PROCLIB member TTD*imsid*, an invalid transaction text descriptor (TTD) control statement was encountered. A transaction descriptor statement that follows transaction definition statement *tttttttt* contained a value of 0 for either its LTH= or POS= field.

## **System action**

The invalid statement is ignored, and processing continues.

## User response

Ensure that the LTH= and POS= parameters contain nonzero values, and restart IMS.

#### Module

IZTBTTD0

IZT1309W tttttttt - TRAN TEXT DESC LENGTH GREATER THAN MAX (252)

## **Explanation**

While reading PROCLIB member TTD*imsid*, an invalid transaction text descriptor (TTD) control statement was encountered. A numeric value specified for a TTD control statement for TRAN *tttttttt* contained a value greater than the maximum allowed. The maximum value that can be specified is 252.

#### System action

The invalid statement is ignored, and processing continues.

Ensure that all numeric values are 252 or less, and restart IMS.

#### Module

IZTBTTD0

IZT1310W tttttttt - INVALID RECORD SYNTAX

# **Explanation**

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. A TTD control statement for transaction tttttttt failed editing. Either a parameter was missing, or there was no comma between parameters.

### **System action**

The invalid statement is ignored, and processing continues.

# **User response**

Correct the invalid statement, and restart IMS.

#### Module

IZTBTTD0

IZT1311W tttttttt - MISSING PARAMETER

### **Explanation**

While reading PROCLIB member TTD*imsid*, an invalid transaction text descriptor (TTD) control statement was encountered. A transaction descriptor statement for transaction *tttttttt* failed editing. Either the POS= or LTH= parameter was omitted from the transaction descriptor statement.

# System action

The invalid statement is ignored, and processing continues.

#### **User response**

Correct the invalid statement, and restart IMS.

#### Module

**IZTBTTD0** 

IZT1312W tttttttt - LTH SPECIFIED MORE THAN ONCE

### **Explanation**

While reading PROCLIB member TTD*imsid*, an invalid transaction text descriptor (TTD) control statement was encountered. The LTH= parameter was specified more than once for a transaction descriptor statement for transaction *tttttttt*.

### **System action**

The invalid statement is ignored, and processing continues.

#### **User response**

Correct the invalid statement, and restart IMS.

#### Module

IZTBTTD0

IZT1313W tttttttt - POS SPECIFIED MORE THAN ONCE

# **Explanation**

While reading PROCLIB member TTD*imsid*, an invalid transaction text descriptor (TTD) control statement was encountered. The POS= parameter was specified more than once for a transaction descriptor statement for transaction *tttttttt*.

### **System action**

The invalid statement is ignored, and processing continues.

#### **User response**

Correct the invalid statement, and restart IMS.

### Module

**IZTBTTD0** 

IZT1316W tttttttt - POS+LTH GREATER THAN
MSGLEN

### **Explanation**

While reading PROCLIB member TTD*imsid*, an invalid transaction text descriptor (TTD) control statement was encountered. A transaction descriptor statement for transaction *tttttttt* contains an invalid POS= or LTH= value. The sum of the LTH= and POS= values is greater than the value specified in the MSGLEN parameter for transaction definition statement *tttttttt*.

The invalid statement is ignored, and processing continues.

### **User response**

Correct the invalid statement, and restart IMS.

#### Module

IZTBTTD0

IZT1317W

tttttttt - INVALID TEXT RECORD (QUOTE AS FIRST CHAR)

# **Explanation**

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. Transaction descriptor statement TEXT for transaction *tttttttt* is invalid. A TEXT statement (as designated by a quotation mark in column 2) cannot have another quotation mark as the first byte of text (column 3).

# **System action**

The invalid statement is ignored, and processing continues.

#### **User response**

Correct the invalid statement, and restart IMS.

#### Module

IZTBTTD0

**IZT1318W** 

tttttttt - INVALID TEXT RECORD, DATA TOO LONG

# **Explanation**

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. Transaction descriptor statement TEXT for transaction *ttttttt* is invalid. The sum of the length TEXT plus the value specified for POS= is greater than the value specified for the MSGLEN parameter in the transaction definition statement.

# **System action**

The invalid statement is ignored, and processing continues.

### User response

Correct the invalid statement, and restart IMS.

#### Module

IZTBTTD0

IZT1319W

tttttttt - INVALID TEXT RECORD, POS PARAMETER MISSING

# **Explanation**

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. Transaction descriptor statement TEXT for transaction *tttttttt* is invalid. The POS= parameter is not specified.

# System action

The invalid statement is ignored, and processing continues.

#### User response

Correct the invalid statement, and restart IMS.

#### Module

IZTBTTD0

**IZT1321W** 

INTERNAL ERROR, TTD FIELD LIMIT REACHED

# **Explanation**

While reading PROCLIB member TTDimsid, a table used by IMS ETO Support reached its maximum size. The maximum number of transaction descriptor statements has been read.

# System action

All subsequent transaction descriptor statements are bypassed, and processing continues.

#### User response

Contact IBM Software Support to have the maximum number of transaction descriptor statements increased.

#### Module

**IZTBTTD0** 

**IZT1322W** 

tttttttt / kkkkkkk "POS" LOCATED
IN TRANSACTION NAME

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. Transaction descriptor statement kkkkkkk for transaction ttttttt is invalid. The value specified for POS causes the field to be placed within the transaction name portion of the message.

# **System action**

The invalid statement is ignored, and processing continues.

### **User response**

Correct the invalid statement, and restart IMS.

#### Module

IZTBTTD0

IZT1390W tttttttt / kkkkkkk CONTAINED INVALID LENGTH - SET TO MAX (8)

### **Explanation**

While reading PROCLIB member TTDimsid, an invalid transaction text descriptor (TTD) control statement was encountered. Transaction descriptor statement kkkkkk for transaction ttttttt is invalid. The value specified for LTH= is greater than the actual field.

# **System action**

The invalid LTH= field is ignored, and a length of 8 bytes is assumed.

#### User response

Correct the invalid LTH= value, and restart IMS.

#### Module

IZTBTTD0

IZT1391I MEMBER(TTDimsid)
SUCCESSFULLY LOADED

### **Explanation**

This is an informational message. IMS PROCLIB member TTD*imsid* successfully loaded.

# **System action**

IMS startup continues.

#### User response

None. This message is informational.

#### Module

IZTBTTD0

IZT2001E INVALID REFRESH OPTION SELECTED: xxxxxxxx

# **Explanation**

An invalid option was entered.

### System action

None.

### **User response**

Enter a valid selection or command.

#### Module

**IZTAPPC0** 

IZT2002E BAD STATUS CODE ON GU FOR DBIZT1 = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTAPPC0

IZT2003E BAD STATUS CODE ON GN FOR DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

Determine the cause of the error code, and correct the problem.

#### Module

IZTAPPC0

IZT2004E BAD STATUS CODE ON GU FOR DBIZT1 = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTAPPCO** 

IZT2005E NO SYMBOLIC DESTINATION NAMES IN DBIZT1

# **Explanation**

An IMS E/CSA refresh was requested, but there are no symbolic destination names in the routing table.

### **System action**

Processing ends.

#### **User response**

From IZTRAN's Primary Menu, select option **Y** and add the appropriate symbolic destination routing information.

#### Module

**IZTAPPC0** 

IZT2006E E/CSA LOCATE SERVICE FAILED

### **Explanation**

The E/CSA locate service failed.

### **System action**

Processing ends.

### **User response**

Verify that no errors were encountered during IMS ETO Support initialization at IMS startup.

#### Module

**IZTAPPCO** 

IZT2007E E/CSA LOCATE FAILED FOR IMS SECTION: imsid

### **Explanation**

The E/CSA locate service failed for this IMSID.

# **System action**

Processing ends.

# User response

Verify that no errors were encountered during IMS ETO Support initialization at IMS startup.

#### Module

**IZTAPPC0** 

IZT2008E UNABLE TO LOCATE E/CSA
OPTIONS DATA SET TABLE

### **Explanation**

The IMS ETO Support E/CSA IMSID section was found, but there was no pointer to the options data set table. This indicates an IMS ETO Support initialization error occurred at IMS startup.

# System action

The IMS ETO Support table refresh terminates.

#### User response

Check for IMS ETO Support initialization messages in the startup of the failed IMS, and take an appropriate action.

#### Module

**IZTAPPC0** 

IZT2010E APPC ERROR EXTRACT ENDED
WITH RC= xxxxxxxx - xxxxxxxx

A bad return code was received from the APPC/MVS error extract service, ATBEES3. Both the error and reason codes are listed in the message.

# **System action**

Processing ends.

# **User response**

Verify that no errors were encountered during IMS ETO Support initialization at IMS startup.

#### Module

**IZTAPPC0** 

IZT2012E DATA RECEIVED STATUS ERROR =

### **Explanation**

An incomplete message was received from the conversation partner program. This is an internal error and should not occur.

### **System action**

Processing ends.

#### **User response**

Contact IBM Software Support.

#### Module

IZTAPPC0

IZT2013I E/CSA REFRESH COMPLETED

### **Explanation**

This is an informational message that indicates the refresh process is complete.

#### System action

None.

#### **User response**

None. This message is informational.

#### Module

**IZTAPPC0** 

IZT2014E MUST SELECT - "R", "S" OR "X"

### **Explanation**

An invalid option was requested.

### **System action**

No processing is attempted.

### User response

Select from one of the valid options.

#### Module

**IZTAPPCO** 

IZT2015W E/CSA REFRESH PROCESSING ENDED

# **Explanation**

This is an informational message that indicates the refresh process is complete.

### System action

None.

#### User response

No action is required.

#### Module

**IZTAPPC0** 

IZT2016E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

### **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

#### System action

The IMS ETO Support table refresh terminates.

### User response

Check the MVS syslog for additional messages. If any messages are found, take appropriate action based on those messages. If there are no additional messages in the MVS syslog verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

ModuleModuleIZTAPPC0IZTAPPC0

IZT2017I ASYNC INACTIVE TABLE CLEANUP IZT2060E INVALID STATUS CODE ON GU
SUBMITTED CALL TO DBIZT1 = xx

**Explanation** 

Processing ends.

User response

DL/I call.

problem.

DL/I call.

problem.

An invalid status code was returned by IMS from a

Determine the cause of the error code, and correct the

An invalid status code was returned by IMS from a

Determine the cause of the error code, and correct the

Explanation

IZTRAN submitted the inactive E/CSA table cleanup task to the APPC ASCH tasks.

System action System action

Review the SYSLOG for IZT messages to determine whether the cleanup task was successful.

Processing is complete.

User response

ModuleModuleIZTAPPC0IZTAPPC0

IZT2024E BAD STATUS CODE ON GU FOR DBIZT1 = xx IZT2061E INVALID STATUS CODE ON GN CALL TO DBIZT1 = xx

**Explanation Explanation** 

An invalid status code was returned by IMS from a DL/I call.

System actionSystem actionProcessing ends.Processing ends.

User response User response

Determine the cause of the error code, and correct the problem.

ModuleModuleIZTAPPC0IZTAPPC0

IZT2050E INVALID OPTION SPECIFIED ON THE COMMAND LINE INVALID STATUS CODE ON GU
CALL TO DBIZT1 = xx

**Explanation Explanation** 

An invalid option was requested.

An invalid status code was returned by IMS from a DL/I call.

System action
No processing is attempted.

System action

Processing ends. **User response** 

Select from one of the valid options.

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Determine the cause of the error code and correct the problem.

#### Module

**IZTAPPC0** 

IZT2070E INVALID STATUS CODE ON GU
CALL TO DBIZT1 = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTAPPC0** 

IZT2071E INVALID STATUS CODE ON GN CALL TO DBIZT1 = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

#### **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTAPPC0

IZT2072E INVALID STATUS CODE ON GN
CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

#### **User response**

Determine the cause of the error code and correct the problem.

#### Module

**IZTAPPC0** 

IZT2080E INVALID STATUS CODE ON GU
CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

#### **System action**

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

**IZTAPPC0** 

IZT2081E INVALID STATUS CODE ON GN CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

**IZTAPPC0** 

IZT2082E INVALID STATUS CODE ON GHU
CALL TO DBIZT1 = xx

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTAPPC0** 

IZT2083E NODE xxxxxxxx NOT FOUND FOR LTERM yyyyyyyy

#### **Explanation**

This is an IMS ETO Support internal error.

### **System action**

Processing ends.

### **User response**

Contact IBM Software Support.

#### Module

**IZTAPPC0** 

IZT2090E INVALID STATUS CODE ON GU
CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTAPPC0** 

IZT2091E INVALID STATUS CODE ON GN CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

#### System action

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTAPPCO** 

IZT2092E INVALID STATUS CODE ON GN CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTAPPC0

IZT2099E ERROR ENCOUNTERED IN APPC SERVICE

### **Explanation**

An error occurred in an APPC/MVS service.

#### System action

Processing ends.

### User response

Review the error messages returned from the error extract service, and correct the problem.

#### Module

**IZTAPPC0** 

IZT2101E ERROR ON ATBGETC, RC=xxxxxxxx

An error occurred in an APPC/MVS service.

System action

Processing ends.

**User response** 

Review the error messages, and correct the problem.

Module

IZTAPPC9

IZT2102E ERROR ON ATBRCVW,

RC=xxxxxxxx

**Explanation** 

An error occurred in an APPC/MVS service.

**System action** 

Processing ends.

**User response** 

Review the error messages, and correct the problem.

Module

IZTAPPC9

IZT2103E INCOMPLETE DATA RECEIVED

**Explanation** 

An error occurred in an APPC/MVS service.

System action

Processing ends.

**User response** 

This is an IMS ETO Support internal error. Contact IBM

Software Support.

Module

IZTAPPC9

IZT2104E INVALID TABLE MESSAGE LENGTH

**Explanation** 

An error occurred in an APPC/MVS service.

**System action** 

Processing ends.

**User response** 

This is an IMS ETO Support internal error. Contact IBM

Software Support.

Module

IZTAPPC9

IZT2105E ERROR ON ATBSEND, RC=xxxxxxxx

**Explanation** 

An error occurred in an APPC/MVS service.

**System action** 

Processing ends.

**User response** 

Review the error messages, and correct the problem.

Module

IZTAPPC9

IZT2106E ERROR ON ATBRCVW,

RC=xxxxxxxx

**Explanation** 

An error occurred in an APPC/MVS service.

System action

Processing ends.

User response

Review the error messages, and correct the problem.

Module

IZTAPPC9

IZT2107E INCOMPLETE DATA RECEIVED

**Explanation** 

An error occurred in an APPC/MVS service.

**System action** 

Processing ends.

This is an IMS ETO Support internal error. Contact IBM Software Support.

#### Module

IZTAPPC9

IZT2110E ERROR ENCOUNTERED ON:

# **Explanation**

An error occurred in an APPC/MVS service.

# **System action**

Processing ends.

### **User response**

This is an IMS ETO Support internal error. Contact IBM Software Support.

#### Module

IZTAPPC9

IZT2111E RETURN CODE: xxxxxxxx

# **Explanation**

An error occurred in an APPC/MVS service.

# System action

Processing ends.

#### **User response**

This is an IMS ETO Support internal error. Contact IBM Software Support.

#### Module

IZTAPPC9

IZT2119I XXXXX INACTIVE TABLE FREED

### **Explanation**

The inactive table indicated by xxxxx has been freed.

# **System action**

Processing continues.

### User response

None. This message is informational.

#### Module

IZTAPPC9

IZT2120I INACTIVE TABLE CLEANUP STARTED

# **Explanation**

The inactive E/CSA table cleanup task has begun.

# **System action**

Processing continues.

### User response

None. This message is informational.

#### Module

IZTAPPC9

IZT2121I INACTIVE TABLE CLEANUP COMPLETED

# **Explanation**

The inactive E/CSA table cleanup task has completed.

### System action

Processing continues.

#### User response

None. This message is informational.

#### Module

IZTAPPC9

IZT2201W ERROR IN IMS COMMON SERVICES INITIALIZATION

### **Explanation**

An error occurred in IMS Common Services initialization. Cleanup processing (message dequeue and terminal status cleanup) fails for the terminal in progress.

### **System action**

Cleanup processing ends for this terminal.

Contact IBM Software Support.

#### Module

**IZTCLNA0** 

#### Module

**IZTCLNA0** 

IZT2202W GET FOR HIOP STORAGE FAILED-CLEANUP FAILED

### **Explanation**

An error occurred in a GETPOOL for space in the high I/O pool (HIOP). Cleanup processing (message dequeue and terminal status cleanup) failed for the terminal in progress.

### **System action**

Cleanup processing ends for this terminal.

### **User response**

Verify that the HIOP is sufficiently large. The amount of storage being requested is approximately 360 bytes. If sufficient pool space is available, contact IBM Software Support.

#### Module

**IZTCLNA0** 

IZT2203E FREE OF HIOP STORAGE FAILED

### **Explanation**

An error occurred in a DFSPOOL request to free space in the high I/O pool (HIOP). To prevent the IMS pool from filling, the IMS control region abends. Register 14 at abend contains the return code from DFSPOOL. Register 15 at abend contains X'1C'.

#### **System action**

The IMS control region abends with a U4002 abend.

#### **User response**

Contact IBM Software Support.

#### **Module**

**IZTCLNA0** 

IZT2205W ERROR LOCATING CVB

### **Explanation**

During terminal cleanup processing, an attempt to find an IMS command verb failed. Cleanup processing (message dequeue and terminal status cleanup) fails for the terminal in progress.

# System action

Cleanup processing ends for this terminal.

#### **User response**

Contact IBM Software Support.

#### Module

**IZTCLNA0** 

IZT2208W ERROR IN DFSBCB GET AWE PROCESSING

#### **Explanation**

An error occurred in a DFSBCB request to get an AWE. Cleanup processing (message dequeue and terminal status cleanup) failed for the terminal in progress.

#### **System action**

Cleanup processing ends for this terminal.

#### **User response**

Contact IBM Software Support.

#### Module

**IZTCLNA0** 

IZT2209E ERROR IN DFSBCB FREE AWE PROCESSING

### **Explanation**

An error occurred in a DFSBCB request to free an AWE. To prevent an IMS control region shortage of AWEs, the IMS control region abends. Register 14 at abend contains the return code from DFSBCB. Register 15 at abend contains X'24'.

#### System action

The IMS control region abends with a U4002 abend.

#### **User response**

Contact IBM Software Support.

#### Module

**IZTCLNA0** 

IZT2210W MULTISEGMENT COMMAND RESPONSE - FIRST SEG:

### **Explanation**

During terminal cleanup processing, an unexpected IMS command response was received. The first segment of the command response is shown on the next line. Cleanup processing (message dequeue and terminal status cleanup) failed for the terminal in progress.

# **System action**

Cleanup processing ends for this terminal.

### **User response**

Contact IBM Software Support.

#### Module

**IZTCLNA0** 

#### IZT2211W DFSCMTI COMMAND RESPONSE:

# **Explanation**

During terminal cleanup processing, an unexpected IMS command response was received. The first segment of the command response is shown on the next line. Cleanup processing (message dequeue and terminal status cleanup) failed for the terminal in progress.

# **System action**

Cleanup processing ends for this terminal.

#### User response

Contact IBM Software Support.

#### Module

**IZTCLNA0** 

IZT2212E DFSCMTI COMMAND FAILED DUE
TO INSUFFICIENT WKAP POOL

#### **Explanation**

An error occurred in a DFSCMTI request for IMS command execution. Cleanup processing (message dequeue and terminal status cleanup) failed for the terminal in progress.

# **System action**

Cleanup processing ends for this terminal.

# User response

Verify that sufficient space is available in the WKAP pool. If sufficient space exists, contact IBM Software Support.

#### Module

**IZTCLNA0** 

IZT2213E DFSCMTI CMD FAILED

### **Explanation**

An error occurred in a DFSCMTI request for IMS command execution. Cleanup processing (message dequeue and terminal status cleanup) failed for the terminal in progress.

### System action

Cleanup processing ends for this terminal.

#### User response

Contact IBM Software Support.

### Module

**IZTCLNA0** 

IZT2214W DFSCMTI MACRO UNSUCCESSFUL

### **Explanation**

An error occurred in a DFSCMTI request for IMS command execution. Cleanup processing (message dequeue and terminal status cleanup) failed for the terminal in progress.

### System action

Cleanup processing ends for this terminal.

#### User response

Contact IBM Software Support.

#### Module

**IZTCLNA0** 

IZT2215W COMMON SERVICES FIND
INTERFACE ERROR

An error occurred during an IMS common services FIND operation. Cleanup processing (message dequeue and terminal status cleanup) failed for the terminal in progress.

# **System action**

Cleanup processing ends for this terminal.

### User response

Contact IBM Software Support.

#### Module

**IZTCLNA0** 

IZT2216W UNABLE TO CLEAN UP USER - SPOB ALLOCATED

### **Explanation**

An error occurred during cleanup processing (message dequeue and terminal status cleanup). Cleanup processing was unable to complete successfully because the same IMS user logged on before cleanup could complete.

# **System action**

Cleanup processing ends for this terminal.

#### User response

This error may occur if a user who is already signed on issues another **/SIGN ON** command, resulting in reuse of the same USER control block. If this is not the case, contact IBM Software Support for help.

#### Module

**IZTCLNA0** 

IZT2217W SCDINTXP WAS ZEROS

#### **Explanation**

The pointer to the IMS ETO Support ECSA area in the SCD was not populated with a valid address. Cleanup processing (message dequeue and terminal status cleanup) failed for the terminal in progress.

# **System action**

Cleanup processing ends for this terminal.

### **User response**

Verify that no user exits (or other products) use the SCDINTXP field for anchoring control blocks. Contact IBM Software Support for help.

#### Module

**IZTCLNA0** 

IZT2218W ADDRESS OF IZTCLNIO WAS MISSING

### **Explanation**

The address of the cleanup intercept module was not valid.

# **System action**

Cleanup processing ends for this terminal.

#### **User response**

Contact IBM Software Support for help.

#### Module

**IZTCLNA0** 

IZT2219W INITIAL CLEANUP OF STATIC TERMINALS - SCAN ERROR

#### **Explanation**

An error was encountered during the scan of static terminals for IMS ETO Support signoff cleanup processing.

#### **System action**

IMS ETO Support signoff cleanup of static terminals is canceled, but IMS continues operating.

#### User response

If this problem persists, contact IBM Software Support for assistance.

#### Module

IZTCLNB0

IZT2400E ERROR ENCOUNTERED TABLE LOCATE SERVICE

#### **Explanation**

The E/CSA locate service failed for the DBIZT1 section of the E/CSA table.

Processing ends.

**User response** 

Verify that no errors were encountered during IMS ETO Support initialization at IMS startup.

Module

**IZTCLSTO** 

IZT2410E AN INVALID COMMAND HAS BEEN

**ENTERED:** xxxxxxxx

**Explanation** 

An invalid command was entered.

System action

No processing is attempted.

**User response** 

Enter a valid command.

Module

IZTCLST0

IZT2411E INVALID ROW COMMAND HAS BEEN ENTERED: x

**Explanation** 

An invalid command was entered.

**System action** 

No processing is attempted.

**User response** 

Enter a valid command.

Module

IZTCLST0

IZT2421E INVALID COMMAND, MUST BE 1
OR 2

**Explanation** 

An invalid command was entered.

**System action** 

No processing is attempted.

**User response** 

Enter a valid command.

Module

IZTCLST0

IZT2422E ERROR ENCOUNTERED IN TABLE

**LOCATE SERVICE** 

**Explanation** 

An error occurred in the E/CSA table locate service.

**System action** 

Processing ends.

User response

Verify that no errors were encountered during IMS ETO Support initialization at IMS startup.

Module

IZTCLST0

IZT2423E ENTRY NO LONGER FOUND IN

TABLE: XXXXXXXX

**Explanation** 

The selected entry is no longer in the E/CSA table. This is probably because a refresh took place while the E/CSA was being viewed.

System action

Processing ends.

User response

List the E/CSA table again.

Module

IZTCLST0

IZT2424E INVALID IMS COMMAND TYPE,

MUST BE "1" OR "2"

**Explanation** 

An invalid value was specified in the IMS COMMAND TYPE field. Valid values for this field are 1 and 2.

The input is ignored.

**User response** 

Correct the value specified in the IMS COMMAND TYPE field, and try again.

Module

**IZTCLST0** 

**IZT2430E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE** 

**Explanation** 

An error occurred in the E/CSA table locate service.

**System action** 

Processing ends.

**User response** 

Verify that no errors were encountered during IMS ETO Support initialization at IMS startup.

Module

**IZTCLST0** 

**IZT2431E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE** 

**Explanation** 

An error occurred in the E/CSA table locate service.

**System action** 

Processing ends.

**User response** 

Verify that no errors were encountered during IMS ETO Support initialization at IMS startup.

Module

**IZTCLST0** 

**IZT2432E ENTRY NO LONGER IN ECSA** 

**TABLE:** xxxxxxxx

**Explanation** 

The selected entry is no longer in the E/CSA table. This is probably because a refresh took place while the E/CSA was being viewed.

**System action** 

Processing ends.

User response

List the E/CSA table again.

Module

**IZTCLST0** 

IZT2441E AN INVALID COMMAND HAS BEEN

**ENTERED:** xxxxxxxx

**Explanation** 

An invalid command was entered.

**System action** 

No processing is attempted.

User response

Enter a valid command.

Module

**IZTCLST0** 

**IZT2442E INVALID ROW COMMAND HAS** 

**BEEN ENTERED:** *x* 

**Explanation** 

An invalid command was entered.

System action

No processing is attempted.

User response

Enter a valid command.

Module

IZTCLST0

IZT2451E ERROR ENCOUNTERED IN TABLE **LOCATE SERVICE** 

An error occurred in the E/CSA table locate service.

# **System action**

Processing ends.

#### **User response**

Verify that no errors were encountered during IMS ETO Support initialization at IMS startup.

#### Module

**IZTCLSTO** 

IZT2452E ENTRY NAME NO LONGER IN

TABLE: xxxxxxxx

# **Explanation**

The selected entry is no longer in the E/CSA table. This is probably because a refresh took place while the E/CSA was being viewed.

#### **System action**

Processing ends.

#### **User response**

List the E/CSA table again.

### Module

IZTCLST0

IZT2461E

AN INVALID COMMAND HAS BEEN ENTERED: XXXXXXXX

# Explanation

An invalid command was entered.

# System action

No processing is attempted.

#### **User response**

Enter a valid command.

#### Module

IZTCLST0

IZT2470E ERROR ENCOUNTERED IN TABLE

**LOCATE SERVICE** 

# **Explanation**

An error occurred in the E/CSA table locate service.

### **System action**

Processing ends.

#### User response

Verify that no errors were encountered during IMS ETO Support initialization at IMS startup.

#### Module

IZTCLST0

IZT2471E ENTRY NO LONGER IN E/CSA

TABLE: XXXXXXXX

### **Explanation**

The selected entry is no longer in the E/CSA table. This is probably because a refresh took place while the E/CSA was being viewed.

### System action

Processing ends.

#### **User response**

List the E/CSA table again.

#### Module

IZTCLST0

IZT2500E

ERROR ENCOUNTERED OBTAINING CPU LOCK

#### **Explanation**

An error occurred obtaining the CPU lock. This error should not happen.

#### **System action**

Processing ends.

### **User response**

If the problem persists, contact IBM Software Support.

#### Module

IZTCSA02

IZT2501E ERROR ENCOUNTERED RELEASING CPU LOCK

An error occurred releasing the CPU lock. This error should not happen.

### System action

Processing ends.

### **User response**

If the problem persists, contact IBM Software Support.

#### Module

IZTCSA02

IZT2510E ERROR ENCOUNTERED DURING GETMAIN

#### **Explanation**

An error occurred while trying to perform a GETMAIN for E/CSA. Make sure enough E/CSA is defined in your MVS configuration.

# **System action**

The request for storage was denied. The precise action depends on what module requested the storage, but in all cases the process could not complete successfully.

#### **User response**

Review E/CSA storage definitions and use. If E/CSA is merely exhausted, increase allocations and IPL your system. If E/CSA is overutilized and it appears that IMS ETO Support is using an excessive amount of storage, contact IBM Software Support.

#### Module

IZTCSA02

IZT2511I FUNCTION RECEIVED RETURN CODE xxxxxxxx

# **Explanation**

This message displays the return code for the service that encountered the error. See the previous IZT message for the failing service name.

# **System action**

See the previous IZT message for an explanation of the error.

### **User response**

See the previous IZT message for an explanation of the error.

#### Module

IZTCSA02

IZT2597I ECSA GETMAIN ADDRESS

xxxxxxxxx LENGTH xxxxxxxx KEY xx

# **Explanation**

This message lists the address, length, and protect key of the E/CSA table entry.

# System action

Processing continues.

### User response

None. This message is informational.

#### Module

IZTCSA02

IZT2600E ERROR ENCOUNTERED OBTAINING CPU LOCK

#### **Explanation**

An error occurred while trying to obtain the CPU lock. This lock is required to free (FREEMAIN) E/CSA.

### **System action**

Processing continues, but the storage is not freed.

#### User response

Contact IBM Software Support.

#### Module

IZTCSA03

IZT2601E ERROR ENCOUNTERED
RELEASING CPU LOCK

#### **Explanation**

An error occurred while trying to release the CPU lock.

#### System action

This error results in a U4051 abend.

Contact IBM Software Support.

#### Module

IZTCSA03

IZT2610E ERROR ENCOUNTERED DURING FREEMAIN

# **Explanation**

An error occurred while trying to free E/CSA.

# **System action**

Processing continues, but the attempt to free E/CSA is unsuccessful.

### **User response**

Review E/CSA storage utilization. If the E/CSA utilization percent is high, avoid running an IMS ETO Support table refresh until the problem is resolved. Contact IBM Software Support.

#### Module

IZTCSA03

IZT2611I FUNCTION RECEIVED RETURN CODE xxxxxxxx

### **Explanation**

This message displays the return code for the service that encountered the error. See the previous IZT message for the failing service name.

### **System action**

See the previous IZT message for an explanation of the error.

# **User response**

See the previous IZT message for an explanation of the error.

#### Module

IZTCSA03

IZT2697I ECSA FREMAIN ADDRESS

xxxxxxxx LENGTH xxxxxxxx KEY xx

# **Explanation**

This is an informational message. It shows both the area address, length, and protect key of the freed storage.

# **System action**

Processing continues.

# **User response**

None. This message is informational.

#### Module

IZTCSA03

IZT2700I PROFILE NAME IS A REQUIRED FIELD

### **Explanation**

The Security Profile name is a required field, but it was not supplied.

# System action

No processing is attempted.

# **User response**

Enter a valid Security Profile name, and try again.

#### Module

IZTCUPD0

IZT2701E BAD STATUS CODE RETURNED ON GU CALL TO DBIZT1 = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

#### System action

Processing ends.

### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTCUPD0

IZT2702E INVALID LINE COMMAND ENTERED, MUST BE "S" OR BLANK

Explanation

An invalid line command was entered.

**System action** 

No processing is attempted.

**User response** 

Enter a valid line command, and continue.

Module

**IZTCUPD0** 

IZT2703E BAD STATUS CODE ON REPL CALL TO DBIZT1 = xx

**Explanation** 

An invalid status code was returned by IMS from a DL/I call.

**System action** 

Processing ends.

**User response** 

Determine the cause of the error code, and correct the problem.

Module

**IZTCUPD0** 

IZT2704E BAD STATUS CODE ON DLET CALL
TO DBIZT1 = xx

**Explanation** 

An invalid status code was returned by IMS from a DL/I call.

**System action** 

Processing ends.

User response

Determine the cause of the error code, and correct the problem.

Module

IZTCUPD0

IZT2705E BAD STATUS CODE ON ISRT CALL

TO DBIZT1 = xx

**Explanation** 

An invalid status code was returned by IMS from a DL/I call.

System action

Processing ends.

**User response** 

Determine the cause of the error code, and correct the problem.

Module

IZTCUPD0

IZT2706E INVALID VALUE FOR PROFILE TYPE

**Explanation** 

An invalid value was specified in the PROFILE TYPE field.

**System action** 

The input is ignored.

User response

Specify a valid value in the PROFILE TYPE field, and try again.

Module

**IZTCUPD0** 

IZT2707E PROFILE NAME IS ALREADY
DEFINED WITH DIFFERENT
PROFILE TYPE

**Explanation** 

The name specified in the PROFILE NAME field is already defined in the options data set with a different PROFILE TYPE.

**System action** 

The input is ignored.

Specify a new name in the PROFILE NAME field, or specify the correct PROFILE TYPE, and try again.

#### Module

IZTCUPD0

IZT2710I OPTIONS DATA SET RECORD HAS BEEN REPLACED

### **Explanation**

The updated record was successfully stored in the options data set. For the update to take effect, a table refresh must be performed.

# **System action**

Processing completes.

### **User response**

None. This message is informational.

#### Module

**IZTCUPD0** 

IZT2711I OPTIONS DATA SET RECORD HAS BEEN ADDED

#### **Explanation**

The record was successfully added to the options data set. For the update to take effect, a table refresh must be performed.

### **System action**

Processing completes.

### **User response**

None. This message is informational.

#### Module

**IZTCUPD0** 

IZT2712I OPTIONS DATA SET RECORD HAS BEEN DELETED

### **Explanation**

The record was successfully removed from the options data set. For the update to take effect, a table refresh must be performed.

### **System action**

Processing completes.

### **User response**

None. This message is informational.

### Module

**IZTCUPD0** 

IZT2721E INVALID OPTION SELECTED,
MUST BE 1 OR 2

### **Explanation**

An invalid option was entered. Valid options are 1 or 2.

### System action

No processing is attempted.

### User response

Enter one of the valid options.

#### Module

IZTCUPD0

IZT2722E BAD STATUS CODE ON GHU CALL
TO DBIZT1 = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTCUPD0

IZT2723E PROFILE NAME IS REQUIRED

#### **Explanation**

The Security Profile name is a required field, but it was not supplied.

No processing is attempted.

# **User response**

Enter a valid Security Profile name, and try again.

#### Module

**IZTCUPD0** 

IZT2731E INVALID SELECTION MADE, MUST BE "S" OR BLANK

### **Explanation**

An invalid selection code was entered. Valid line commands are a blank or an **S**.

### **System action**

No processing is attempted.

# **User response**

Enter a valid line command, and try again.

#### Module

IZTCUPD0

IZT2741E BAD STATUS CODE ON GHU CALL TO DBIZT1 =

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

IZT2751E INTERNAL ERROR OCCURRED, COMMAND XXX NOT IN TABLE

### **Explanation**

An IMS ETO Support internal error occurred.

### **System action**

Processing ends.

### User response

Clear the screen, and attempt processing from the beginning. Dump the IMS log records for transaction IZTRAN, and contact IBM Software Support.

#### Module

**IZTCUPD0** 

IZT2752E BAD STATUS CODE ON GHU CALL TO DBIZT1 =

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

IZT2753W INTERNAL ERROR OCCURRED,
COMMAND XXXXXXXX NOT FOUND
IN TABLE

#### **Explanation**

An IMS ETO Support internal error occurred.

# System action

Processing ends.

#### User response

Clear the screen and attempt processing from the beginning. Dump the IMS log records for transaction IZTRAN, and contact IBM Software Support.

#### Module

**IZTCUPD0** 

IZT2754W OPTION MUST BE AN A OR D
INVALID OPTION BYPASSED

An invalid line command was entered. Valid line commands are **A** and **D**.

# **System action**

No processing is attempted.

# **User response**

Enter a valid line command, and try again.

#### Module

**IZTCUPD0** 

IZT2755E BAD STATUS CODE ON DLET CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

IZT2756E BAD STATUS CODE ON REPL CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### System action

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

#### IZT2757E BAD STATUS CODE ON ISRT CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

IZT2758I RECORD HAS BEEN DELETED FROM DBIZT1

# **Explanation**

The record was deleted from the options data set. For the update to take effect, a table refresh must be performed.

# **System action**

Processing completes.

### **User response**

None. This message is informational.

#### Module

**IZTCUPD0** 

IZT2759I RECORD HAS BEEN REPLACED IN DBIZT1

# **Explanation**

The record was replaced in the options data set. For the update to take effect, you must perform a table refresh.

#### **System action**

Processing completes.

#### User response

None. This message is informational.

#### Module

**IZTCUPD0** 

### IZT2760I

RECORD HAS BEEN ADDED TO DBIZT1

# **Explanation**

The record was added to the options data set. For the update to take effect, a table refresh must be performed.

# **System action**

Processing completes.

# **User response**

None. This message is informational.

#### Module

**IZTCUPD0** 

#### **IZT2761I**

AN INVALID ROW COMMAND WAS ENTERED: x

#### **Explanation**

An invalid line command was entered.

### **System action**

No processing is attempted.

### **User response**

Enter a valid line command, and try again.

#### Module

**IZTCUPD0** 

IZT2764I BAD STATUS CODE ON GHU=xx

### **Explanation**

An error occurred while trying to read a record from the options data set. The status code that was returned (xx) indicates the reason for the failure.

# **System action**

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

#### IZT2765E

BAD STATUS CODE ON DLET=xx

### **Explanation**

An error occurred while trying to delete a record from the options data set. The status code that was returned (xx) indicates the reason for the failure.

# System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

#### IZT2766E

BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

# **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

### System action

The options data set I/O operation ends.

#### User response

Check the MVS syslog for additional messages. If any messages are found, take appropriate action based on those messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTCUPD0** 

**IZT2767E** 

AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

# **Explanation**

An invalid command was entered.

No processing is attempted.

# **User response**

Enter a valid line command, and try again.

#### Module

**IZTCUPD0** 

IZT2775E CONFLICTING ROW COMMANDS
HAVE BEEN ENTERED

# **Explanation**

Conflicting line commands were entered. Only one type of command can be entered at a time. You can enter multiple **D** (delete) commands, but you cannot enter different types of commands.

# **System action**

No processing is attempted.

### **User response**

Determine which commands you want, and remove the others.

#### Module

**IZTCUPD0** 

IZT2793E ERROR ENCOUNTERED ON GU
CALL TO SLU2 GLOBAL RECORD =
xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

### **Module**

**IZTCUPD0** 

IZT2794E ERROR ENCOUNTERED ON GN
CALL TO SLU2 NODE RECORD = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

IZT2796E ERROR ENCOUNTERED ON GN
CALL TO SLU2 NODE RECORD = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTCUPD0

IZT2798E ERROR ENCOUNTERED ON REPL OF DBIZT1 CONTROL RECORD, CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

#### System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

IZT2799E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE

= *xx* 

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTCUPD0** 

IZT2801E ETO SUPPORT SCD ANCHOR NOT FOUND imsid

# **Explanation**

An error occurred in the IMS ETO Support E/CSA search routine.

### **System action**

Processing ends.

### **User response**

Verify that IMS ETO Support is installed properly by checking the messages issued at IMS initialization.

#### Module

**IZTPPUE0** 

IZT2802E NON-ETOS TABLE ADDRESS IN SCDINTXP imsid

### **Explanation**

The address stored in field SCDINTXP is not that of the IMS ETO Support anchor control block.

#### **System action**

Processing ends.

### **User response**

Verify that IMS ETO Support is installed properly by checking the message issued at IMS initialization.

#### Module

**IZTPPUE0** 

IZT2803E ERROR LOCATING OTMA SCD imsid

# **Explanation**

An internal error occurred.

### System action

Processing ends.

#### **User response**

Contact IBM Software Support.

#### Module

**IZTPPUE0** 

IZT2804E USER DATA FORMATTING EXIT
(YDRU) NOT ETOS imsid

### **Explanation**

An internal error occurred. IMS ETO Support failed to dynamically set the hook for exit DFSYDRUO.

# **System action**

Processing ends.

#### User response

Contact IBM Software Support.

#### Module

IZTPPUE0

IZT2805E OTMA DESCRIPTOR TABLE NOT FOUND imsid

### **Explanation**

An internal error occurred.

### **System action**

Processing ends.

Contact IBM Software Support.

#### Module

**IZTPPUE0** 

IZT2806I OTMA INIT COMPLETE

FOR MEMBER

# **Explanation**

There should be an IZT2806I message issued for each OTMA member defined in IMS PROCLIB member DFSYDTx. This message indicates that IMS ETO Support uses its OTMA User Data Formatting user exit (IZTYDRU0) to route messages inserted to the alternate PCB destinations defined in the OTMA destination table.

# System action

IMS startup continues.

# User response

Verify that this message is displayed for each OTMA member defined in IMS PROCLIB member DFSYDTx.

If this message is not displayed for an OTMA member defined in IMS PROCLIB member DFSYDTx, verify that the OTMA member has a DRU= parameter specified.

If you do not use an OTMA User Data Formatting user exit for this OTMA member, you should code DRU=IEFBR14 for this OTMA member.

### **Module**

**IZTPPUE0** 

IZT2900E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

### **Explanation**

An invalid command was entered.

# **System action**

No processing is attempted.

#### User response

Enter a valid command, and try again.

#### Module

**IZTDLST0** 

IZT2970E ERROR ENCOUNTERED IN ETO-SUPPORT

# **Explanation**

IMS ETO Support encountered an error while trying to locate its E/CSA tables.

### System action

Processing ends.

### **User response**

Check IMS start up messages, and make sure IMS ETO Support is installed correctly.

#### Module

**IZTDLST0** 

IZT2971W DEVICE DEFAULT NOT DEFINED IN TABLE

#### **Explanation**

IMS ETO Support encountered an error while trying to locate one of its E/CSA tables.

### **System action**

Processing ends.

#### User response

Check IMS start up messages, and make sure IMS ETO Support is installed correctly.

#### Module

**IZTDLST0** 

IZT2972E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

#### **Explanation**

An invalid command was entered.

# System action

No processing is attempted.

Enter a valid command, and try again.

#### Module

IZTDLST0

IZT3101E AN INVALID COMMAND HAS BEEN ENTERED: x

# **Explanation**

An invalid value (x) was specified on the Command line

### System action

The input is ignored.

### **User response**

Remove the invalid value from the Command line, and try again.

#### Module

**IZTDUPD0** 

IZT3102I INVALID OPTION SELECTED FOR LOGON PROCESS

#### **Explanation**

An invalid option was selected for the LOGON PROCESS.

### **System action**

No processing is attempted.

#### **User response**

Select one of the listed options, and try again.

#### Module

IZTDUPD0

IZT3103I INVALID OPTION SELECTED FOR XXXXXXXX PROCESS

#### **Explanation**

An invalid option was selected for either the DFS3649 or DFS3650 process.

### System action

No processing is attempted.

#### User response

Select one of the listed options, and try again.

#### Module

IZTDUPD0

IZT3104I MOD REQUIRED IF OPTION 5
SELECTED IN XXXXXXX PROCESS

# **Explanation**

Option 5 was selected for either the DFS3649 or the DFS3650 process, but the MFS MOD name was not supplied. The MFS MOD name is required for option 5.

### System action

No processing is attempted.

### **User response**

Select one of the other options, leave a blank, or add an MFS MOD name.

### Module

**IZTDUPD0** 

IZT3105I MOD NOT ALLOWED UNLESS
OPTION 5 SELECTED IN XXXXXXXX
PROCESS

### **Explanation**

For either the DFS3649 or DFS3650 process, an MFS MOD name was supplied but option 5 was not selected. option 5 must be selected if an MFS MOD name is supplied.

#### System action

No processing is attempted.

### User response

Either remove the MFS MOD name, or select option 5.

#### Module

IZTDUPD0

IZT3106I INVALID VALUE SELECTED FOR LTERM/USER NAMING OPTION

#### **Explanation**

An invalid value was selected for LTERM/USER NAMING OPTIONS.

No processing is attempted.

# **User response**

Select one of the listed options, and try again.

#### Module

**IZTDUPD0** 

IZT3107I INVALID CHARACTER DETECTED IN ASOT

### **Explanation**

An invalid character was detected in the ASOT field. Only numeric characters or blanks are allowed in this field.

### **System action**

No processing is attempted.

### **User response**

Correct the ASOT value.

#### Module

IZTDUPD0

IZT3108I INVALID VALUE FOR ASOT, MUST
BE XXXXXXXX

#### **Explanation**

An invalid value was requested in the ASOT field.

### **System action**

No processing is attempted.

#### **User response**

Correct the ASOT value.

#### Module

IZTDUPD0

IZT3109I INVALID CHARACTER DETECTED IN ALOT

### **Explanation**

An invalid character was detected in the ALOT field. Only numeric characters or blanks are allowed in this field.

### **System action**

No processing is attempted.

### **User response**

Correct the ALOT value.

#### Module

**IZTDUPD0** 

IZT3110I INVALID VALUE FOR ALOT, MUST BE XXXXXXXX

#### **Explanation**

An invalid value was requested in the ALOT field.

### System action

No processing is attempted.

### **User response**

Correct the ALOT value.

#### Module

IZTDUPD0

IZT3111E INVALID VALUE SELECTED FOR "LTERM NAMING OPTIONS"

#### **Explanation**

An invalid value was specified for the LTERM NAMING OPTIONS field.

### System action

The input is ignored.

### User response

Specify a valid value for the LTERM NAMING OPTIONS and try again.

#### Module

IZTDUPD0

IZT3112E INVALID VALUE SPECIFIED FOR "SPQB NAMING OPTIONS"

### **Explanation**

An invalid value was specified in the SPQB (USER) NAMING OPTIONS field.

The input is ignored.

# **User response**

Correct the value specified in the USER (SPQB) NAMING OPTIONS field, and try again.

#### Module

IZTDUPD0

IZT3113E INVALID VALUE SPECIFIED FOR
"USER RECORD FOR SIGNON"

### **Explanation**

You have specified an invalid value in the "USER RECORD FOR SIGNON" field.

# System action

No processing is attempted.

### **User response**

Enter a valid option in the "USER RECORD FOR SIGNON" field and try the operation again.

#### Module

IZTDUPD0

IZT3114E INVALID VALUE SPECIFIED FOR "TIME-OF-DAY VERIFICATION"

# **Explanation**

An invalid value was specified in the "TIME-OF-DAY VERIFICATION" field.

# **System action**

The options data set is not updated.

#### **User response**

Enter a valid value in the "TIME-OF-DAY VERIFICATION" field and try the operation again.

#### Module

IZTDUPD0

IZT3115E INVALID VALUE SPECIFIED FOR
"3649A RC WITH USER MOD"

# **Explanation**

An invalid value was specified in the IZT RC FOR DFS3649A W/USER MOD field.

# **System action**

The input is ignored.

### User response

Correct the value specified in the IZT RC FOR DFS3649A W/USER MOD field, and try again.

#### Module

**IZTDUPD0** 

IZT3116E INVALID VALUE SPECIFIED FOR
"BYPASS SEC WHEN USERID =
NODE"

### **Explanation**

An invalid value was specified in the 'BYPASS SEC WHEN USERID = NODE' field.

# System action

The options data set is not updated.

#### User response

Specify a valid value in the 'BYPASS SEC WHEN USERID = NODE' field and try the operation again.

#### Module

IZTDUPD0

IZT3117E TRX NOT ALLOWED UNLESS
OPTION 7 SELECTED IN DFS3650
PROCESS

# **Explanation**

A transaction name has been specified, but option 7 has not also been selected for the DFS3650I options.

# System action

No update takes place.

### User response

Specify 7 for the DFS3650I option, or remove the transaction name.

#### Module

**IZTDUPD0** 

IZT3118E TRX NAME NOT ALLOWED WHEN USER MOD SELECTED FOR

DFS3650

### **Explanation**

Both a user MFS mod name and DFS3650I Transaction Replacement name have been specified for DFS3650 options. However the transaction name cannot be specified when the user mod name has already been specified.

# System action

No update takes place.

### **User response**

Remove the transaction name if the user mod name is the required option.

#### Module

IZTDUPD0

IZT3119E USER MOD NOT ALLOWED WHEN TRX NAME SELECTED FOR

DFS3650

### **Explanation**

Both a user MFS mod name and DFS3650I Transaction Replacement name have been specified for DFS3650 options. However the user mod name cannot be specified when the DFS3650I Transaction Replacement name has been specified.

# **System action**

No update takes place.

### User response

Remove the user mod name if the DFS3650I Transaction Replacement name is the required option.

#### Module

IZTDUPD0

IZT3120I BAD STATUS CODE ON REPL CALL
TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTDUPD0** 

IZT3121E TRX NAME REQUIRED IF OPTION 7 SELECTED FOR DFS3650

### **Explanation**

The DFS3650I Transaction Replacement name has been specified for the DFS3650 option, however option 7 must also be specified.

### **System action**

No update takes place.

#### User response

Specify option 7 if the DFS3650I Transaction Replacement name is the required option.

#### Module

**IZTDUPD0** 

IZT3122E INVALID VALUE SPECIFIED FOR "LU DEFINITION REQUIRED"

# **Explanation**

You have specified an invalid value for the **LU DEFINITION REQUIRED** field.

#### System action

No processing is attempted.

#### User response

Enter a valid option in the **LU DEFINITION REQUIRED** field, and try the operation again.

#### Module

IZTDUPD0

**IZT3130I** 

INVALID DEVICE TYPE SELECTION

# **Explanation**

An invalid selection was made for the DEVICE TYPE option.

# **System action**

No processing is attempted.

# **User response**

Enter a valid DEVICE TYPE option, and try again.

#### Module

IZTDUPD0

IZT3131I

INVALID VALUE SUPPLIED FOR MSGDEL OPTION

# **Explanation**

An invalid option was selected for the MSGDEL OPTIONS function.

# System action

No processing is attempted.

### **User response**

Enter a valid MSGDEL option or blank.

#### Module

IZTDUPD0

IZT3132I INVALID VALUE SUPPLIED FOR RESPONSE OPTION

### **Explanation**

An invalid option was selected for the RESPONSE OPTIONS function.

# **System action**

No processing is attempted.

#### **User response**

Enter a valid selection for RESPONSE OPTIONS, or leave it blank.

#### Module

**IZTDUPD0** 

IZT3143I BAD STATUS CODE ON GHU TO DBIZT1 = xx

### **Explanation**

An error occurred while trying to read a record from the options data set. The status code that was returned (xx) indicates the reason for the failure.

### **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTDUPD0** 

IZT3160E BAD STATUS CODE ON DLET CALL
= xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

### Module

IZTDUPD0

IZT3161E BAD STATUS CODE ON ISRT CALL
= xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

#### **System action**

Processing ends.

Determine the cause of the error code, and correct the problem.

#### Module

IZTDUPD0

IZT3162E BAD STATUS CODE ON REPL CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTDUPD0** 

IZT3163E BAD STATUS CODE ON GHU CALL =

### **Explanation**

An error occurred while trying to read a record from the options data set. The status code that was returned (xx) indicates the reason for the failure.

# **System action**

Processing ends.

# **User response**

Determine the cause of the failure, and correct the problem.

#### Module

IZTDUP0

IZT3167I PASSSIZE NOT ALLOWED UNLESS DFS3649 PROCESS 3 SPECIFIED

#### **Explanation**

A DFS3649 ETOS PASSSIZE option was specified, but a selection other than 3 was entered for DFS3649.

# **System action**

No processing is attempted.

### **User response**

Either select option 3 for DFS3649, or remove the DFS3649 ETOS PASSSIZE option.

### Module

IZTDUPD0

IZT3168I INVALID OPTION SELECTED FOR DFS3649 PASSSIZE FIELD

### **Explanation**

The specified DFS3649 ETOS PASSSIZE option is invalid.

### System action

No processing is attempted.

# **User response**

Select one of the listed options, and try again.

#### Module

IZTDUPD0

IZT3171I RECORD ADDED TO DBIZT1

### **Explanation**

All entered fields passed edit checking; this record was added to the options data set. Before the changes actually take effect, a table refresh is required.

#### System action

Processing completes.

#### User response

None. This message is informational.

#### Module

IZTDUPD0

IZT3172I RECORD REPLACED IN DBIZT1

### **Explanation**

All entered fields passed edit checking; this record was replaced in the options data set. Before the changes actually take effect, a table refresh is required.

Processing completes.

# **User response**

None. This message is informational.

#### Module

IZTDUPD0

IZT3173E BAD STATUS CODE ON GHU CALL =

### **Explanation**

An error occurred while trying to read a record from the options data set. The status code that was returned (xx) indicates the reason for the failure.

### **System action**

Processing ends.

### **User response**

Determine the reason for the failure, and correct the problem.

#### Module

IZTDUPD0

IZT3174E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

# **Explanation**

An error occurred processing the options data set. The MVS syslog probably has additional error messages. The return code (xxxxxxxxx) is of value only if you need help from IBM Software Support.

# **System action**

The options data set I/O operation ends.

#### **User response**

Check the MVS syslog for additional messages. If any messages are found, take appropriate action based on those messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTDUPD0** 

IZT3175E INVALID VALUE SPECIFIED FOR SRMDEF

# **Explanation**

An incorrect value was specified in the SRMDEF field. Valid values are 0, 1, 2, or blank.

# System action

Processing ends.

#### User response

Specify a valid value, and continue.

### Module

IZTDUPD0

IZT3176E INVALID VALUE SPECIFIED FOR FASTPATH RECOVERY

### **Explanation**

An incorrect value was specified in the FASTPATH RECOVERY field. Valid values are Y, N, or blank.

#### **System action**

Processing ends.

### User response

Specify a valid value, and continue.

#### Module

**IZTDUPD0** 

IZT3177E INVALID VALUE SPECIFIED FOR CONVERSATION RECOVERY

### **Explanation**

An incorrect value was specified in the CONVERSATION RECOVERY field. Valid values are Y, N, or blank.

### System action

Processing ends.

#### User response

Specify a valid value, and continue.

#### Module

IZTDUPD0

IZT3178E INVALID VALUE SPECIFIED FOR SIGNON W/RM AFFIN

# **Explanation**

An incorrect value was specified in the ALLOW SIGNON W/RM AFFIN field. Valid values are Y, N, or blank.

# **System action**

Processing ends.

# **User response**

Specify a valid option, and continue.

#### Module

IZTDUPD0

IZT3179E BAD STATUS CODE ON GHU CALL =

### **Explanation**

An error occurred while trying to read a record from the options data set. The status code that was returned (xx) indicates the reason for the failure.

### **System action**

Processing ends.

### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTDUP0

IZT3180E BAD STATUS CODE ON REPL CALL
= xx

### **Explanation**

An error occurred while trying to replace a record in the options data set. The status code that was returned (xx) indicates the reason for the failure.

### **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTDUPD0

IZT3181E BAD STATUS CODE ON ISRT CALL
= xx

# **Explanation**

An error occurred while trying to insert a record into the options data set. The status code that was returned (xx) indicates the reason for the failure.

# **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTDUPD0** 

IZT3182E FASTPATH RECOVERY=Y INVALID
WHEN SRMDEF=0

#### **Explanation**

Conflicting parameters were specified. FASTPATH RECOVERY is not valid with SRMDEF= none.

#### **System action**

Processing ends.

#### User response

Correct the parameter conflict, and continue.

#### Module

**IZTDUPD0** 

IZT3183E CONVERSATION RECOVERY=Y
INVALID WHEN SRMDEF=0

### **Explanation**

Conflicting parameters were specified. CONVERSATION RECOVERY is not valid with SRMDEF= none.

Processing ends.

# **User response**

Correct the parameter conflict, and continue.

#### Module

IZTDUPD0

IZT3184I NO NON-DEFAULT OPTIONS SPECIFIED, RECORD DELETED

# **Explanation**

No options other than the default values have been specified for the SLU2/3270 device default record.

# **System action**

Because only default values were specified for the SLU2/3270 device default record, the record is deleted from the IMS ETO Support options data set.

### **User response**

None. This message is informational.

#### Module

IZTDUPD0

IZT3199E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTDUPD0

IZT3200E UNABLE TO LOCATE E/CSA ANCHOR POINT

### **Explanation**

An error occurred in the IMS ETO Support E/CSA search routine.

### **System action**

Processing ends.

### **User response**

Verify that IMS ETO Support is installed properly by checking the messages issued at IMS initialization.

#### Module

**IZTGLST0** 

IZT3201E IMSID SECTION OF ETO-SUPPORT TABLES NOT FOUND

### **Explanation**

An error occurred in the IMS ETO Support E/CSA search routine.

### System action

Processing ends.

#### User response

Verify that IMS ETO Support is installed properly by checking the messages issued at IMS initialization.

#### Module

IZTGLST0

IZT3202E OPTIONS DATA SET SECTION OF ETO/S TABLES NOT FOUND

### **Explanation**

An error occurred in the E/CSA search for the IMS ETO Support tables for this options data set.

#### System action

Processing ends.

#### User response

Review the IMS ETO Support initialization messages from IMS restart. Correct any errors that were encountered.

Module

**IZTGLST0** 

IZT3203W AN INVALID COMMAND HAS BEEN

**ENTERED:** xxxxxxxx

Module

**IZTGUPD0** 

IZT3302I INVALID OPTION SELECTED FOR

**LOGON PROCESS** 

**Explanation** 

An invalid command was entered.

**System action** 

No processing is attempted.

**User response** 

Enter a valid command, and try again.

Module

**IZTGLST0** 

IZT3204E AN INVALID OPTION SPECIFIED

ON COMMAND LINE

**Explanation** 

An invalid value was specified on the Command line.

**System action** 

The input is ignored.

User response

Remove the invalid value from the Command line, and try again.

Module

**IZTGLST0** 

IZT3301I INVALID STATUS CODE ON CALL

TO DBIZT1 = xx

**Explanation** 

An invalid status code was returned by IMS from a DL/I call.

**System action** 

Processing ends.

**User response** 

Determine the cause of the error code, and correct the problem.

**Explanation** 

An invalid selection was made for the LOGON

PROCESS.

System action

No processing is attempted.

**User response** 

Select from one of the listed options, and try again.

Module

**IZTGUPD0** 

IZT3303I INVALID OPTION SELECTED FOR

**XXXXXXX** PROCESS

**Explanation** 

An invalid selection was made for either the DFS3649 or DFS3650 process.

**System action** 

No processing is attempted.

**User response** 

Select from one of the listed options, and try again.

Module

**IZTGUPD0** 

IZT3304I MOD REQUIRED IF OPTION 5
SELECTED IN XXXXXXX PROCESS

**Explanation** 

option 5 was selected for either the DFS3649 or DFS3650 process, but the respective process did not have a USER MOD supplied.

System action

No processing is attempted.

Either select another listed option, or supply a USER MOD name.

#### Module

**IZTGUPD0** 

IZT3305I MOD NOT ALLOWED UNLESS
OPTION 5 SELECTED IN XXXXXXX
PROCESS

## **Explanation**

A USER MOD name was supplied for either the DFS3649 or DFS3650 process, but a selection other than option 5 was entered.

## **System action**

No processing is attempted.

### **User response**

Either select option 5, or remove the USER MOD name.

#### Module

**IZTGUPD0** 

IZT3306I INVALID VALUE SELECTED FOR LTERM/USER NAMING OPTION

### **Explanation**

An invalid selection was entered for the LTERM/USER NAMING OPTIONS.

### **System action**

No processing is attempted.

### **User response**

Select from one of the listed options, and try again.

### Module

**IZTGUPD0** 

IZT3307I INVALID CHARACTER DETECTED IN ASOT

### **Explanation**

An invalid character was detected in the ASOT field. Only numeric characters or blanks are allowed in this field.

## **System action**

No processing is attempted.

## **User response**

Correct the ASOT value.

#### Module

**IZTGUPD0** 

IZT3308I INVALID VALUE FOR ASOT, MUST BE xxxxxxxx

## **Explanation**

An invalid value was requested in the ASOT field.

## System action

No processing is attempted.

### **User response**

Correct the ASOT value.

### Module

**IZTGUPD0** 

IZT3309I INVALID CHARACTER DETECTED IN ALOT

### **Explanation**

An invalid character was detected in the ALOT field. Only numeric characters or blanks are allowed in this field.

### **System action**

No processing is attempted.

### User response

Correct the ALOT value.

#### Module

**IZTGUPD0** 

IZT3310I INVALID VALUE FOR ALOT, MUST BE XXXXXXXX

### **Explanation**

An invalid value was requested in the ALOT field.

No processing is attempted.

## **User response**

Correct the ALOT value.

#### Module

**IZTGUPD0** 

IZT3311I INVALID VALUE FOR SIGNOFF CLEANUP MUST BE Y OR N

## **Explanation**

An invalid value was requested in the SIGNOFF CLEANUP option.

## **System action**

No processing is attempted.

## **User response**

Select from the listed options, and try again.

#### Module

IZTGUPD0

IZT3312I INVALID VALUE FOR PROCESS
STATIC TERMINAL, MUST BE Y OR
N

### **Explanation**

An invalid value was requested in the PROCESS STATIC TERMINALS option.

### **System action**

No processing is attempted.

### **User response**

Select from the listed options, and try again.

### Module

**IZTGUPD0** 

IZT3313E INVALID VALUE FOR BYPASS
DEQUEUE (STATIC), MUST BE Y OR
N

## **Explanation**

A value other than Y (yes) or N (no) was specified for BYPASS DEQUEUE (STATIC) option.

## **System action**

The input is ignored.

## **User response**

Specify either Y (yes) or N (no) and try again.

#### Module

**IZTGUPD0** 

IZT3314E INVALID VALUE FOR --- BYPASS
DEQUEUE (DYNAMIC), MUST BE Y
OR N

## **Explanation**

A value other than Y (yes) or N (no) was specified for the BYPASS DEQUEUE (DYNAMIC) option.

## System action

The input is ignored.

## **User response**

Specify either Y (yes) or N (no) and try again.

#### Module

**IZTGUPD0** 

IZT3320I BAD STATUS CODE ON REPL CALL
TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### System action

Processing ends.

## User response

Determine the cause of the error code, and correct the problem.

#### Module

**IZTGUPD0** 

IZT3321I BAD STATUS CODE ON ISRT CALL TO DBIZT1 = xx IZT3325I GLOBAL OPTION RECORD UPDATED ON DBIZT1

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code and correct the problem.

#### Module

**IZTGUPD0** 

#### IZT3322I RECORD SUCCESSFULLY ADDED

## **Explanation**

The updates have been successfully added to the options data set.

## **System action**

Processing successfully completes.

### **User response**

None. This message is informational.

#### Module

**IZTGUPD0** 

IZT3323I	RECORD SUCCESSFULLY
	REPLACED

### **Explanation**

The updates have been successfully added to the options data set.

### **System action**

Processing successfully completes.

### User response

None. This message is informational.

### Module

**IZTGUPD0** 

## **Explanation**

All input successfully passed edit checking.

## **System action**

The IMS ETO Support global options member was replaced in the options data set.

### **User response**

Before options take effect, IMS must be restarted or a table refresh must be performed.

### Module

**IZTGUPD0** 

IZT3326W AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

## **Explanation**

An invalid command was entered.

### System action

No processing is attempted.

### **User response**

Enter a valid command, and try again.

#### Module

**IZTGUPD0** 

IZT3327E INVALID OPTION FOR TABLE SEARCH SEQUENCE

### **Explanation**

An incorrect value was entered for the TABLE Search Sequence field.

### System action

Processing ends.

### User response

Enter a valid option in the TABLE Search Sequence field and try the transaction again.

**IZTGUPD0** 

IZT3328E INVALID OPTION FOR USERID SUFFIXING

## **Explanation**

An incorrect value was entered in the USERID SUFFIXING field.

## **System action**

Processing ends.

## **User response**

Enter a valid option in the USERID SUFFIXING field and try the transaction again.

#### Module

**IZTGUPD0** 

IZT3329E INVALID VALUE FOR "ALTERNATE ALOT=0"

### **Explanation**

A value other than Y (yes) or N (no) was specified for the ALTERNATE ALOT=0 option.

### **System action**

The input is ignored.

### **User response**

Specify either Y (yes) or N (no), and try again.

### **Module**

**IZTGUPD0** 

IZT3330E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

### **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

### **System action**

The options data set I/O operation ends.

### **User response**

Check the MVS syslog for additional messages. If additional messages are found, take appropriate action based on the messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTGUPD0** 

IZT3331E INVALID VALUE SPECIFIED FOR "LU03 LOGON"

## **Explanation**

An invalid value was specified in the LU03 LOGON field. Valid values are Y or N.

## System action

Processing ends.

### User response

Correct the invalid field, and continue.

#### Module

IZTGUPD0

IZT3332E INVALID OPTION SPECIFIED, SELECT FROM LISTED OPTIONS

### **Explanation**

A value other than one of the listed options has been specified.

### System action

No processing is attempted.

### User response

Specify one of the listed options, and press Enter.

## Module

**IZTGUPD0** 

IZT3333E INVALID VALUE FOR DYNAMIC TRANSACTIONS, MUST BE "Y" OR "N"

## **Explanation**

An invalid value was specified for the DYNAMIC TRANSACTION option. Valid values are a Y or N.

## **System action**

Processing ends.

### **User response**

Correct the invalid value, and continue.

#### Module

**IZTGUPD0** 

IZT3334E INVALID VALUE FOR DISABLE VGR FOR ISC, MUST BE "Y" OR "N"

### **Explanation**

An invalid value was specified for the DISABLE ISC FOR VGR option. Valid values are Y or N.

## **System action**

Processing ends.

## **User response**

Correct the invalid value, and continue.

### Module

**IZTGUPD0** 

IZT3335E INVALID VALUE SPECIFIED FOR SRMDEF, MUST BE "0", "1" OR "2"

### **Explanation**

An invalid value was specified for SRMDEF. Valid values are 0, 1, 2, or blank.

### **System action**

Processing ends.

### **User response**

Correct the invalid values, and continue.

### Module

**IZTGUPD0** 

IZT3336E INVALID VALUE SPECIFIED FOR FP RECOVERY, MUST BE "Y" OR "N"

## **Explanation**

An invalid value was specified for FP RECOVERY. Valid values are Y or N.

## **System action**

Processing ends.

### User response

Correct the invalid value, and continue.

#### Module

IZTGUPD0

IZT3337E INVALID SPECIFICATION FOR CONV RECOVERY, MUST BE "Y" OR

"N"

### **Explanation**

An invalid value was specified for CONVERSATION RECOVERY. Valid values are Y or N.

## **System action**

Processing ends.

### User response

Correct the invalid value, and continue.

#### Module

**IZTGUPD0** 

IZT3338E INVALID VALUE SPECIFIED FOR

 ${\bf SIGNON} \ {\bf W/RM} \ {\bf AFFIN, \, MUST \, BE}$ 

"Y" OR "N"

## **Explanation**

An invalid value was specified for ALLOW SIGNON W/RM AFFIN. Valid values are Y or N.

### System action

Processing ends.

### User response

Correct the invalid value, and continue.

#### Module

**IZTGUPD0** 

IZT3339E INVALID VALUE SPECIFIED FOR STSN RECOVERY, MUST BE "Y" OR

"N"

## **Explanation**

A value other than Y (yes) or N (no) was specified for STSN RECOVERY option.

## **System action**

The input is ignored.

## **User response**

Specify either Y (yes) or N (no) and try again.

#### Module

**IZTGUPD0** 

IZT3340E INVALID VALUE LU03 LOGON OPTION, MUST BE "1", "2" OR "3"

## **Explanation**

You have specified an invalid value in the LU03 LOGON OPTIONS field.

## System action

No processing is attempted.

#### **User response**

Enter a valid option in the LU03 LOGON OPTIONS field and try the operation again.

#### Module

**IZTGUPD0** 

IZT3341E INVALID VALUE SPECIFIED FOR "DFS3650 WHEN USER MOD USED"

### **Explanation**

An incorrect value was specified in the field titled DFS3650 WHEN USER MOD USED. Valid values are Y or N.

## System action

Processing is bypassed.

### User response

Enter a valid value and try the failed operation again.

#### Module

**IZTGUPD0** 

IZT3342E A RESERVED VALUE WAS
ENTERED IN "SIGNON FAILURE
LOG REC ID"

## **Explanation**

An invalid value was specified in the SIGNON FAILURE LOGREC ID field. Values in this field must be in the hexadecimal range of D0-FF.

## System action

The input is ignored.

## **User response**

Correct the value specified in the SIGNON FAILURE LOGREC ID field, and try again.

### Module

**IZTGUPD0** 

IZT3343E A NON-HEX CHARACTER WAS ENTERED IN "SIGNON FAILURE LOG REC ID"

## **Explanation**

An invalid value was specified in the SIGNON FAILURE LOGREC ID field. Values in this field must be in the hexadecimal range of D0-FF.

## **System action**

The input is ignored.

### User response

Correct the value specified in the SIGNON FAILURE LOGREC ID field, and try again.

#### Module

IZTGUPD0

IZT3344E INVALID VALUE SPECIFIED FOR "DISABLE STATIC ISC SHR"

### **Explanation**

A value other than Y (yes) or N (no) was specified for DISABLE STATIC ISC option.

The input is ignored.

## **User response**

Specify either Y (yes) or N (no) and try again.

### Module

**IZTGUPD0** 

IZT3345E CANNOT SPECIFY BOTH NODE OFFSET AND NODE KEYWORD

## **Explanation**

Values for NODE OFFSET and NODE KEYWORD cannot both be specified. Only a value for NODE OFFSET or a value for NODE KEYWORD can be specified, but not both.

## **System action**

No update takes place.

## **User response**

Either specify a value for NODE OFFSET (leaving NODE KEYWORD blank) or specify a value for NODE KEYWORD (leaving NODE OFFSET blank). Leaving both NODE OFFSET and NODE KEYWORD as blanks is also acceptable.

#### Module

IZTGUPD0

IZT3346E NON-NUMERIC CHARACTER IN NODE OFFSET

### **Explanation**

A value has been specified for NODE OFFSET, however the value specified did not contain 2 numeric digits.

### **System action**

No update takes place.

### **User response**

Either specify 2 numeric digits for NODE OFFSET, or leave the value blank.

### Module

**IZTGUPD0** 

# IZT3347E CANNOT SPECIFY BOTH OFFSET AND KEYWORD FOR XXXXXXXX

## **Explanation**

Values for both OFFSET and KEYWORD for any specific *xxxxxxxx* cannot be specified. Only a numeric value for OFFSET or a character value for KEYWORD can be specified, but not both.

## **System action**

No update takes place.

## **User response**

Possible responses to the problem include:

- Leave both values for OFFSET and KEYWORD as blanks
- Specify only a numeric value for OFFSET (leaving KEYWORD as blanks)
- Specify a character value for KEYWORD (leaving OFFSET as blanks)

#### Module

**IZTGUPD0** 

IZT3348E NON-NUMERIC CHARACTER IN XXXXXXXXX OFFSET

### **Explanation**

A non-numeric value was entered in the OFFSET field designated by xxxxxxxx.

## System action

The input is ignored.

### User response

■ Enter numeric data in the OFFSET field, and try again.

#### Module

**IZTGUPD0** 

IZT3349E INVALID VALUE SPECIFIED FOR XXXXXXXX

## **Explanation**

A value other than Y or N has been specified for the process user data option for SLU2 devices.

No update takes place.

## **User response**

Specify either Y or N for the indicated prompt.

### Module

**IZTGUPD0** 

IZT3350E INVALID VALUE SPECIFIED FOR USERDATA NOT PRESENT

**OPTIONS** 

## **Explanation**

An invalid value was specified in the SLU2/3270 OPTIONS IF USERDATA NOT PRESENT field.

## **System action**

The input is ignored.

## **User response**

Specify a valid value in the SLU2/3270 OPTIONS IF USERDATA NOT PRESENT field, and try again.

#### Module

**IZTGUPD0** 

IZT3351I UPD DONE, BUT REJECT LOGON VALID ONLY FOR ETOS PROCESS USERDATA

**Explanation** 

The SLU2/3270 USERDATA PROCESSING OPTIONS field specified an option other than ETO SUPPORT PROCESSES USERDATA, and the SLU2/3270 OPTIONS IF USERDATA NOT PRESENT field specified REJECT LOGON.

Option REJECT LOGON can occur only when IMS ETO Support processes VTAM USERDATA.

## **System action**

The specified values are saved in the options data set, but logons are not rejected due to lack of VTAM USERDATA.

### **User response**

If logons should be rejected due to lack of VTAM USERDATA, specify ETO SUPPORT PROCESSES USERDATA, and try again.

### Module

**IZTGUPD0** 

IZT3352E INVALID VALUE SPECIFIED FOR "SEARCH PRINTER LTERM TABLE"

## **Explanation**

A value other than Y (yes) or N (no) was specified for SEARCH PRINTER LTERM TABLE option.

## System action

The input is ignored.

#### User response

Specify either Y (yes) or N (no) and try again.

#### Module

**IZTGUPD0** 

IZT3353E INVALID VALUE SPECIFIED FOR "DFSYPRXO RETURN CODE"

### **Explanation**

A value other than 1 or 2 was specified for DFSYPRXO RETURN CODE option.

### **System action**

The input is ignored.

### User response

Specify either 1 or 2 and try again.

#### Module

**IZTGUPD0** 

IZT3367I PASSSIZE NOT ALLOWED UNLESS DFS3649 PROCESS 3 SPECIFIED

### **Explanation**

A DFS3649 ETOS PASSSIZE option was specified, but a selection other than 3 was entered for DFS3649.

### **System action**

No processing is attempted.

### User response

Either select option 3 for DFS3649, or remove the DFS3649 ETOS PASSSIZE option.

**IZTGUPD0** 

IZT3368I INVALID OPTION SELECTED FOR DFS3649 PASSSIZE FIELD

## **Explanation**

The specified DFS3649 ETOS PASSSIZE option is invalid.

## **System action**

No processing is attempted.

## **User response**

Select one of the listed options, and try again.

### Module

**IZTGUPD0** 

IZT3501I IZTCTRNO INTERCEPT ESTABLISHED

## **Explanation**

The hook used for IMS ETO Support Enhanced Transaction Verification has been successfully activated.

### **System action**

IMS startup continues.

### **User response**

None. This message is informational.

#### Module

**IZTSECIO** 

IZT4001E VSAM MODCB ERROR
R0=xxxxxxxxx, R15=xxxxxxxxx

### **Explanation**

A VSAM MODCB macro was issued for the DBIZT1 options data set and returned with a nonzero return code. The return code (R15) and subcode (R0) are shown.

### **System action**

If this error occurs in the IMS control region, the IMS control region abends with a U4001 abend. If

this error occurs in a batch table refresh, the update process ends abnormally.

## **User response**

Make sure that the DBIZT1 options data set contains data. Contact IBM Software Support for further help.

### Module

IZTINTXL, IZTLOAD2

IZT4002E VSAM POINT ERROR RPLFDBWD=xxxxxxxxx

## **Explanation**

A VSAM POINT macro was issued for the DBIZT1 options data set and returned an unexpected return code. The RPL feedback word is shown in the message.

## System action

If this error occurs in the IMS control region, the IMS control region abends with a U4001 abend. If this error occurs in a batch table refresh, the update process ends abnormally.

## **User response**

See DFSMS Macro Instructions for Data Sets for a description of the fields within the RPL feedback word. Contact IBM Software Support for further help.

#### Module

IZTINTXL, IZTLOAD2

IZT4003E VSAM GET ERROR RPLFDBWD=xxxxxxxxx

### **Explanation**

A VSAM GET macro was issued for the DBIZT1 options data set and returned an unexpected return code. The RPL feedback word is shown in the message.

### System action

If this error occurs in the IMS control region, the IMS control region abends with a U4001 abend. If this error occurs in a batch table refresh, the update process ends abnormally.

See *DFSMS Macro Instructions for Data Sets* for a description of the fields within the RPL feedback word. Contact IBM Software Support for further help.

#### Module

IZTINTXL, IZTLOAD2

IZT4004E

**DBIZT1 AUTH REQ R15=** 

## **Explanation**

SAF rejected authorization to the IMS ETO Support options data set (DBIZT1).

## **System action**

The batch job terminates.

## User response

Additional error message might be present in the z/OS log. Correct the reason for the SAF rejection of authorization to the options data set, and try again.

#### Module

**IZTLIST** 

IZT4005E

INTERNAL ERROR LOADING ECSA TABLES - RC=xx

### **Explanation**

An internal error occurred while loading the IMS ETO Support ECSA tables. For RC=01, an unexpected function code was passed to subroutine READTBL. For RC=02, an incorrect record count occurred during the ECSA table load process.

## **System action**

If this error occurs in the IMS control region, the IMS control region abends with a U4001 abend. If this error occurs in a batch table refresh, the update process ends abnormally.

#### **User response**

Contact IBM Software Support.

#### Module

IZTINTXL, IZTLOAD2

IZT4006E

ERROR LOADING SECURITY TABLE
- HEADER NOT FIRST RECORD

## **Explanation**

During security table load, the security header record was not the first security record encountered.

## System action

If this error occurs in the IMS control region, the IMS control region abends with a U4001 abend. If this error occurs in a batch table refresh, the update process ends abnormally.

### User response

Make sure that the DBIZT1 options data set contains a security header record (key X'E2000000000000000000). Contact IBM Software Support for further help.

### Module

IZTINTXL, IZTLOAD2

IZT4007E

ERROR SLU1 RECORD aaaaaaaa FOUND WHEN LTERM REQUESTED bbbbbbbbb

## **Explanation**

While retrieving the LTERM record in the DBIZT1 options data set, an unexpected record was retrieved. LTERM record *bbbbbbbb* was requested, but VSAM returned LTERM record *aaaaaaaa*.

## System action

If this error occurs in the IMS control region, the IMS control region abends with a U4001 abend. If this error occurs in a batch table refresh, the update process ends abnormally.

### User response

Contact IBM Software Support for further help.

#### Module

IZTINTXL, IZTLOAD2

**IZT4008E** 

NODE aaaaaaaa NOT FOUND FOR LTERM bbbbbbbbb

## **Explanation**

While processing SLU1 LTERM record *bbbbbbbb*, the SLU1 record associated with this LTERM record was not found in the DBIZT1 options data set.

LTERM name bbbbbbbb is unavailable.

## **User response**

Verify that the *bbbbbbbb* LTERM record in the DBIZT1 options data set specifies a valid SLU1 node name, and that the node name has a SLU1 record in the DBIZT1 options data set.

#### Module

IZTINTXL, IZTLOAD2

IZT4009E

FREECSA FAILED FOR ADDRESS

xxxxxxxx LENGTH xxxxxxxx

## **Explanation**

An attempt to free ECSA tables no longer in use failed. The address of the area to be freed and its length are shown in the message text.

## **System action**

If this error occurs in the IMS control region, the IMS control region abends with a U4001 abend. If this error occurs in a batch table refresh, the update process ends abnormally.

## **User response**

Check for prior ECSA FREEMAIN error messages, and contact IBM Software Support for further help.

#### Module

IZTINTXL, IZTLOAD2

IZT4010E

MULTIPLE LTERM RECORD NOT FOUND FOR type=nnnnnnn

## **Explanation**

There is a missing record in the options data set. The missing record is identified by type (NODE/USER) and record key (nnnnnnnn).

## **System action**

The missing record is ignored, and processing continues.

### **User response**

Try to delete the record related to the missing multiple LTERM record, which can be identified by the type=nnnnnnn information in this message, using

either the online update (IZTRAN) or batch update utility (IZTUD1U0). Contact IBM Software Support for additional assistance.

### Module

IZTINTXL / IZTLIST / IZTLOAD2

IZT4100E DBIZT1 IS NOT

PROPERLY INITIALIZED { ETO DEACTIVATED }

## **Explanation**

The DBIZT1 options data set does not contain a header record (key X'0000000000000000000).

## System action

ETO is deactivated for this execution of IMS, or the Batch Table Refresh utility ends abnormally.

## **User response**

Verify that the IMS ETO Support options data set was properly initialized.

#### Module

IZTINTXO, IZTLOAD1

IZT4101E

ERROR READING DBIZT1 { ETO DEACTIVATED | RPL FEEDBACK=xxxxxxxx }

### **Explanation**

An error occurred reading the header record of the DBIZT1 options data set.

## **System action**

If this error occurs in the IMS control region, ETO is deactivated for this execution of IMS. If this error occurs in a batch table load, the batch table refresh processing ends abnormally.

## User response

Verify that the IMS ETO Support options data set was properly initialized, and that share options were properly specified. See *DFSMS Macro Instructions* for *Data Sets* for a description of the fields in the RPL feedback word. If this error occurs in the IMS control region, try to load the DBIZT1 tables using the batch table refresh procedures. Contact IBM Software Support for further help.

IZTINTXO, IZTLOAD1

IZT4102E

UNABLE TO LOCATE DBIZT1
DD OR DFSMDA MEMBER { ETO
DEACTIVATED }

## **Explanation**

IMS ETO Support was unable to determine the DBIZT1 options data set to be used for this execution of IMS.

## **System action**

If this error occurs in the IMS control region, ETO is deactivated for this execution of IMS. If this error occurs in a batch table load, the batch table refresh processing ends abnormally.

## **User response**

The IMS control region (not DL/I separate address space) or batch table refresh job must have either a DBIZT1 DD statement in the JCL, or have an IMS dynamic allocation member in the IMS control region STEPLIB concatenation. Make the DBIZT1 options data set available using one of these two methods.

#### Module

IZTINTXO, IZTLOAD1

**IZT4103E** 

INVALID DYNALLOC MEMBER FOR DBIZT1 { ETO DEACTIVATED }

### **Explanation**

Member DBIZT1 in the IMS control region STEPLIB concatenation was not a valid IMS dynamic allocation member.

## **System action**

If this error occurs in the IMS control region, ETO is deactivated for this execution of IMS. If this error occurs in a batch table load, the batch table refresh processing ends abnormally.

## **User response**

Verify that member DBIZT1 is a valid IMS dynamic allocation member. If appropriate, regenerate the dynamic allocation module, and restart the job.

#### Module

IZTINTXO, IZTLOAD1

IZT4104E

ERROR ON DYNALLOC FOR DBIZT1 { RC=xx REASON=xxxx | ETO DEACTIVATED}

## **Explanation**

Dynamic allocation for options data set DBIZT1 failed.

## System action

If this error occurs in the IMS control region, ETO is deactivated for this execution of IMS. If this error occurs in a batch table load, the batch table refresh processing ends abnormally.

### User response

Verify that the data set name specified in IMS control region STEPLIB member DBIZT1 is available to this IMS system, and restart IMS. If this error occurs in the IMS control region, try to recreate the error in a batch table refresh job. Look up the reason code for the dynamic allocation error and address the problem, or contact IBM Software Support for help.

#### Module

IZTINTXO, IZTLOAD1

IZT4105E

ERROR OPENING DBIZT1 { R15=xx ACBERFLG=xx | ETO DEACTIVATED }

### **Explanation**

VSAM open failed for the IMS ETO Support options data set.

## System action

If this error occurs in the IMS control region, ETO is deactivated for this execution of IMS. If this error occurs in a batch table load, the batch table refresh processing ends abnormally.

### User response

Verify that the VSAM share options for the DBIZT1 options data set are specified properly. To activate ETO, correct the error and restart IMS.

### Module

IZTINTXO, IZTLOAD1

IZT4106E

RETURN CODE XXXXXXXX ON GETMAIN, ETO DEACTIVATED

## **Explanation**

A GETMAIN for ECSA failed. The return code is specified in the message text.

## **System action**

ETO is deactivated for this execution of IMS.

### **User response**

Verify that sufficient ECSA is available to the IMS control region. Contact IBM Software Support for help.

### Module

**IZTINTX0** 

IZT4107I DBIZT1 DSN=dsn

## **Explanation**

This informational message shows the data set name of the options data set that was used to load the IMS ETO Support processing options.

## System action

Processing continues.

## **User response**

None. This message is informational.

#### Module

IZTINTX0 / IZTLOAD1

IZT4108I E/CSA DATA BASE SECTION ADDRESS: xxxxxxxx

## **Explanation**

This message displays the address of one of the E/CSA tables.

### **System action**

Processing continues.

## **User response**

None. This message is informational.

### Module

IZTINTX0 / IZTLOAD1

IZT4110E SECTION NOT FOUND,RC=xx,DSN=nnn

## **Explanation**

IMS ETO Support cannot locate the E/CSA tables associated with data set *nnn*. This is probably due to the batch refresh job running on a CPU where these tables do not exist. The tables are created when an IMS region using this data set is started.

## **System action**

Processing ends with a nonzero (xx) return code.

### User response

Run the batch job on a CPU containing the tables or, alternatively, start IMS on this CPU.

#### Module

IZTLOAD1

IZT4111E ERROR FINDING DSNAME FOR OPTIONS DATA SET RC=xx

## **Explanation**

IMS ETO Support was unable to determine the data set name for the options data set.

## **System action**

Batch table refresh processing terminates abnormally.

## User response

Contact IBM Software Support for help.

#### Module

IZTLOAD1

IZT4112I ETO SUPPORT TABLE LOAD COMPLETED

### **Explanation**

IMS ETO Support batch table load completed successfully.

## **System action**

None.

### User response

None. This message is informational.

IZTLOAD1

IZT4114I ETO SUPPORT TABLE LOAD INCOMPLETE - SOME TABLE(S) FAILED TO LOAD

## **Explanation**

IMS ETO Support table load processing completed with some errors.

## **System action**

Not all tables were reloaded.

## **User response**

Investigate previous error messages to determine the cause of the problem.

#### Module

IZTLOAD1

IZT4115I ETO SUPPORT TABLE LOAD FAILED - ERRORS ENCOUNTERED

## **Explanation**

IMS ETO Support table load processing was unsuccessful.

### **System action**

No tables were reloaded.

#### **User response**

Investigate previous error messages to determine the cause of the problem.

### Module

IZTLOAD1

IZT4116W INVALID FORMAT, PARM PROCESSING BYPASSED

### **Explanation**

The data passed in the parameter statement is in an improper format.

### **System action**

Processing continues.

### **User response**

Correct the parameter statement and rerun the job if you want to.

#### Module

IZTLOAD1

IZT4117W FORMAT ERROR IN THE PARM DATA, USING DEFAULT TIME

## **Explanation**

The parameter statement indicated that the inactive tables be freed, but the wait time contained an invalid value.

## **System action**

Processing continues using the default wait time of 3 seconds before freeing the inactive tables.

## **User response**

No action is required.

#### Module

IZTLOAD1

IZT4118I INACTIVE TABLE CLEANUP STARTED

### **Explanation**

IZTLOAD has begun the cleanup processing phase.

### **System action**

Processing continues.

### User response

None. This message is informational.

#### Module

IZTLOAD1

IZT4119I XXXXX INACTIVE TABLE FREED

### **Explanation**

The inactive table indicated by xxxxx is freed.

## System action

Processing continues.

None. This message is informational.

#### Module

IZTLOAD1

IZT4120I E/CSA ANCHOR FOUND AT XXXXXXXXX

## **Explanation**

The E/CSA table anchor point was found at address xxxxxxxxx.

## System action

Processing continues.

## **User response**

None. This message is informational.

#### Module

IZTLOAD1

IZT4121W RC=XX RETURNED FROM E/CSA SEARCH

## **Explanation**

An error occurred in the E/CSA search routine. The return code from the search routine is displayed as xx.

## System action

IMS ETO Support batch load processing terminates unsuccessfully.

#### User response

Contact IBM Software Support.

#### Module

IZTLOAD1

IZT4122I DBIZT1 LOADED FROM DDNAME IMSDALIB

## **Explanation**

IMS ETO Support options data set dynamic allocation module was loaded from ddname IMSDALIB.

## System action

Processing continues.

### User response

None. This message is informational.

#### Module

IZTLOAD1

IZT4123I DBIZT1 LOADED FROM STEPLIB/ LINKLIST

## **Explanation**

IMS ETO Support options data set dynamic allocation module was loaded from a library in JOBLIB/STEPLIB or LINKLIST.

## **System action**

Processing continues.

## **User response**

None. This message is informational.

### Module

IZTLOAD1

IZT4124W ERROR ON DEALLOC FOR DBIZT1
RC=xx REASON=xxxx

### **Explanation**

Dynamic deallocation for options data set DBIZT1 failed.

## **System action**

Batch table refresh processing ends abnormally, but table refresh processing completes.

### User response

Look up the reason code for the dynamic allocation error and address the problem, or contact IBM Software Support for help.

#### Module

IZTLOAD1

IZT4200E EITHER LUNAME OR USERID REQUIRED

### **Explanation**

The LUNAME and/or a USERID is required to perform the table lookup, but neither was supplied.

No processing is attempted.

## **User response**

Enter the LUNAME and/or the USERID, and try again.

### Module

IZTLKUP0

IZT4201E SEARCH TYPE IS A REQUIRED FIELD

## **Explanation**

SEARCH is a required field, but it was not supplied.

## **System action**

No processing is attempted.

## **User response**

Enter a valid SEARCH selection, and try again.

### Module

IZTLKUP0

IZT4202E INVALID OPTION SELECTED IN SEARCH FIELD: x

## **Explanation**

An invalid value was entered for the SEARCH option.

### **System action**

No processing is attempted.

### **User response**

Enter a valid SEARCH selection, and try again.

### Module

IZTLKUP0

IZT4203E BAD STATUS CODE ON GHU CALL TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTLKUP0

IZT4204E BAD STATUS CODE ON GHU CALL TO DBIZT1 = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTLKUP0

IZT4205E BAD STATUS CODE ON GHU CALL
TO DBIZT1 = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTLKUP0

IZT4206E BAD STATUS CODE ON GHU CALL
TO DBIZT1 = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

### Module

IZTLKUP0

IZT4207W AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

## **Explanation**

An invalid command was entered.

### **System action**

No processing is attempted.

## **User response**

Enter a valid command, and try again.

### Module

IZTLKUP0

IZT4208W USER REC BYPASSED, NODE NAME IN REC DID NOT MATCH LUNAME

## **Explanation**

An LU 6.1 (ISC) user ID record was found, but the node name in the record did not match the name specified for LUNAME.

### **System action**

Processing continues.

### **User response**

Verify the LUNAME and USERID fields contain the appropriate values and try the operation again.

#### Module

IZTLKUP0

# IZT4230E BAD STATUS CODE ON CALL TO DBIZT1 = xx

## **Explanation**

An invalid status code was returned on a call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

## System action

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTLKUP0

IZT4231E BAD STATUS CODE ON CALL TO DBIZT1 = xx

## **Explanation**

An invalid status code was returned on a call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

## System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

### Module

**IZTLKUPO** 

IZT4232E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxxx

### **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

## **System action**

The options data set I/O operation ends.

Check the MVS syslog for additional messages. If any messages are found, take appropriate action based on those messages.

If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set.

Contact IBM Software Support if additional help is needed.

#### Module

IZTLKUP0

IZT4250E BAD RETURN CODE FROM TABLE xxxxxxxx SEARCH ROUTINE

## **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

## **System action**

Processing ends.

### User response

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

#### Module

IZTLKUP0

IZT4251E IMSID TABLE SECTION NOT FOUND

### **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

## **System action**

Processing ends.

#### User response

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

#### Module

IZTLKUP0

IZT4252E IMSID SPECIFIC TABLE NOT FOUND

### **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

## System action

Processing ends.

### User response

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

### Module

IZTLKUP0

IZT4260E VALUE ENTERED MUST BE ONE LISTED UNDER TRANSLATION TYPE

## **Explanation**

An incorrect value was entered on the command line. The valid values are listed under the TRANSLATION TYPE menu.

## System action

Processing is bypassed.

#### User response

Enter a valid value on the command line and try the failed operation again.

#### Module

IZTLKUP0

IZT4261E LUNAME IS A REQUIRED FIELD

## **Explanation**

LUNAME is required but was not specified.

### System action

Processing ends.

### User response

Specify the required data, and continue.

#### Module

IZTLKUP0

IZT4262E LTERM IS A REQUIRED FIELD

### **Explanation**

LTERM is a required field but was not specified.

## **System action**

Processing ends.

## **User response**

Specify the required data, and continue.

### Module

IZTLKUP0

IZT4263E LTERM CONTAINS INVALID CHARACTERS

## **Explanation**

The value specified in the LTERM field contains characters that are not supported by IMS.

## **System action**

Processing ends.

## **User response**

Correct the invalid characters in the LTERM field, and continue.

### Module

IZTLKUP0

IZT4264I MATCHING LTERM NOT FOUND IN ANY TABLE

### **Explanation**

IMS ETO Support did not find an exact match or a mask character pattern in any of its tables that matched the name specified in the LTERM field.

### **System action**

IMS ETO Support does not allow the creation of this LTERM during "unknown destination" processing unless IMS sets the forced create flag.

#### User response

If this LTERM name should build ETO control blocks during "unknown destination" processing, create an IMS ETO Support table entry for this LTERM.

### Module

IZTLKUP0

IZT4265E BAD STATUS CODE ON CALL TO DBIZT1 = xx

## **Explanation**

An unacceptable IMS status code was returned while trying to call DBIZT1.

## System action

Processing ends.

## **User response**

Correct the problem with DBIZT1, and continue

### Module

IZTLKUP0

IZT4266E BAD STATUS CODE ON CALL TO DBIZT1 = xx

## **Explanation**

An unacceptable IMS status code was returned while trying to call DBIZT1.

### **System action**

Processing ends.

### User response

Correct the problem with DBIZT1, and continue.

#### Module

IZTLKUP0

IZT4267I OPTIONS DATA SET IS UNAVAILABLE

### **Explanation**

The options data set either could not be allocated or could not be opened. The MVS syslog may contain additional information.

## **System action**

Processing ends.

Determine why the options data set is unavailable, and correct the problem.

#### Module

IZTLKUP0

IZT4268I USERID RECORD NOT FOUND,
REQUIRED FOR SUCCESSFUL
SIGNON

## **Explanation**

Because USER RECORD REQUIRED FOR SIGNON is set to Yes (IZTRAN option B - 2), a USER record is required for successful signon. However, the value you specified in the USERID field is not defined in the IMS ETO Support User table (IZTRAN option D).

## System action

This is an informational message. Before you can sign on with this USERID, you must define it in the IMS ETO Support User table (IZTRAN option D).

### **User response**

If you plan to use this USERID to sign on to IMS, define it in the IMS ETO Support User table (IZTRAN option D).

#### Module

IZTLKUP0

IZT4269I USERID REQUIRED FOR SUCCESSFUL SIGNON

## **Explanation**

Because USER RECORD REQUIRED FOR SIGNON is set to Yes (IZTRAN option B - 2), a USERID must exist in the IMS ETO Support User table (IZTRAN option D). Because you have not entered a value in the USERID field, the translation table lookup cannot determine if signon can be successful.

## **System action**

This is an informational message. Processing continues.

## User response

In order to determine if signon can be successful, specify a value in the USERID field.

#### Module

**IZTLKUPO** 

IZT4300E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

## **Explanation**

An error was encountered during an attempt to locate the E/CSA tables.

## System action

The requested information is unavailable.

### **User response**

Verify that IMS ETO Support was properly initialized by reviewing the IZT messages in the IMS control region. Contact IBM Software Support if further assistance is required.

#### Module

IZTLLST0

IZT4301E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

## **Explanation**

An invalid command was entered.

### System action

No processing is attempted.

### User response

Enter a valid command, and try again.

#### Module

IZTLLST0

IZT4302E INVALID ROW COMMAND HAS BEEN ENTERED: *x* 

### **Explanation**

An invalid command was entered.

### **System action**

No processing is attempted.

#### User response

Enter a valid command, and try again.

**IZTLLSTO** 

IZT4330E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

## **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

### **System action**

Processing ends.

## **User response**

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

#### Module

**IZTLLSTO** 

IZT4340E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

## **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

### **System action**

Processing ends.

### User response

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

#### Module

IZTLLST0

IZT4341E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

### **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

## **System action**

Processing ends.

### **User response**

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

#### Module

IZTLLST0

IZT4342E ENTRY NO LONGER EXISTS IN TABLE: xxxxxxxx

## **Explanation**

The selected entry no longer exists in the E/CSA table. This is probably because one user deleted it while another user attempted to process the record.

## **System action**

Processing ends.

## **User response**

Display the entries again, and if the problem persists contact IBM Software Support.

#### Module

IZTLLST0

IZT4350E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

### **Explanation**

An invalid command was entered.

### **System action**

No processing is attempted.

### User response

Enter a valid command, and try again.

#### Module

IZTLLST0

IZT4400I AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

### **Explanation**

An invalid command was entered.

## System action

No processing is attempted.

Enter a valid command, and try again.

#### Module

IZTLUPD0

IZT4401I LTERM NAME IS A REQUIRED FIELD

## **Explanation**

LTERM is a required field but contains blanks.

## **System action**

No processing is attempted.

## **User response**

Enter a valid LTERM name, and try again.

#### Module

**IZTLUPDO** 

IZT4402E NODE NAME REQUIRED IF
DFSINSX1=N AND MSNAME NOT
SPECIFIED

## **Explanation**

If DFSINSX1 was set to N and MSNAME data is not entered, then the Node Name data is required.

## **System action**

No processing is attempted.

#### User response

Enter either DFSINSX1=Y, MSNAME data, or the intended Node Name and try the operation again.

#### Module

**IZTLUPDO** 

IZT4410I LTERM NAME CONTAINS AN INVALID CHARACTER

### **Explanation**

The LTERM failed edit checking due to an invalid character.

### System action

No processing is attempted.

### **User response**

Enter valid characters for the LTERM name, and try again.

#### Module

**IZTLUPD0** 

IZT4411I NODE NAME CONTAINS AN INVALID CHARACTER

## **Explanation**

The NODE NAME failed edit checking due to an invalid character.

## System action

No processing is attempted.

## **User response**

Enter valid characters for the NODE NAME, and try again.

### Module

**IZTLUPD0** 

IZT4412I MODE NAME CONTAINS AN INVALID CHARACTER

### **Explanation**

The LOGMODE failed edit checking due to an invalid character.

## System action

No processing is attempted.

### User response

Enter valid characters for the LOGMODE, and try again.

#### Module

**IZTLUPDO** 

IZT4413I LOGON DESCRIPTOR CONTAINS
AN INVALID CHARACTER

### **Explanation**

The LOGON DESC failed edit checking due to an invalid character.

No processing is attempted.

## **User response**

Enter valid characters for the LOGON DESC, and try again.

#### Module

**IZTLUPDO** 

IZT4414I ASOT MUST BE A NUMERIC

## **Explanation**

A non-numeric value was entered in the ASOT field.

## **System action**

No processing is attempted.

## **User response**

Enter a valid numeric value for ASOT, and try again.

### Module

IZTLUPD0

IZT4415I ASOT VALUE NOT IN RANGE

### **Explanation**

An invalid value was entered for ASOT. The valid ranges are listed on the screen.

### **System action**

No processing is attempted.

### **User response**

Enter a valid numeric value for ASOT, and try again.

### Module

**IZTLUPDO** 

IZT4416I ASOT CANNOT EXCEED 1440

### **Explanation**

A value greater than 1440 was entered for ASOT. ASOT cannot exceed 1440.

## System action

No processing is attempted.

### **User response**

Enter a valid numeric value for ASOT, and try again.

#### Module

IZTLUPD0

IZT4417I BAD STATUS CODE ON REPL CALL
= xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

### Module

**IZTLUPD0** 

IZT4418I BAD STATUS CODE ON ISRT CALL
= xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTLUPD0

IZT4419I aaaaaaaa / bbbbb ENTRY ccccccc

### **Explanation**

There are several combinations of this message. This message indicates which record type was updated and how it was updated. The fields in the message have the following meanings:

• aaaaaaaa is the entry name.

- bbbbb is the node or LTERM name.
- ccccccc indicates whether the record was INSERTED or REPLACED.

Processing completes successfully.

## **User response**

None. This message is informational.

### Module

**IZTLUPDO** 

IZT4421E INVALID VALUE REQUESTED FOR MSGDEL

## **Explanation**

An invalid selection was entered for the MSGDEL OPTIONS.

### **System action**

No processing is attempted.

## **User response**

Enter a valid MSGDEL OPTION, and try again.

#### Module

IZTLUPD0

IZT4422E USER DFSINSX1 MUST BE "Y" OR "N"

## **Explanation**

An invalid selection was entered for the DFSINSX1 option.

## **System action**

No processing is attempted.

#### User response

Enter a valid DFSINSX1 option, and try again.

#### Module

IZTLUPD0

IZT4423E PRINTER/RCNT DATA NOT ALLOWED IF USER DFSINSX1 =

### **Explanation**

DFSINSX1 has been set to Y and either Node Name or RCNT data is also specified. If DFSINSX1 is set to Y, neither Node Name nor RCNT data is allowed.

## **System action**

No processing is attempted.

## **User response**

Specify DFSINSX1=N and try the operation again. Alternatively, remove the RCNT data, Node Name data, or both, and try the operation again.

### Module

**IZTLUPDO** 

IZT4424E BAD STATUS CODE ON GHU CALL TO DBIZT1 = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

### User response

Determine the cause of the error code, and correct the problem.

#### Module

**IZTLUPD0** 

IZT4425E BAD STATUS CODE ON GHU CALL
TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

## User response

Determine the cause of the error code, and correct the problem.

**IZTLUPDO** 

IZT4426E INVALID VALUE SPECIFIED FOR "SKIP AUTO-LOGON"

## **Explanation**

An invalid value was specified in the SKIP AUTO-LOGON field.

## **System action**

The input is ignored.

## **User response**

Correct the value specified in the SKIP AUTO-LOGON field, and try again.

#### Module

IZTLUPD0

IZT4427I BAD STATUS CODE ON REPL CALL
= xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTLUPD0

IZT4428I BAD STATUS CODE ON ISRT CALL
= xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTLUPD0

## **Explanation**

## System action

The LTERM table entry is not added to the options data set.

### **User response**

Correct the reason for the duplicate LTERM, and continue.

### Module

**IZTLUPDO** 

IZT4430I REPLACEMENT STRING CONTAINS
AN INVALID CHARACTER

### **Explanation**

One or more invalid characters are included in the REPLACEMENT STRING value.

## System action

No processing is attempted.

### User response

Enter valid characters for the REPLACEMENT STRING field, and try again.

## Module

**IZTLUPDO** 

IZT4440E AN INVALID COMMAND HAS BEEN

**ENTERED:** xxxxxxxx

IZT4444E BAD STATUS CODE ON GHU TO DBIZT1 = xx

**Explanation** 

An invalid command was entered.

System action

No processing is attempted.

**User response** 

Enter a valid command, and try again.

Module

IZTLUPD0

IZT4441I AN INVALID ROW COMMAND WAS ENTERED: x

**Explanation** 

An invalid command was entered.

**System action** 

No processing is attempted.

User response

Enter a valid command, and try again.

Module

**IZTLUPDO** 

IZT4443E BAD STATUS CODE ON DATA BASE GHU=xx

**Explanation** 

An invalid status code was returned by IMS from a DL/I call.

System action

Processing ends.

User response

Determine the cause of the error code, and correct the problem.

Module

**IZTLUPDO** 

**Explanation** 

An invalid status code was returned on a GHU call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

**System action** 

Processing ends.

**User response** 

Determine the cause of the error code, and correct the problem.

Module

**IZTLUPD0** 

IZT4445E BAD STATUS CODE ON GHU TO DBIZT1 = xx

**Explanation** 

An invalid status code was returned on a GHU call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

**System action** 

Processing ends.

**User response** 

Determine the cause of the failure, and correct the problem.

Module

IZTLUPD0

IZT4446E BAD STATUS CODE ON DLET TO DBIZT1 = xx

**Explanation** 

An invalid status code was returned on a DLET call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

**System action** 

Processing ends.

Determine the reason for the failure, and correct the problem.

#### Module

IZTLUPD0

IZT4447E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

## **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

## **System action**

The options data set I/O operation ends.

## **User response**

Check the MVS syslog for additional messages. If any messages are found, take appropriate action based on those messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTLUPDO** 

IZT4448E BOTH PRINTER AND MSNAME DATA CANNOT BE SPECIFIED

## **Explanation**

You have specified printer data along with MSNAME data. You cannot specify both Printer and MSNAME data.

## **System action**

No processing is attempted.

### **User response**

Remove either the Printer or MSNAME information, and try the operation again.

## **Module**

IZTLUPDO, IZTUD1U0

IZT4475E CONFLICTING ROW COMMANDS
HAVE BEEN ENTERED

## **Explanation**

An invalid combination of commands was entered. Only one type of command can be entered at a time.

## System action

No processing is attempted.

## **User response**

Remove the conflicting command type, and try again.

### Module

IZTLUPD0

IZT4493E ERROR ENCOUNTERED ON GU
CALL TO SLU2 GLOBAL RECORD =

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTLUPD0

IZT4494E ERROR ENCOUNTERED ON GN
CALL TO SLU2 NODE RECORD = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### System action

Processing ends.

## User response

Determine the cause of the error code, and correct the problem.

IZTLUPD0

IZT4496E ERROR ENCOUNTERED ON GN
CALL TO SLU2 NODE RECORD = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTLUPD0

IZT4498E ERROR ENCOUNTERED ON REPL OF DBIZT1 CONTROL RECORD, CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

### Module

IZTLUPD0

IZT4499E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTLUPD0

IZT4500E INVALID OPTION SPECIFIED ON COMMAND LINE

## **Explanation**

An invalid command was entered.

## **System action**

No processing is attempted.

### **User response**

Enter a valid command, and try again.

#### Module

**IZTNLST0** 

IZT4510E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

### **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

## **System action**

Processing ends.

## **User response**

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

#### Module

**IZTNLSTO** 

IZT4521E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

### **Explanation**

An invalid command was entered.

### System action

No processing is attempted.

Enter a valid command, and try again.

#### Module

**IZTNLSTO** 

IZT4522E INVALID LINE COMMAND HAS BEEN ENTERED: x

## **Explanation**

An invalid command was entered.

## System action

No processing is attempted.

## **User response**

Enter a valid command, and try again.

#### Module

**IZTNLSTO** 

IZT4530E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

## **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

## System action

Processing ends.

### **User response**

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

#### Module

**IZTNLSTO** 

IZT4540E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

## **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

## System action

Processing ends.

### **User response**

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

#### Module

**IZTNLSTO** 

IZT4541E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

## **Explanation**

An internal error occurred in the IMS ETO Support E/CSA lookup routine.

## System action

Processing ends.

## **User response**

Verify that IMS ETO Support is properly installed, and check for error messages at IMS initialization.

### Module

**IZTNLSTO** 

IZT4542E ENTRY NO LONGER IN TABLE: XXXXXXXXX

### **Explanation**

The selected entry no longer exists in the E/CSA table. This is probably because a table refresh took place while the E/CSA table was being viewed.

### **System action**

Processing ends.

### User response

Display the entries again, and if the problem persists contact IBM Software Support.

#### Module

IZTNLST0

IZT4551E INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

### **Explanation**

An invalid command was entered.

No processing is attempted.

## **User response**

Enter a valid command, and try again.

#### Module

**IZTNLSTO** 

IZT4602I INVALID OPTION SELECTED FOR LOGON PROCESS

## **Explanation**

An invalid option was selected for the LOGON PROCESS.

## **System action**

No processing is attempted.

## **User response**

Enter a valid option for the LOGON PROCESS, and try again.

#### Module

IZTNUPD0

IZT4603I INVALID OPTION SELECTED FOR XXXXXXXX PROCESS

### **Explanation**

An invalid option was selected for either the DFS3649 or DFS3650 process.

### System action

No processing is attempted.

### **User response**

Enter a valid option for the respective process, and try again.

#### Module

IZTNUPD0

IZT4604I MOD REQUIRED IF OPTION 5
SELECTED IN XXXXXXX PROCESS

### **Explanation**

Option 5 was selected for either the DFS3649 or DFS3650 process. When option 5 is selected, a USER MOD name is required for that respective process.

## **System action**

No processing is attempted.

## **User response**

Either choose another option or add a USER MOD name, and try again.

### Module

**IZTNUPD0** 

IZT4605I MOD NOT ALLOWED UNLESS
OPTION 5 SELECTED FOR XXXXXXX

## **Explanation**

A USER MOD name was supplied for either the DFS3649 or DFS3650 process, but option 5 was not specified. option 5 is required to use a USER MOD name.

## **System action**

No processing is attempted.

## User response

Either choose option 5 or remove the USER MOD name, and try again.

#### Module

**IZTNUPD0** 

IZT4606I INVALID VALUE SELECTED FOR LTERM/USER NAMING OPTION

## **Explanation**

An invalid selection was entered for the LTERM/USER NAMING OPTIONS.

## System action

No processing is attempted.

### User response

Select from one of the listed options, and try again.

**IZTNUPD0** 

IZT4607I INVALID CHARACTER DETECTED IN ASOT

## **Explanation**

An invalid character was detected in the ASOT field. Only numeric characters or blanks are allowed in this field.

## **System action**

No processing is attempted.

## **User response**

Correct the ASOT value.

#### Module

**IZTNUPD0** 

IZT4608I INVALID VALUE FOR ASOT, MUST BE (BLANKS, 0000, 0010–1440)

## **Explanation**

An invalid value was entered in the ASOT field. The valid values are listed on the user's screen.

## **System action**

No processing is attempted.

### **User response**

Correct the ASOT value.

#### Module

**IZTNUPD0** 

IZT4609I INVALID CHARACTER DETECTED IN ALOT

### **Explanation**

An invalid character was detected in the ALOT field. Only numeric characters or blanks are allowed in this field.

### **System action**

No processing is attempted.

### User response

Correct the ALOT value.

#### Module

**IZTNUPD0** 

IZT4610I INVALID VALUE FOR ALOT, MUST BE (BLANKS, 0000, 0010–1440)

## **Explanation**

An invalid value was entered in the ALOT field. The valid values are listed on the user's screen.

## **System action**

No processing is attempted.

## **User response**

Correct the ALOT value.

#### Module

**IZTNUPD0** 

IZT4611E ERROR ON GHU CALL, STATUS CODE=xx KEY=yyyyyyyyy

### **Explanation**

An invalid status code was returned on a GHU call to the options data set. The status code that was returned (xx) indicates the reason for the failure. The key for the read operation is designated by yyyyyyyyy.

### **System action**

Processing ends.

### User response

Determine the reason for the failure, and correct the problem.

### Module

**IZTNUPD0** 

IZT4612E ERROR ON DLET CALL, STATUS CODE=xx

### **Explanation**

An invalid status code was returned on a DLET call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

Processing ends.

## **User response**

Determine the reason for the failure, and correct the problem.

#### Module

**IZTNUPD0** 

IZT4613E ERROR ON GHU CALL, STATUS
CODE=xx

## **Explanation**

An invalid status code was returned on a GHU call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

## **System action**

Processing ends.

## **User response**

Determine the reason for the failure, and correct the problem.

#### Module

**IZTNUPD0** 

IZT4614E ERROR ON DLET CALL, STATUS
CODE=xx

### **Explanation**

An invalid status code was returned on a DLET call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

## System action

Processing ends.

### **User response**

Determine the reason for the failure, and correct the problem.

#### Module

**IZTNUPD0** 

IZT4615E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

### **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

## System action

The options data set I/O operation ends.

## **User response**

Check the MVS syslog for additional messages. If any messages are found, take appropriate action based on those messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTNUPD0** 

IZT4616E USERID NOT SPECIFIED

## **Explanation**

Option 4 was specified for LOGON OPTION, but no USERID was specified.

### **System action**

The input is ignored.

### User response

Either specify a USERID, or specify a value other than 4 for LOGON OPTION.

### Module

**IZTNUPD0** 

IZT4617E USERID CONTAINS INVALID CHARACTERS

### **Explanation**

The USERID field contains an invalid character. Valid characters are alphanumeric and national (@#\$).

### System action

The input is ignored.

Remove the invalid character in the USERID field and try again.

#### Module

**IZTNUPDO** 

IZT4618E USERID NOT ALLOWED UNLESS LOGON PROCESS 4 SPECIFIED

### **Explanation**

A value was specified in the USERID field, but LOGON OPTION 4 was not specified.

## System action

The input is ignored.

## User response

Either specify LOGON OPTION 4, or remove the value specified in the USERID field.

#### Module

**IZTNUPD0** 

IZT4620I BAD STATUS CODE ON REPL CALL
TO DBIZT1 = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

### Module

**IZTNUPDO** 

IZT4621E INVALID VALUE SPECIFIED FOR BYPASS DEQUEUE

### **Explanation**

A value other than Y (yes) or N (no) was specified for the BYPASS DEQUEUE option.

## **System action**

The input is ignored.

## **User response**

Specify either Y (yes) or N (no) and try again.

#### Module

**IZTNUPD0** 

IZT4630I INVALID DEVICE TYPE
SPECIFIED, MUST BE "1", "2", OR
"3"

## **Explanation**

A value other than 1, 2, or 3 was specified on the device type menu.

## System action

The input is ignored.

## User response

Specify 1, 2, or 3 and try again

#### Module

**IZTNUPDO** 

IZT4631I INVALID VALUE SUPPLIED FOR MSGDEL OPTION

### **Explanation**

An invalid selection was entered for the MSGDEL OPTIONS.

### System action

No processing is attempted.

### User response

Enter a valid MSGDEL OPTION, and try again.

#### Module

**IZTNUPDO** 

IZT4632I INVALID VALUE SUPPLIED FOR RESPONSE OPTION

### **Explanation**

An invalid option was selected for the RESPONSE OPTIONS function.

No processing is attempted.

## **User response**

Enter a valid choice for RESPONSE OPTIONS, or leave it blank.

### Module

**IZTNUPDO** 

IZT4633E LTERM/USER OPTION 3 CANNOT BE SELECTED WITH WILDCARD IN LUNAME

## **Explanation**

The LUNAME cannot contain a wildcard when LTERM/ USER NAMING OPTIONS contains a 3. When option 3 is used, it relates a specific LUNAME to the specific LTERM name contained in the USER/LTERM field. This USER/LTERM cannot be shared by multiple LUNAMEs.

### **System action**

No processing is attempted.

## User response

Either remove the wildcard from the LUNAME, or change the LTERM/USER NAMING OPTIONS to something other than 3.

#### Module

**IZTNUPD0** 

IZT4634E USER/LTERM NAME CANNOT BE SUPPLIED WITH WILDCARD IN LUNAME

## **Explanation**

The USER/LTERM is not allowed when the LUNAME contains a wildcard so that different LUNAMEs do not create the same USER/LTERM names.

### System action

No processing is attempted.

### **User response**

Either remove the wildcard from the LUNAME, or clear the USER/LTERM name field.

#### Module

**IZTNUPD0** 

IZT4635E USER/LTERM MUST BE PROVIDED
WHEN LTERM/USER OPTION 3
USED

### **Explanation**

The USER/LTERM is required when LTERM/USER NAMING OPTIONS contains a 3.

## **System action**

No processing is attempted.

## **User response**

Enter a USER/LTERM name, or change the LTERM/ USER NAMING OPTIONS to something other than 3.

#### Module

IZTNUPD0

IZT4636E USER/LTERM CAN BE SUPPLIED ONLY WHEN LTERM/USER OPTION 3 USED

## **Explanation**

The USER/LTERM is not allowed unless the LTERM/ USER NAMING OPTIONS contains a 3.

## **System action**

No processing is attempted.

## User response

Remove USER/LTERM name or change the LTERM/ USER NAMING OPTIONS to 3.

### Module

IZTNUPD0

IZT4637E USER/LTERM CONTAINS AN INVALID CHARACTER

### **Explanation**

An invalid character was found in the USER/LTERM name.

### **System action**

Processing ends

Remove the invalid character from the USER/LTERM name and make sure the first character is nonnumeric.

#### Module

IZTNUPD0

IZT4638E BAD STATUS CODE ON GHU TO DBIZT1 = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

### Module

**IZTNUPD0** 

IZT4639I DUP USER/LTERM=xxxxxxxx IN OPTIONS DS, REC=yyyyyyyy TYPE=zzzzzzzz

### **Explanation**

A duplicate USER/LTERM name was found in the options data set assigned to a different Userid or Node record. Since USER/LTERM names cannot be shared, IMS ETO Support does not allow the same USER/LTERM name to be defined for more than one Userid or Node record.

- xxxxxxxx is the name of the USER/LTERM that is a duplicate.
- yyyyyyyy is the name of the options data set where the duplicate USER/LTERM is defined.
- zzzzzzzz is the type of entry where the duplicate USER/LTERM name exists. zzzzzzzz could contain SLU2, SLUP, SLU1/C, or USERID.

## **System action**

Processing ends.

### **User response**

Either select another USER/LTERM name, or remove the USER/LTERM name from the duplicate options data set record.

#### Module

**IZTNUPD0** 

IZT4640E BAD STATUS CODE ON ISRT TO DBIZT1 = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTNUPDO** 

IZT4641I AN INVALID ROW COMMAND WAS ENTERED: x

### **Explanation**

An invalid command was entered.

### **System action**

No processing is attempted.

### User response

Enter a valid command, and try again.

#### Module

**IZTNUPD0** 

IZT4642E MULTIPLE LTERM RECORD NOT FOUND

### **Explanation**

Data contained in the Node record indicates a multiple LTERM record should be present in the options data set. However, the record is not present. This is likely an IMS ETO Support internal error.

Processing ends.

## **User response**

Save the contents of the options data set to another file, restore the options data set from the last good backup, and contact IBM Software Support.

#### Module

**IZTNUPD0** 

IZT4643E BAD STATUS CODE ON GHU TO DBIZT1 =xx

## **Explanation**

An invalid status code was returned on a GHU call to the options data set. The status code that was returned (*xx*) indicates the reason for the failure.

## System action

Processing ends.

## **User response**

Determine the reason for the failure, and correct the problem.

### Module

**IZTNUPD0** 

IZT4644E AN INVALID COMMAND WAS ENTERED: xxxxxxxx

### **Explanation**

An invalid command was entered.

## **System action**

No processing is attempted.

### **User response**

Enter a valid command, and try again.

#### Module

**IZTNUPD0** 

IZT4645I ENTRY IS NO LONGER IN OPTIONS
DATA SET: xxxxxxxx

## **Explanation**

The selected entry no longer resides in the options data set. This is probably because one user deleted the entry while another user was viewing the options data set.

## **System action**

Processing ends.

## User response

Return to IZTRAN's main menu, and try again.

#### Module

**IZTNUPD0** 

IZT4646E BAD STATUS CODE ON GHU TO DBIZT1 =xx

## **Explanation**

An invalid status code was returned on a GHU call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

## System action

Processing ends.

### **User response**

Determine the reason for the failure, and correct the problem.

### Module

**IZTNUPD0** 

IZT4650I INVALID CHARACTER DETECTED
IN THE LUNAME MASK

## **Explanation**

An invalid character was detected in the LUNAME mask.

## **System action**

Processing ends.

### User response

Remove the invalid character, and try again.

**IZTNUPD0** 

#### **IZT4651I**

ASTERISK (\*) MUST BE THE LAST CHARACTER IN THE LUNAME MASK

# **Explanation**

An asterisk (\*) was found in the LUNAME, but it was not the last character of the name. If an asterisk is used, it must be the last character of the name.

# **System action**

Processing ends.

# **User response**

Fix the LUNAME mask, and try again.

#### Module

**IZTNUPD0** 

IZT4652I LUNAME IS A REQUIRED PARAMETER

# **Explanation**

The LUNAME field is required but was blank.

#### **System action**

No processing is attempted.

#### User response

Fix the LUNAME mask, and try again.

## **Module**

**IZTNUPD0** 

IZT4653I LUNAME MUST START WITH ALPHA CHARACTER

## **Explanation**

The first character of the LUNAME contains an invalid character.

# System action

No processing is attempted.

#### **User response**

Fix the LUNAME mask, and try again.

#### Module

**IZTNUPD0** 

IZT4654E NODE NAME ALREADY DEFINED AS A XXXXXXXXX

## **Explanation**

The node you are trying to enter is already defined as a node of a different device type. The *xxxxxxxx* indicates the device type of the duplicate node record in the options data set.

## System action

Processing ends.

# **User response**

Determine which is the correct device type for the node.

#### Module

**IZTNUPD0** 

IZT4655E BAD STATUS CODE ON CALL TO DBIZT1 = xx

# **Explanation**

An invalid status code was returned on a call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

# System action

Processing ends.

#### User response

Determine the reason for the failure, and correct the problem.

#### Module

**IZTNUPD0** 

IZT4656I INVALID VALUE SELECTED FOR LTERM NAMING OPTION

## **Explanation**

An invalid value was specified in the LTERM NAMING OPTIONS field.

#### System action

The input is ignored.

Specify 1, 2, or 3 and try again.

#### Module

**IZTNUPD0** 

IZT4657E LTERM(S) NOT ALLOWED UNLESS
"LTERM FROM TABLE" SELECTED

# **Explanation**

User—supplied LTERMs were present, but a value other than LTERM FROM TABLE was specified for the LTERM NAMING OPTIONS.

# **System action**

The input is ignored.

# **User response**

Either remove the user-supplied LTERM names, or choose LTERM FROM TABLE in the LTERM NAMING OPTIONS field.

#### Module

**IZTNUPDO** 

IZT4659E "LTERM FROM TABLE" SELECTED
BUT NO LTERMS WERE DEFINED

## **Explanation**

There must be at least one valid LTERM defined when LTERM FROM TABLE is selected.

# **System action**

The input is ignored.

#### **User response**

Either choose an option other than LTERM FROM TABLE, or define a valid LTERM entry.

#### Module

**IZTNUPD0** 

IZT4660E BAD STATUS CODE ON DLET CALL
= xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTNUPDO** 

IZT4661E BAD STATUS CODE ON ISRT CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTNUPDO** 

IZT4662E BAD STATUS CODE ON REPL CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTNUPD0

IZT4663E BAD STATUS CODE ON GHU CALL =

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTNUPDO** 

IZT4664E BAD STATUS CODE ON DLET CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTNUPD0

IZT4665E BAD STATUS CODE ON GHU CALL =

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTNUPD0

IZT4666E BAD STATUS CODE ON DLET CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTNUPD0** 

IZT4667I PASSSIZE NOT ALLOWED UNLESS
DFS3649 PROCESS 3 SPECIFIED

# **Explanation**

A DFS3649 ETOS PASSSIZE option was specified, but a selection other than 3 was entered for DFS3649.

# System action

No processing is attempted.

#### User response

Either select option 3 for DFS3649, or remove the DFS3649 ETOS PASSSIZE option.

#### Module

**IZTNUPDO** 

IZT4668I INVALID OPTION SELECTED FOR DFS3649 PASSSIZE FIELD

#### **Explanation**

The specified DFS3649 ETOS PASSSIZE option is invalid.

# **System action**

No processing is attempted.

#### User response

Select one of the listed options, and try again.

IZTNUPD0

**IZT4670I** 

NO OVERRIDE FIELDS PROVIDED, **RECORD DELETED FROM DBIZT1** 

Module

**IZTNUPD0** 

**IZT4674E** 

AN INVALID COMMAND HAS BEEN

**ENTERED:** xxxxxxxx

**Explanation** 

There were no input fields supplied, so there is no reason to save the options data set record.

**System action** 

**Explanation** 

No processing is attempted.

An invalid command was entered.

**System action** 

Processing completes.

User response

Enter a valid command, and try again.

**User response** 

The empty entry was deleted from the options data set.

Module

**IZTNUPD0** 

**IZTNUPD0** 

**RECORD ADDED TO DBIZT1** 

**RECORD REPLACED IN DBIZT1** 

IZT4675E CONFLICTING ROW COMMANDS **HAVE BEEN ENTERED** 

**Explanation** 

Module

IZT4671I

All entered fields passed edit checking. The record was added to the options data set.

**Explanation** 

Conflicting commands were entered. This is not allowed.

**System action** 

Processing completes.

**System action** 

No processing is attempted.

**User response** 

None. This message is informational.

User response

Remove the command conflict, and try again.

Module

**IZTNUPD0 IZT4672I** 

**IZTNUPD0** 

Module

**IZT4676E** 

INVALID COMPONENT SPECIFIED

FOR: IIIIIII

**Explanation** 

All entered fields passed edit checking. The record was replaced in the options data set.

**Explanation** 

An invalid component number was specified for LTERM IllIIII. Valid component numbers are 1 - 4, and they must match the component from the selected LOGON descriptor. The LOGON descriptor can be defined in IMS ETO Support, selected by IMS, or provided by the device as logon data.

**System action** 

**User response** 

Processing completes.

System action

None. This message is informational.

The input is ignored.

Correct the LTERM definition, and try again.

#### Module

**IZTNUPD0** 

IZT4677E INVALID CHARACTER CASE SPECIFIED FOR: !!!!!!!!

# **Explanation**

An invalid value was specified for the character case for LTERM *llllllll*. Valid character case values are 0 (uppercase) and 1 (uppercase or lowercase).

# **System action**

The input is ignored.

# **User response**

Correct the LTERM definition, and try again.

#### Module

**IZTNUPD0** 

IZT4678E CANNOT HAVE MULTIPLE LTERMS
WHEN USING CHARACTER
MASKING

# **Explanation**

An entry cannot have more than one LTERM defined when using mask characters (!) in an LTERM entry.

# System action

The requested entry is not added to the options data set.

## **User response**

Remove the entry with mask characters or all other USER/LTERMS.

#### Module

**IZTNUPD0** 

IZT4679E LUNAME REQUIRES WILDCARD
IF MASK CHARACTER IN USER/
LTERM

# **Explanation**

It the USER/LTERM name contains mask characters (!), then the LUNAME must contain wildcard characters (\*, %, or ?).

# **System action**

The requested entry is not added to the options data set

# **User response**

Either remove the entry with the mask characters, or use a wildcard in the LUNAME.

#### Module

**IZTNUPD0** 

IZT4680E LTERM NAMING OPTION 2 NOT ALLOWED WITH WILDCARD IN LUNAME

# **Explanation**

For this device type, LTERM names cannot be specified when the LUNAME contains wildcards (\*, %, or ?).

# **System action**

The requested entry is not added to the options data set.

# **User response**

Remove the wildcards from the LUNAME, or choose a different LTERM NAMING OPTION.

#### Module

**IZTNUPD0** 

IZT4681E INVALID LTERM/USER OPTION
WHEN USER/LTERM NAME
SUPPLIED

#### **Explanation**

If USER/LTERMS are supplied, LTERM/USER naming option 3 must be specified.

# **System action**

The requested entry is not added to the options data set.

Remove the USER/LTERM names, or set LTERM/USER naming option to 3.

#### Module

**IZTNUPD0** 

IZT4682E USER/LTERM MUST CONTAIN
MASK CHARACTERS WHEN
LUNAME HAS WILDCARD

# **Explanation**

When the LUNAME contains wildcard characters (\*, %, or ?), the USER/LTERM must contain mask characters (!).

# **System action**

The requested entry is not added to the options data set.

# **User response**

Remove the wildcards from the LUNAME, or add mask characters to the USER/LTERM name.

#### Module

**IZTNUPD0** 

IZT4683E MASK CHARACTER IN LTERM NOT SUPPORTED FOR THIS DEVICE TYPE

#### **Explanation**

This device type does not support the mask characters.

## **System action**

The requested entry is not added to the options data set.

#### **User response**

Choose another way to create USER/LTERM names.

#### Module

IZTNUPD0

IZT4684E DEVICE DOES NOT ALLOW LTERM
WHEN WILDCARD SPECIFIED IN
LUNAME

# **Explanation**

LTERM names are not allowed for this device type when the LUNAME contains wildcards (\*, %, or ?).

# **System action**

The requested entry is not added to the options data set.

# **User response**

Correct the inconsistency, and continue.

#### Module

**IZTNUPDO** 

IZT4685E USER/LTERM "aaaaaaaa"
ALREADY DEFINED AS PRINTER
LTERM

# **Explanation**

LTERM name aaaaaaaa is already defined in the IMS ETO Support options data set as a printer LTERM.

# System action

The requested entry is not added to the options data set.

#### **User response**

If this entry is valid, remove the LTERM name from the printer LTERM table.

#### Module

**IZTNUPDO** 

IZT4686E INVALID LTERM NAMING OPTION WHEN LTERM SPECIFIED

## **Explanation**

LTERM naming option 2 must be used when LTERM names are supplied.

# **System action**

The requested entry is not added to the options data set.

#### User response

Either use LTERM naming option 2 or remove the LTERM name.

IZTNUPD0

IZT4687E TRX NAME NOT ALLOWED WHEN DFS3650 OPTION 5 SELECTED

# **Explanation**

Both a user MFS mod name and DFS3650I Transaction Replacement name have been specified for DFS3650 options. However, the transaction name cannot be specified when the user mod name has already been specified.

# System action

No update takes place.

# User response

Remove the transaction name if the user mod name is the required option.

#### Module

**IZTNUPD0** 

IZT4688E USER MOD NOT ALLOWED WHEN DFS3650 OPTION 7 SELECTED

# **Explanation**

Both a user MFS mod name and a DFS3650I Transaction Replacement name have been specified for DFS3650 options. However, the user mod name cannot be specified when the DFS3650I Transaction Replacement name has been specified.

# **System action**

No update takes place.

# **User response**

Remove the user mod name if the DFS3650I Transaction Replacement is the required option.

#### Module

**IZTNUPD0** 

IZT4689E TRX NAME REQUIRED WHEN DFS3650 OPTION 7 SELECTED

#### **Explanation**

Option 7 has been selected for the DFS3650 option, however a value for DFS3650I Transaction Replacement has not also been specified.

# **System action**

No update takes place.

# **User response**

Specify a value for the transaction name.

#### Module

**IZTNUPD0** 

IZT4690E TRX NAME NOT ALLOWED UNLESS
DFS3650 OPTION 7 SELECTED

# **Explanation**

A value for DFS3650I Transaction Replacement has been specified, however option 7 has not been specified for the DFS3650 option.

# **System action**

No update takes place.

# User response

Specify option 7 for the DFS3650 option in addition to the value for DFS3650I Transaction Replacement.

#### Module

**IZTNUPDO** 

IZT4693E ERROR ENCOUNTERED ON GU
CALL TO SLU2 GLOBAL RECORD =
xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

**IZTNUPD0** 

IZT4694E ERROR ENCOUNTERED ON GN
CALL TO SLU2 NODE RECORD = xx

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTNUPD0** 

IZT4696E ERROR ENCOUNTERED ON GN
CALL TO SLU2 NODE RECORD = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTNUPD0

IZT4699E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTNUPD0** 

IZT4701W IZTRAN PF KEYS WILL NOT FUNCTION FROM SOME DEVICES

# **Explanation**

During initialization, IMS ETO Support code was unable to set intercepts to provide functioning PF keys for the IZTRAN transaction.

# **System action**

Restart continues.

# **User response**

To use IZTRAN functions, enter the commands **END**, **DOWN**, and **UP** instead of using PF keys 3, 7, and 8.

#### Module

IZTPFKI0

IZT4710E ERROR IN MESSAGE FORMAT

# **Explanation**

An error was encountered while editing the IZTRAN input message. The message was not in the required format.

## System action

Processing is bypassed.

# User response

Ensure that programs IZTRAN and IZTPFKIx are at the same maintenance level. If that does not correct the problem, ensure the IMS Receive-Any buffer size is at least 1920 bytes. You can verify this in the IMS startup message DFS1920I as parameter RECASZ. If the problem still persists, contact IBM Software Support.

#### Module

**IZTPFKIx** 

IZT4711I INVALID VALUE SPECIFIED FOR TYPE

#### **Explanation**

The value you specified in the TYPE field is not valid.

Processing is bypassed.

# **User response**

Enter one of the values listed on the screen for TYPE.

#### Module

**IZTPFKI**x

IZT4712E ERROR IN MESSAGE FORMAT

# **Explanation**

An error was encountered while editing the IZTRAN input message. The message was not in the required format.

# **System action**

Processing is bypassed.

# **User response**

Ensure that the programs IZTRAN and IZTPFKIx are at the same maintenance level. If that does not correct the problem, ensure the IMS Receive-Any buffer size is at least 1920 bytes. You can verify this in the IMS startup message DFS1920I as parameter RECASZ. If the problem still persists, contact IBM Software Support.

#### Module

**IZTPFKIx** 

IZT4713E ERROR IN MESSAGE FORMAT

# **Explanation**

An error was encountered while editing the IZTRAN input message. The message was not in the required format.

# **System action**

Processing is bypassed.

# **User response**

Ensure that the programs IZTRAN and IZTPFKIx are at the same maintenance level. If that does not correct the problem, ensure the IMS Receive-Any buffer size is at least 1920 bytes. You can verify this in the IMS startup message DFS1920I as parameter RECASZ. If the problem still persists, contact the IBM Software Support.

#### Module

**IZTPFKIx** 

IZT4714I NAME FIELD REQUIRED

# **Explanation**

There was no data entered in the NAME field.

# System action

Processing is bypassed.

#### User response

Enter the name of the object you want displayed in the NAME field.

#### Module

**IZTPFKIx** 

IZT4715I TYPE FIELD REQUIRED

# **Explanation**

There was no data entered in the TYPE field.

# **System action**

Processing is bypassed.

#### User response

Enter the type of display you want performed in the TYPE field.

#### Module

**IZTPFKIx** 

IZT4716I CONTROL BLOCK LOCATE FAILED

## **Explanation**

The value specified in the NAME field is unknown to IMS.

## System action

Processing is bypassed.

# User response

Enter a valid NAME and TYPE combination.

#### Module

**IZTPFKIx** 

#### IZT4717E ESTAE PROCESSING COMPLETE

# **Explanation**

An error was encountered while performing the requested display. The ESTAE routine prevented an abend. This is probably because IMS was cleaning up the control block while the display was being formatted.

# **System action**

Processing is bypassed.

# **User response**

Try the display again. If the problem persists, contact IBM Software Support.

#### Module

**IZTPFKIx** 

IZT4801E AN INVALID COMMAND WAS ENTERED: xxxxxxxx

# **Explanation**

An invalid command (xxxxxxxx) was entered on the command line.

# **System action**

The command is ignored.

#### **User response**

Enter a valid command, and try again.

#### Module

IZTMLST0

IZT4802E "START" FIELD CONTAINS AN INVALID VALUE

# **Explanation**

An invalid value was entered in the START field. This field must contain only numeric data.

# System action

The input is ignored.

#### User response

Enter a numeric START key, or scroll to your desired location.

#### Module

**IZTMLST0** 

IZT4803E AN INVALID ROW COMMAND WAS ENTERED: x

# **Explanation**

An invalid command (x) was entered in a member selection field.

# **System action**

The input is ignored.

# **User response**

Enter a valid row command, and try again.

## Module

IZTMLST0

IZT4804I ENTRY "nnnnnn" IS NO LONGER
IN THE E/CSA TABLE

# **Explanation**

Entry nnnnnn was selected for viewing, but it is no longer in the E/CSA table. Another user or process probably deleted it after the E/CSA table entries were listed on your screen.

# **System action**

The input is ignored.

#### User response

If desired, select another entry for viewing.

#### Module

IZTMLST0

IZT4805E E/CSA TABLE NOT FOUND

## **Explanation**

The IMS ETO Support E/CSA anchor point was not found.

## System action

Processing ends.

Check the IMS control region startup messages to make sure IMS ETO Support initialized successfully.

#### Module

**IZTMLSTO** 

IZT4901E BAD STATUS CODE ON REPL CALL
TO DBIZT1 = xx

#### **Explanation**

IMS returned a status code of xx during a REPL call to DBIZT.

# **System action**

The options data set update was not completed.

# **User response**

Check status code xx in IMS Messages and Codes. Correct the condition, and the update again.

#### Module

**IZTMUPD0** 

IZT4902I AN INVALID ROW COMMAND WAS ENTERED: x

#### **Explanation**

An invalid command (x), was entered on a member selection line.

## **System action**

The input is ignored.

#### **User response**

Correct the command, and try again.

#### Module

IZTMUPD0

IZT4903E BAD STATUS CODE ON GHU TO DBIZT1 = xx

#### **Explanation**

An error occurred while attempting a GHU call to DBIZT1. The status code is described in the *IMS Messages and Codes*.

# **System action**

The request is ignored.

#### **User response**

Correct the problem that caused the bad status code, and try again.

#### Module

IZTMUPD0

IZT4904E AN INVALID COMMAND WAS ENTERED: xxxxxxxx

# **Explanation**

An unrecognized command (xxxxxxxx) was attempted.

# **System action**

The command was ignored.

# User response

Enter a valid command, and continue.

## Module

IZTMUPD0

IZT4905I ENTRY IS NO LONGER IN OPTIONS DATA SET: xxxxxx

## **Explanation**

The options data set record for the selected return code (xxxxxx) is no longer valid. The record was probably deleted by one user while another was trying to view it.

# System action

Processing ends.

#### User response

Go back to IZTRAN's main menu, and display the DFS3649A error messages again.

#### Module

IZTMUPD0

IZT4911E INVALID DATA IN "RETURN CODE"
FIELD

The return code field contains non-numeric data. The return code must be a numeric value.

# **System action**

The input is ignored.

# **User response**

Correct the return code, and try again.

#### Module

**IZTMUPD0** 

IZT4912E "MESSAGE TEXT" IS A REQUIRED FIELD

# **Explanation**

No data was entered in the MESSAGE TEXT field, and this is a required field.

# **System action**

The input is ignored.

# **User response**

Add the error message override, and try again.

#### Module

IZTMUPD0

IZT4913E INVALID DATA IN "START" FIELD

## **Explanation**

The START field indicates the starting return code value that is used to list the entries in DBIZT and, therefore, must contain numeric data. IMS ETO Support found non-numeric data in the START field.

#### **System action**

The input is ignored.

# **User response**

Enter numeric data or use blanks in the START field, and try again.

#### Module

IZTMUPD0

IZT4914E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

# **Explanation**

An unrecognized command was attempted.

# **System action**

The command is ignored.

# **User response**

Enter a valid command, and try again.

#### Module

**IZTMUPD0** 

IZT4915E BAD STATUS CODE ON GHU TO DBIZT1 = xx

# **Explanation**

An error occurred while attempting a GHU call to DBIZT1. The status code is described in the *IMS Messages and Codes*.

# System action

The request is ignored.

# **User response**

Correct the problem that caused the bad status code, and try again.

#### Module

IZTMUPD0

IZT4916E BAD STATUS CODE ON REPL TO DBIZT1 = xx

# **Explanation**

An error occurred while attempting a REPL call to DBIZT1. The status code is described in the *IMS Messages and Codes*.

## System action

The request is ignored.

#### User response

Correct the problem that caused the bad status code, and try again.

**IZTMUPD0** 

IZT4917E

BAD STATUS CODE ON ISRT TO DBIZT1 = xx

Module

IZTMUPD0

**IZT4921E** 

BAD STATUS CODE ON GU TO DBIZT1 = xx

# **Explanation**

An error occurred while attempting an ISRT call to DBIZT1. The status code is described in the *IMS Messages and Codes*.

# Explanation

An error occurred while attempting a GU call to DBIZT1. The status code is described in the *IMS Messages and Codes*.

# **System action**

The request is ignored.

# System action

The request is ignored.

# **User response**

Correct the problem that caused the bad status code, and try again.

# **User response**

Correct the problem that caused the bad status code, and try again.

#### Module

**IZTMUPD0** 

IZT4918I RECORD SUCCESSFULLY REPLACED IN DBIZT1

#### Module

**IZTMUPD0** 

**IZT4922E** 

BAD STATUS CODE ON GN TO DBIZT1 = xx

# **Explanation**

The record addition completed successfully.

# **Explanation**

An error occurred while attempting a GN call to DBIZT1. The status code is described in the *IMS Messages and Codes*.

# System action

The database record update completed.

# System action

The request is ignored.

# User response

Continue normal processing.

#### User response

Correct the problem that caused the bad status code, and try again.

#### Module

IZTMUPD0

IZT4919I RECORD SUCCESSFULLY INSERTED IN DBIZT1

#### Module

IZTMUPD0

# **IZT4923E**

CONFLICTING ROW COMMANDS
HAVE BEEN ENTERED

# **Explanation**

The record addition completed successfully.

# **System action**

The database record addition completed.

#### **Explanation**

Multiple IMS ETO Support row commands were attempted, but only one at a time is allowed.

#### **User response**

Continue normal processing.

#### System action

The request is ignored.

Specify only one row command, and try again.

#### Module

IZTMUPD0

IZT4924E BAD STATUS CODE ON GN TO DBIZT1 = xx

# **Explanation**

An error occurred while attempting a GN call to DBIZT1. The status code is described in the *IMS Messages and Codes*.

# **System action**

The request is ignored.

# **User response**

Correct the problem that caused the bad status code, and try again.

#### Module

**IZTMUPD0** 

IZT4925E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE = xx

# **Explanation**

An error occurred while trying to read the control record from DBIZT1. The status codes are described in *IMS Messages and Codes*.

#### **System action**

The request is ignored.

## **User response**

Correct the problem that caused the bad status code, and try again.

## Module

IZTMUPD0

IZT4926E ERROR ON GHU CALL, STATUS
CODE = xx KEY=yyyyyyyyy

#### **Explanation**

An invalid status code was returned on a GHU call to the options data set. The status code that was

returned (xx) indicates the reason for the failure. The key of the record being retrieved is designated by yyyyyyyy.

# **System action**

Processing ends.

# **User response**

Determine the reason for the failure, and correct the problem.

#### Module

IZTMUPD0

IZT4928E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxxx

# **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

# System action

The options data set I/O operation ends.

# User response

Check the MVS syslog for additional messages. If any messages are found, take appropriate action based on those messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

IZTMUPD0

IZT5000I IZTRAN PROCESSING COMPLETE

# **Explanation**

IZTRAN processing ended.

#### System action

Processing completes.

#### User response

None. This message is informational.

IZTRAN00

IZT5001E

BAD STATUS CODE ON GU TO IOPCB - xx

Module

IZTRAN00

IZT5011W

DATA BASE DBIZT1 NOT AVAILABLE

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **Explanation**

The IMS ETO Support database was not available.

# **System action**

Processing ends.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

# **User response**

Try the command again when the database becomes available.

#### Module

IZTRAN00

IZT5002E

ERROR ON INQY CALL
RC=xxxxxxxx REASON=xxxxxxxx

# Module

IZTRAN00

IZT5012E

INTERNAL ERROR, NULL SUB ROUTINE ADDRESS

# **Explanation**

An invalid RETURN or REASON code was returned for an IMS INQY call.

# **Explanation**

An IMS ETO Support internal error occurred.

# **System action**

Processing ends.

# **System action**

Processing ends.

# **User response**

Determine the cause of the bad return or reason code, and correct the problem.

**INTERNAL ERROR, INVALID** 

PROCESS NAME = xxxxxxxx

# User response

Contact IBM Software Support.

#### Module

IZTRAN00 IZT5010E

# IZTRAN00

Module

**IZT5013E** 

NON ZERO RETURN CODE FROM xxxxxxxx RC=yyyyyyyy

# Explanation

An IMS ETO Support internal error occurred.

# **Explanation**

A bad return code was returned from routine *xxxxxxxx*. The return code is indicated in the *yyyyyyyy* field.

# **System action**

Processing ends.

# **System action** Processing ends.

User response

# **User response**

Contact IBM Software Support.

# Contact IBM Software Support.

**IZTRAN00** 

IZT5014E STATUS CODE = xx ON CHNG CALL TO IZTRAN

# **Explanation**

A message switch was attempted to transaction IZTRAN, but the CHNG call encountered a non-blank status code. The status code is returned in the xx field.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the error.

#### Module

**IZTRAN00** 

IZT5050E AN INVALID SELECTION WAS ENTERED: xxxxxxxx

# **Explanation**

An invalid selection was entered.

# **System action**

No processing is attempted.

#### **User response**

Enter a valid selection code, and try again.

#### Module

IZTRAN00

IZT5051E VINT FAILED FOR DBIZT1, RC=xxxxxxxx

## **Explanation**

The options data set initialization routine failed with an unexpected error.

# **System action**

Processing ends.

## **User response**

Check the MVS syslog for additional messages. Also, look in "Options data set access module (IZTTDLI return codes" for the return code in this message (xxxxxxxxx). If this fails to resolve the problem, contact IBM Software Support.

#### Module

**IZTRAN** 

IZT5052E UNABLE TO OBTAIN SYSTEMS ENQ ON DBIZT1

# **Explanation**

IMS ETO Support ensures serialized access to the options data set by means of an MVS ENQ. The attempt to acquire the ENQ failed because another job was holding it.

# **System action**

Processing ends.

# **User response**

Try the transaction again. If repeated attempts fail, check to see if there is a long-running batch update taking place.

#### Module

**IZTRAN** 

IZT5053E BLDL FAILED FOR MEMBER
DBIZT1

## **Explanation**

Member DBIZT1 was not found in a STEPLIB library. When accessing the options data set as a VSAM KSDS, the IMS message region must contain member DBIZT1 (the options data set dynamic allocation member) in a STEPLIB library.

## System action

Processing ends.

#### User response

Make sure IMS ETO Support installation is correct. If you are trying to update the options data set as a VSAM KSDS, dynamic allocation member DBIZT1 must be in a STEPLIB library for the MPR. If you are trying to update the options data set as an IMS database,

IZTRAN cannot be defined as a GPSB on the APPLCTN statement in the IMS system generation.

# Module

**IZTRAN** 

IZT5054E MEMBER DBIZT1 WAS NOT CREATED BY DFSMDA

# **Explanation**

Member DBIZT1 was found in a STEPLIB library, but it was not created using the IMS DFSMDA macro.

# **System action**

Processing ends.

# **User response**

Create a valid DBIZT1 member using the DFSMDA dynamic allocation macro.

#### Module

**IZTRAN** 

IZT5101E BAD STATUS CODE ON CALL TO DBIZT1 = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTREFRO** 

IZT5102E BAD STATUS CODE ON CALL TO DBIZT1 = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTREFRO** 

IZT5103E BAD STATUS CODE ON GHU CALL
TO DBIZT1 = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTREFRO** 

IZT5104E BAD STATUS CODE ON GHN CALL
TO DBIZT1 = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTREFR0

IZT5105E BAD STATUS CODE ON DLET CALL
TO DBIZT1 = xx

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTREFRO** 

IZT5106E BAD STATUS CODE ON ISRT CALL
TO DBIZT1 = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTREFRO** 

#### Module

**IZTSEKW0** 

IZT5107I RECORD SAVED

# **Explanation**

The REFRESH ROUTING INFORMATION record was saved in the options data set.

# System action

Processing completes.

#### User response

None. This message is informational.

#### Module

**IZTREFRO** 

IZT5108E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxxx

# **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support. Check the MVS syslog for additional messages.

# System action

The options data set I/O operation ends.

# User response

Check the MVS syslog for additional messages. If additional messages are found, take appropriate action based on the messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTREFRO** 

IZT5201I "x" IS AN INVALID SELECTION CODE

## **Explanation**

An invalid selection was entered.

# System action

No processing is attempted.

#### User response

Enter a valid selection code, and try again.

#### Module

**IZTSEKW0** 

IZT5202E INVALID STATUS CODE ON CALL
TO DBIZT1 = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTSEKW0** 

IZT5203I COMMAND KEYWORD SECURITY CHECKING IS NOT ACTIVE

# **Explanation**

An attempt to activate a command/keyword combination was made, but Enhanced Command/ Keyword checking is not active.

# **System action**

Processing ends.

# **User response**

If command/keyword checking is desired, select option **E** from the Primary Menu and activate ENHANCED COMMAND/KEYWORD SECURITY.

## **Module**

**IZTSEKW0** 

IZT5204I INTERNAL ERROR OCCURRED, CONTACT VENDOR FOR SUPPORT

# **Explanation**

An IMS ETO Support internal error occurred.

# **System action**

Processing ends.

#### **User response**

Contact IBM Software Support.

#### Module

IZTSEKW0

IZT5205E INTERNAL ERROR OCCURRED,
COMMAND XXXXXXXX NOT IN TABLE

## **Explanation**

An IMS ETO Support internal error occurred.

# **System action**

Processing ends.

#### User response

Contact IBM Software Support.

#### Module

**IZTSEKW0** 

IZT5206W OPTION MUST BE AN A OR D,
INVALID OPTION BYPASSED

# **Explanation**

An invalid command was entered.

# System action

No processing is attempted.

#### User response

Enter a valid command, and try again.

#### Module

**IZTSEKWO** 

IZT5207E INTERNAL ERROR OCCURRED,
COMMAND XXXXXXXX NOT IN TABLE

#### **Explanation**

An IMS ETO Support internal error occurred.

## System action

Processing ends.

#### User response

Contact IBM Software Support.

#### Module

**IZTSEKW0** 

IZT5208E INVALID STATUS CODE ON REPL CALL FOR DBIZT1 = xx

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTSEKWO** 

IZT5209E INVALID STATUS CODE ON GHU
CALL FOR DBIZT1 = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTSEKWO** 

IZT5210E INVALID STATUS CODE ON REPL CALL FOR DBIZT1 = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTSEKW0** 

IZT5211E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

# **Explanation**

An invalid command was entered.

# **System action**

No processing is attempted.

# **User response**

Enter a valid command, and try again.

#### Module

IZTSEKW0

IZT5212E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxxx

# **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

# System action

The options data set I/O operation ends.

#### User response

Check the MVS syslog for additional messages. If additional messages are found, take appropriate action based on the messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTSEKW0** 

IZT5301I X IS AN INVALID SELECTION CODE

## **Explanation**

An invalid command was entered.

## **System action**

No processing is attempted.

Enter a valid command, and try again.

Module

IZTSEKW5

IZT5302I E/CSA TABLE NOT FOUND ON THIS

CPU

**Explanation** 

An IMS ETO Support internal error occurred.

**System action** 

Processing ends.

**User response** 

Verify that IMS ETO Support was installed correctly, and check for IZT messages at IMS initialization.

Module

IZTSEKW5

IZT5303I COMMAND KEYWORD SECURITY CHECKING IS NOT ACTIVE

**Explanation** 

A request was made to list the Enhanced Command Keyword tables, but Enhanced Command/Keyword checking is not active.

**System action** 

Processing ends.

**User response** 

If Enhanced Command/Keyword checking is desired, select option **E** from the Primary Menu, activate ENHANCED COMMAND/KEYWORD SECURITY, and refresh the E/CSA tables.

Module

**IZTSEKW5** 

IZT5304I INTERNAL ERROR OCCURRED, CONTACT VENDOR FOR SUPPORT

**Explanation** 

An IMS ETO Support internal error occurred.

**System action** 

Processing ends.

**User response** 

Contact IBM Software Support.

Module

IZTSEKW5

IZT5305E INTERNAL ERROR OCCURRED,

COMMAND XXXXXXXX NOT IN TABLE

**Explanation** 

An IMS ETO Support internal error occurred.

**System action** 

Processing ends.

**User response** 

Contact IBM Software Support.

Module

**IZTSEKW5** 

IZT5307E INTERNAL ERROR OCCURRED,

**COMMAND XXXXXXXX NOT IN TABLE** 

**Explanation** 

An IMS ETO Support internal error occurred.

**System action** 

Processing ends.

User response

Contact IBM Software Support.

Module

**IZTSEKW5** 

IZT5400E UNABLE TO LOCATE ETO-SUPPORT ANCHOR

**Explanation** 

An IMS ETO Support internal error occurred.

**System action** 

Processing ends.

Verify that IMS ETO Support was installed correctly, and check for IZT messages at IMS initialization.

#### Module

**IZTSLST0** 

IZT5401E UNABLE TO LOCATE IMSID TABLE SECTION

# **Explanation**

An IMS ETO Support internal error occurred.

# System action

Processing ends.

#### User response

Verify that IMS ETO Support was installed correctly, and check for IZT messages at IMS initialization.

#### Module

**IZTSLST0** 

IZT5402E UNABLE TO LOCATE OPTIONS DATA SET SECTION

# **Explanation**

An IMS ETO Support internal error occurred.

# **System action**

Processing ends.

#### **User response**

Verify that IMS ETO Support was installed correctly, and check for IZT messages at IMS initialization.

#### Module

IZTSLST0

IZT5403W AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

#### **Explanation**

An invalid command was entered.

# **System action**

No processing is attempted.

#### **User response**

Enter a valid command, and try again.

#### Module

IZTSLST0

IZT5404E OPTIONS SELECTED, "MUST BE "1" OR "2"

# **Explanation**

You specified an invalid option on the command line. Valid options are either 1 or 2.

# **System action**

The request is ignored.

#### User response

Enter a valid option and try the operation again.

#### Module

**IZTSLST0** 

IZT5500E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

# **Explanation**

An invalid command was entered.

#### System action

No processing is attempted.

#### User response

Enter a valid command, and try again.

#### Module

IZTSUPD0

IZT5501E INVALID STATUS CODE ON GHU
TO DBIZT1 = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

Determine the cause of the error code, and correct the problem.

#### Module

IZTSUPD0

IZT5502E INVALID OPTION FOR DYNAMIC TERMINALS

# **Explanation**

An invalid selection was entered for DYNAMIC TERMINALS processing.

# **System action**

No processing is attempted.

# User response

Select from the listed options, and try again.

#### **Module**

**IZTSUPD0** 

IZT5503E INVALID OPTION FOR STATIC TERMINALS

# **Explanation**

An invalid selection was entered for STATIC TERMINALS processing.

# System action

No processing is attempted.

#### **User response**

Select from the listed options, and try again.

#### Module

IZTSUPD0

IZT5504E INVALID OPTION FOR LU 6.2
DEVICES

# **Explanation**

An invalid selection was entered for LU 6.2 DEVICES processing.

# System action

No processing is attempted.

## User response

Select from the listed options, and try again.

#### Module

IZTSUPD0

IZT5505E INVALID OPTION FOR OTMA
DEVICES

# **Explanation**

An invalid selection was entered for OTMA processing.

# System action

No processing is attempted.

# **User response**

Select from the listed options, and try again.

#### Module

IZTSUPD0

IZT5506E INVALID OPTION FOR ICMD PROCESSING

# **Explanation**

An invalid selection was entered for ICMD processing.

## System action

No processing is attempted.

#### User response

Select from the listed options, and try again.

#### Module

**IZTSUPD0** 

IZT5507E INVALID OPTION FOR ENHANCED KEYWORD SUPPORT

# **Explanation**

An invalid selection was entered for the ENHANCED COMMAND/KEYWORD SECURITY option.

# System action

No processing is attempted.

Select from the listed options, and try again.

#### Module

IZTSUPD0

IZT5508E INVALID OPTION FOR COMMANDS FROM WTOR

# **Explanation**

An invalid value was specified in the COMMANDS FROM THE WTOR field.

# **System action**

The input is ignored.

#### **User response**

Correct the value specified in the COMMANDS FROM THE WTOR field, and try again.

#### Module

**IZTSUPD0** 

IZT5509E INVALID OPTION FOR COMMANDS FROM MTO

# **Explanation**

An invalid value was specified in the COMMANDS FROM THE MTO field.

#### **System action**

The input is ignored.

#### **User response**

Correct the value specified in the COMMANDS FROM THE MTO field, and try again.

#### Module

**IZTSUPD0** 

IZT5510E INVALID OPTION FOR COMMANDS FROM TCO

#### **Explanation**

An invalid value was specified in the COMMANDS FROM TCO field.

# **System action**

The input is ignored.

# **User response**

Correct the value specified in the COMMANDS FROM TCO field, and try again.

## Module

IZTSUPD0

IZT5511E INVALID OPTION FOR COMMANDS FROM EMCS

## **Explanation**

An invalid value was specified in the COMMANDS FROM THE EMCS field.

# **System action**

The input is ignored.

# **User response**

Correct the value specified in the COMMANDS FROM EMCS field, and try again.

#### Module

**IZTSUPD0** 

IZT5512E INVALID OPTION FOR IMS CMD CALLS

# **Explanation**

An invalid value was specified in the CMD CALLS field.

#### System action

The input is ignored.

#### User response

Correct the value specified in the CMD CALLS field, and try again.

#### Module

IZTSUPD0

IZT5513E INVALID OPTION FOR LU 6.1 DEVICES

An invalid selection was entered for LU 6.1 device processing.

# **System action**

No processing is attempted.

# **User response**

Select from the listed options, and try again.

#### Module

**IZTSUPD0** 

IZT5520E BAD STATUS CODE ON REPL CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTSUPD0

IZT5521E BAD STATUS CODE ON GHU CALL = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTSUPD0

IZT5522E BAD STATUS CODE ON REPL CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTSUPD0** 

IZT5523E BAD STATUS CODE ON ISRT CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTSUPD0

IZT5531I SECURITY OPTIONS UPDATE COMPLETE

# **Explanation**

All selections passed edit checking, and the database update completed successfully.

## System action

Processing completes.

#### User response

None. This message is informational.

**IZTSUPD0** 

IZT5532E BAD RETURN CODE FROM IZTTDLI
= XXXXXXXX

# **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

# **System action**

The options data set I/O operation ends.

# **User response**

Check the MVS syslog for additional messages. If additional messages are found, take appropriate action based on the messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTSUPD0** 

IZT5533E INVALID OPTIONS SELECTED,
MUST BE "1" OR "2"

## **Explanation**

An invalid value was specified on the COMMAND line.

# **System action**

The input is ignored.

#### User response

Correct the value specified on the COMMAND line, and try again.

#### Module

**IZTSUPD0** 

IZT5534E INVALID VALUE SPECIFIED FOR "PERFORM TRAN/LTERM VERIFICATION"

#### **Explanation**

An invalid value was specified in the PERFORM TRAN/LTERM VERIFICATION field.

# **System action**

The input is ignored.

## User response

Correct the value specified in the PERFORM TRAN/LTERM VERIFICATION field, and try again.

#### Module

**IZTSUPD0** 

IZT5535E INVALID VALUE SPECIFIED
FOR "PERFORM TRAN/PASSWORD
VERIFICATION"

# **Explanation**

An invalid value was specified in the PERFORM TRAN/ PASSWORD VERIFICATION field.

# System action

The input is ignored.

# **User response**

Correct the value specified in the PERFORM TRAN/ PASSWORD VERIFICATION field, and try again.

#### Module

**IZTSUPD0** 

IZT5536E RACF PREFIX NOT ALLOWED
UNLESS TRAN/LTERM OR TRAN/
PSWD ACTIVE

#### **Explanation**

A value was specified in the PREFIX NAME FOR RACF RULES field, but both TRAN/LTERM VERIFICATION and TRAN/PASSWORD VERIFICATION are inactive.

#### **System action**

The input is ignored.

#### User response

Either clear the PREFIX NAME FOR RACF RULES field, or set TRAN/LTERM VERIFICATION or TRAN/PASSWORD VERIFICATION to Yes (Y), and try again.

#### Module

IZTSUPD0

# IZT5537E RACF PREFIX REQUIRED IF TRAN/ LTERM OR TRAN/PSWD ACTIVE

# **Explanation**

Either TRAN/LTERM VERIFICATION or TRAN/ PASSWORD VERIFICATION is set to Yes (Y), but no value was specified in the PREFIX NAME FOR RACF RULES field.

# **System action**

The input is ignored.

# **User response**

Either specify a value in the PREFIX NAME FOR RACF RULES field, or set both TRAN/LTERM VERIFICATION and TRAN/PASSWORD VERIFICATION fields to No (N), and try again.

#### Module

**IZTSUPD0** 

IZT5538E RACF PREFIX CONTAINS INVALID CHARACTERS

# **Explanation**

Invalid characters were detected in the PREFIX NAME FOR RACF RULES field. Only alphanumeric (A-Z, 0-9) and national characters (#,@,\$) are allowed in the PREFIX NAME FOR RACF RULES field.

# **System action**

The input is ignored.

# User response

Correct the value specified in the PREFIX NAME FOR RACF RULES field, and try again.

#### Module

IZTSUPD0

IZT5539E INVALID VALUE SPECIFIED FOR "SUPPRESS ICH408I/IZT0008I""

# **Explanation**

An invalid value was specified in the SUPPRESS ICH408I/IZT0008I field.

# System action

The input is ignored.

#### User response

Correct the value specified in the SUPPRESS ICH408I/IZT0008I field, and try again.

#### Module

**IZTSUPD0** 

IZT5540E INVALID VALUE SPECIFIED FOR ETOS MATRIX

# **Explanation**

An invalid value was coded for the IMS ETO Support MATRIX option.

# **System action**

The options are not updated.

# User response

Enter a valid value (Y or N) for IMS ETO Support MATRIX, and press Enter.

#### Module

**IZTSUPD0** 

IZT5541E BOTH RACF AND ETOS MATRIX CANNOT BE SPECIFIED

#### **Explanation**

You can specify the use of either RACF Verification or IMS ETO Support MATRIX Verification. Both cannot be used at the same time.

# System action

The options are not updated.

#### User response

Choose either RACF Verification, or IMS ETO Support MATRIX Verification, and specify N for the other.

#### Module

**IZTSUPD0** 

IZT5550E BAD STATUS CODE ON GHU TO DBIZT1 = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

Processing ends.

**User response** 

Determine the cause of the error code, and correct the problem.

Module

IZTSUPD0

IZT5600E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

**Explanation** 

An IMS ETO Support internal error occurred.

**System action** 

Processing ends.

**User response** 

Verify that IMS ETO Support was installed correctly, and check for IZT messages at IMS initialization.

Module

IZTULST0

IZT5610E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

**Explanation** 

An invalid command was entered.

**System action** 

No processing is attempted.

User response

Enter a valid command, and try again.

Module

**IZTULSTO** 

IZT5611E INVALID ROW COMMAND HAS BEEN ENTERED: x

**Explanation** 

An invalid command was entered.

**System action** 

No processing is attempted.

**User response** 

Enter a valid command, and try again.

Module

**IZTULSTO** 

IZT5630E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

**Explanation** 

An IMS ETO Support internal error occurred.

**System action** 

Processing ends.

**User response** 

Verify that IMS ETO Support was installed correctly, and check for IZT messages at IMS initialization.

Module

IZTULST0

IZT5640E ERROR ENCOUNTERED IN TABLE

**LOCATE SERVICE** 

**Explanation** 

An IMS ETO Support internal error occurred.

**System action** 

Processing ends.

**User response** 

Verify that IMS ETO Support was installed correctly, and check for IZT messages at IMS initialization.

Module

IZTULST0

IZT5641E ERROR ENCOUNTERED IN TABLE LOCATE SERVICE

**Explanation** 

An IMS ETO Support internal error occurred.

Processing ends.

# **User response**

Verify that IMS ETO Support was installed correctly, and check for IZT messages at IMS initialization.

#### Module

**IZTULSTO** 

IZT5642E ENTRY NO LONGER IN TABLE:

# **Explanation**

The selected entry no longer exists in the E/CSA table. This is probably because one user was refreshing the table while another user was viewing it.

# **System action**

Processing ends.

# **User response**

Return to the Primary Menu, and try again.

#### Module

**IZTULSTO** 

IZT5651E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

# **Explanation**

An invalid command was entered.

#### System action

No processing is attempted.

#### **User response**

Enter a valid command, and try again.

#### Module

**IZTULSTO** 

IZT5700E USERID MUST BE PROVIDED

## **Explanation**

USERID is a required field, but it contained blanks.

# **System action**

No processing is attempted.

#### **User response**

Enter a valid user ID, and try again.

#### Module

**IZTUUPD0** 

IZT5701E AN INVALID COMMAND HAS BEEN ENTERED: xxxxxxxx

# **Explanation**

An invalid command was entered.

## System action

No processing is attempted.

# User response

Enter a valid command, and try again.

#### Module

**IZTUUPD0** 

IZT5702E TRX NOT ALLOWED UNLESS
OPTION 7 SPECIFIED FOR
DFS3650

## **Explanation**

A transaction name has been specified in TRX NAME, but DFS3650 option 7 has not been specified.

# System action

No update takes place.

#### User response

Specify option 7 for the DFS3650 option, or remove the TRX NAME.

#### Module

IZTUUPD0

IZT5703I INVALID OPTION SELECTED FOR DFS3650 PROCESS

#### **Explanation**

An invalid selection was made for the DFS3650 process.

No processing is attempted.

# **User response**

Select one of the listed options, and try again.

#### Module

**IZTUUPDO** 

IZT5704I MOD REQUIRED IF OPTION 5
SELECTED IN XXXXXXX PROCESS

# **Explanation**

Option 5 was selected for the DFS3650 process, but the USER MOD field contained blanks.

# **System action**

No processing is attempted.

# **User response**

Either select another option, or enter a valid USER MOD name.

#### Module

IZTUUPD0

IZT5705I MOD NOT ALLOWED UNLESS
OPTION 5 SELECTED IN DFS3650
PROCESS

## **Explanation**

Option 5 was not selected for the DFS3650 process, and the USER MOD field was non-blank.

# **System action**

No processing is attempted.

#### **User response**

Either select option 5, or do not enter a USER MOD name.

#### Module

**IZTUUPDO** 

IZT5706I INVALID VALUE SELECTED FOR LTERM/USER NAMING OPTION

# **Explanation**

An invalid value was entered for LTERM/USER NAMING OPTIONS.

# System action

No processing is attempted.

# User response

Select one of the listed options, or leave the field blank.

#### Module

**IZTUUPD0** 

IZT5707I INVALID CHARACTER DETECTED IN ASOT

# **Explanation**

An invalid character was detected in the ASOT field. Only numeric characters or blanks are allowed in this field.

# System action

No processing is attempted.

#### User response

Correct the ASOT value.

#### Module

IZTUUPD0

IZT5708I INVALID VALUE FOR ASOT, MUST BE xxx

## **Explanation**

An invalid value was entered in the ASOT field.

#### System action

No processing is attempted.

# User response

Enter a value in the listed range, or leave the field blank.

#### Module

**IZTUUPDO** 

IZT5709I INVALID VALUE SPECIFIED IN "LOGON PROCESS" FIELD

IZT5712I INVALID CASE VALUE FOR LTERM

# **Explanation**

An invalid option was selected for the LOGON PROCESS.

# **System action**

No processing is attempted.

# User response

Select one of the listed options, and try again.

#### Module

IZTUUPD0

IZT5710I INVALID ICOMPT VALUE FOR LITERM !!!!!!!!

## **Explanation**

An invalid value was specified in the ICOMPT field for LTERM *IllIllIl*.

# **System action**

No processing is attempted.

## User response

Correct the ICOMPT value, and try again.

#### Module

IZTUUPD0

IZT5711I INVALID OCOMPT VALUE FOR LITERM !!!!!!!

# **Explanation**

An invalid value was specified in the OCOMPT field for LTERM *llllllll*.

## **System action**

No processing is attempted.

# User response

Correct the OCOMPT value, and try again.

#### Module

**IZTUUPD0** 

# **Explanation**

An invalid value was specified in the CASE field for LTERM *IIIIIIIII*.

# **System action**

No processing is attempted.

#### **User response**

Correct the CASE value, and try again.

#### Module

IZTUUPD0

IZT5713I LTERM NAME REQUIRED IF LTERM
NAMING OPTION 2 SPECIFIED

## **Explanation**

Option 2 was specified in the LTERM NAMING OPTIONS field, but there were no LTERM names provided in the table.

# System action

No processing is attempted.

#### User response

Either choose another value for LTERM NAMING OPTIONS, or include one or more LTERM names in the table, and try again.

#### Module

IZTUUPD0

IZT5714I INVALID VALUE SPECIFIED FOR LTERM NAMING OPTION

# **Explanation**

The value specified in the LTERM NAMING OPTIONS field is not one of the supported values.

## System action

No processing is attempted.

#### User response

Correct the value specified in the LTERM NAMING OPTIONS field, and try again.

**IZTUUPD0** 

IZT5715I LTERM(S) NOT ALLOWED UNLESS LTERM NAMING OPTION = 2

# **Explanation**

One or more LTERM names were specified, but the LTERM NAMING OPTIONS field was not set to 2.

# **System action**

No processing is attempted.

# **User response**

Either remove the LTERM names, or change the LTERM NAMING OPTIONS field to 2, and try again.

#### Module

IZTUUPD0

IZT5716E USERID uuuuuuuu ALREADY DEFINED AS A tttt USERID

#### **Explanation**

The attempt to create a record for user ID *uuuuuuuu* failed because a user ID record already exists in table *tttt*.

#### **System action**

No processing is attempted.

#### **User response**

Correct the conflict in user ID names, and try again.

#### Module

IZTUUPD0

IZT5717E LTERM NAME(S) REQUIRED WHEN LTERM NAMING OPTION 2 IS SPECIFIED

#### **Explanation**

Option 2 is specified for LTERM NAMING OPTIONS, but there are no LTERM names specified.

#### **System action**

No processing is attempted.

## User response

Either change LTERM NAMING OPTIONS, or add one or more LTERM names, and try again.

#### Module

**IZTUUPD0** 

IZT5719E TRX NAME NOT VALID WHEN
USER MOD SELECTED FOR
DFS3650

#### **Explanation**

Option 5 has been specified for DFS3650, and a transaction name has also been specified in DFS3650 TRX NAME.

#### **System action**

No update takes place.

#### User response

Either specify option 5 for DFS3650 and provide a USER MOD name, or specify option 7 for DFS3650 and provide a TRX NAME.

#### Module

IZTUUPD0

IZT5720I BAD STATUS CODE ON REPL CALL TO DBIZT1 = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

#### System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTUUPD0

IZT5721E TRX NAME REQUIRED WHEN
OPTION 7 SPECIFIED FOR
DFS3650

DFS3650 option 7 was specified, but the TRX NAME field contained blanks.

# **System action**

No update takes place.

# **User response**

Either specify a TRX NAME or specify a different value for option DFS3650.

#### Module

IZTUUPD0

IZT5722E USER MOD NOT VALID WHEN TRX
NAME SELECTED FOR DFS3650

## **Explanation**

DFS3650 option 7 was specified, but the USER MOD field did not contain blanks.

# **System action**

No update takes place.

# **User response**

Either specify option 5 for DFS3650 and provide a USER MOD name, or specify option 7 for DFS3650 and provide a TRX NAME.

#### Module

IZTUUPD0

IZT5731I INVALID VALUE SUPPLIED FOR MSGDEL OPTION

## **Explanation**

An invalid selection was entered for the MSGDEL OPTIONS.

## System action

No processing is attempted.

#### **User response**

Enter a valid MSGDEL OPTION, and try again.

#### Module

IZTUUPD0

IZT5732I INVALID VALUE SUPPLIED FOR RESPONSE OPTION

# **Explanation**

An invalid option was selected for the RESPONSE OPTIONS.

# **System action**

No processing is attempted.

# **User response**

Enter a valid selection for RESPONSE OPTIONS, or leave it blank.

#### Module

**IZTUUPD0** 

IZT5733E USER/LTERM NAME REQUIRED IF LTERM/USER TABLE OPTION 3 USED

# **Explanation**

Option 3 was selected for the LTERM/USER NAMING OPTIONS, but the USER/LTERM field contains blanks. A USER/LTERM name is required when option 3 is requested.

## **System action**

No processing is attempted.

#### User response

Either change the LTERM/USER NAMING OPTIONS, or enter a valid USER/LTERM name.

#### Module

**IZTUUPD0** 

IZT5734E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

#### **Explanation**

An error occurred processing the options data set. The MVS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

## System action

The options data set I/O operation ends.

Check the MVS syslog for additional messages. If additional messages are found, take appropriate action based on the messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

IZTUUPD0

IZT5735E INVALID VALUE SPECIFIED FOR BYPASS DEQUEUE

# **Explanation**

A value other than Y (yes) or N (no) was specified for the BYPASS DEQUEUE option.

# System action

The input is ignored.

#### **User response**

Specify either Y (yes) or N (no) and try again.

#### Module

IZTNUPD0

IZT5740E AN INVALID COMMAND WAS ENTERED: xxxxxxxx

#### **Explanation**

An invalid command was entered.

#### System action

No processing is attempted.

## **User response**

Enter a valid command, and try again.

#### Module

IZTUUPD0

IZT5741E AN INVALID ROW COMMAND WAS ENTERED: x

#### **Explanation**

An invalid command was entered.

# **System action**

No processing is attempted.

#### **User response**

Enter a valid command, and try again.

#### Module

**IZTUUPD0** 

IZT5742E MULTIPLE LTERM RECORD NOT FOUND

# **Explanation**

Data contained in the Userid record indicates a multiple LTERM record should be present in the database. However, the record is not present. This is likely an IMS ETO Support internal error.

# System action

Processing ends.

#### **User response**

Save the contents of the database to another file, restore the database from the last good backup, and contact IBM Software Support.

#### Module

**IZTUUPD0** 

IZT5743E BAD STATUS CODE ON DATA BASE GHU=xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTUUPD0

IZT5744E BAD STATUS CODE ON A
DATABASE GHU=xx

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTUUPD0** 

IZT5750E ERROR ON GHU CALL, STATUS CODE=xx KEY=yyyyyyyyy

# **Explanation**

An invalid status code was returned on a GHU call to the options data set. The status code that was returned (xx) indicates the reason for the failure, and yyyyyyyy is the record key.

# **System action**

Processing ends.

#### **User response**

Determine the reason for the failure, and correct the problem.

#### Module

**IZTUUPD0** 

IZT5751E ERROR ON DLET CALL, STATUS
CODE=xx

# **Explanation**

An invalid status code was returned on a DLET call to the options data set. The status code that was returned (xx) indicates the reason for the failure.

# **System action**

Processing ends.

# **User response**

Determine the reason for the failure, and correct the problem.

#### Module

**IZTUUPD0** 

IZT5760E BAD STATUS CODE ON DLET CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTUUPD0

IZT5762E BAD STATUS CODE ON REPL CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

#### **System action**

Processing ends.

## User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTUUPD0

IZT5763E BAD STATUS CODE ON GHU CALL =

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

Determine the cause of the error code, and correct the problem.

#### Module

IZTUUPD0

IZT5764E BAD STATUS CODE ON DLET CALL
= xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTUUPD0** 

IZT5770I NO OVERRIDE FIELDS PROVIDED,
RECORD DELETED FROM DBIZT1

#### **Explanation**

No override values were provided for this entry. The entry was deleted from the database.

#### **System action**

Processing completes.

#### **User response**

None. This message is informational.

#### Module

IZTUUPD0

IZT5771I RECORD ADDED TO DBIZT1

## **Explanation**

All fields passed edit checking, and the record was added to the database.

#### **System action**

Processing completes.

#### User response

None. This message is informational.

#### Module

IZTUUPD0

IZT5772I RECORD REPLACED IN DBIZT1

# **Explanation**

All fields passed edit checking, and the record was replaced in the database.

# System action

Processing completes.

# User response

None. This message is informational.

#### Module

**IZTUUPD0** 

IZT5775E CONFLICTING ROW COMMANDS
HAVE BEEN ENTERED

# **Explanation**

An invalid command was entered.

#### System action

No processing is attempted.

#### User response

Enter a valid command, and try again.

#### Module

IZTUUPD0

IZT5776E BAD STATUS CODE=xx FOR RECORD=xxxxxxxx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

#### **System action**

Processing ends.

Determine the cause of the error code, and correct the problem.

#### Module

IZTUUPD0

IZT5777E BAD STATUS CODE=xx FOR RECORD=xxxxxxxx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTUUPD0** 

IZT5781E USERID CONTAINS AN INVALID CHARACTER

# **Explanation**

The USERID contains an invalid character.

# **System action**

Processing ends.

#### **User response**

Remove the invalid character, and try again.

#### Module

IZTUUPD0

IZT5782E SECURITY PROFILE CONTAINS AN INVALID CHARACTER

#### **Explanation**

The SECURITY PROFILE contains an invalid character.

#### System action

Processing ends.

#### **User response**

Remove the invalid character, and try again.

#### Module

IZTUUPD0

IZT5783E USER/LTERM CONTAINS AN INVALID CHARACTER

# **Explanation**

The USER / LTERM contains an invalid character.

### **System action**

Processing ends.

# **User response**

Remove the invalid character, and try again.

#### Module

**IZTUUPDO** 

IZT5784E BAD STATUS CODE ON ISRT TO DBIZT =xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTUUPD0

IZT5785E DUP LTERM "IIIIIII" IN MEMBER (mmmmmmmm) TYPE-tttttt

#### **Explanation**

LTERM *llllllll* is a duplicate name. It is already defined in IMS ETO Support table *tttttt* in entry *mmmmmmmm*.

#### **System action**

No processing is attempted.

Correct the duplicate LTERM name condition, and try again.

#### Module

**IZTUUPD0** 

IZT5786E BAD STATUS CODE ON GHU TO DBIZT = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTUUPD0** 

IZT5787E USER/LTERM NOT ALLOWED
UNLESS LTERM / USER OPTION =
3

# **Explanation**

The USER / LTERM is not allowed unless the LTERM / USER NAMING OPTIONS contains a 3.

#### **System action**

No processing is attempted.

#### **User response**

Remove USER / LTERM name, or change the LTERM / USER NAMING OPTIONS to 3.

#### Module

**IZTUUPDO** 

IZT5788E BAD STATUS CODE ON GHU TO DBIZT1 xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTUUPD0** 

IZT5789E BAD STATUS CODE ON DELETE CALL TO DBIZT xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTUUPD0** 

IZT5790E FIRST CHARACTER MUST BE ALPHA OR NATIONAL

# **Explanation**

The USERID must start with an alphabetic or national character.

# System action

No processing is attempted.

#### User response

Enter a valid USERID, and try again.

#### Module

**IZTUUPD0** 

IZT5791 LTERM "aaaaaaaa" ALREADY
DEFINED AS PRINTER LTERM

The LTERM name designated by aaaaaaaa is already defined in the IMS ETO Support Printer LTERM table. Duplicate LTERMS are not allowed.

# **System action**

The requested entry is not added or updated in the database.

### **User response**

Remove the duplicate LTERM from this entry or from the Printer LTERM table and continue.

#### Module

**IZTUUPD0** 

IZT5793E ERROR ENCOUNTERED ON GU
CALL TO SLU2 GLOBAL RECORD =

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

# Module

**IZTUUPD0** 

IZT5794E ERROR ENCOUNTERED ON GN CALL TO SLU2 NODE RECORD = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

#### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTUUPD0** 

IZT5796E ERROR ENCOUNTERED ON GN
CALL TO SLU2 NODE RECORD = xx

# **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTUUPD0

IZT5799E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

# **System action**

Processing ends.

# User response

Determine the cause of the error code, and correct the problem.

#### Module

IZTUUPD0

IZT5800E INVALID OPTION SPECIFIED ON COMMAND LINE

#### **Explanation**

An invalid option was entered on the command line.

# **System action**

Processing ends.

Enter a valid option, and continue.

#### Module

**IZTRXITO** 

IZT5810I SUCCESSFUL REFRESH FOR EXIT

# **Explanation**

The exit designated by xxxxxxxx was successfully loaded.

### **System action**

Processing completes.

#### User response

None. This message is informational.

#### Module

**IZTRXITO** 

IZT5813E LOAD FAILED FOR EXIT XXXXXXXX

# **Explanation**

The MVS LOAD failed for exit xxxxxxxx.

This error can occur if option **B - DFSYPRX0** or **D - DFSNDMX0** is specified on the IMS ETO Support **EXIT/ MATRIX RELOAD** panel.

#### **System action**

Processing ends.

#### **User response**

Make sure the load module is in the proper STEPLIB library and is executable.

Do not specify **B - DFSYPRX0** or **D - DFSNDMX0** on the **EXIT/MATRIX RELOAD** panel. Instead, you can specify these exits in the USER\_EXITS section of the IMS DFSDF*xxx* member.

See the topic "USER\_EXITS section of the DFSDFxxx member" in *IMS System Definition*.

#### Module

**IZTRXITO** 

IZT5814E UNDETERMINED ERROR ENCOUNTERED LOADING XXXXXXXX

# **Explanation**

An error occurred trying to LOAD module xxxxxxxx.

# System action

Processing continues, but the requested module did not get loaded.

#### User response

Check the MVS syslog for additional messages. Make sure that the load module is in the proper STEPLIB library and is executable. Verify that the STEPLIB library where the exit resides did not go into new extents when the exit was updated.

#### Module

IZTRXIT0

IZT5815I ETOS MATRIX REFRESH COMPLETE

### **Explanation**

The IMS ETO Support MATRIX table has been successfully refreshed.

#### System action

Processing continues.

#### User response

None. This message is informational.

#### Module

**IZTRXITO** 

IZT5816E ERROR ENCOUNTERED IN ETOS MATRIX REFRESH

#### **Explanation**

An error was encountered attempting to refresh the IMS ETO Support Matrix table.

#### System action

Processing continues.

Review the IMS control region JES log for additional messages, and take the action indicated by that message.

#### Module

**IZTRXITO** 

IZT5901E AN INVALID COMMAND HAS BEEN ATTEMPTED

### **Explanation**

An unsupported value was entered on the command line.

# **System action**

No processing is performed.

# User response

Enter a valid option, and try the operation again.

#### Module

**IZTJLST0** 

IZT5902E UNABLE TO LOCATE ETO/S E/CSA TABLES

#### **Explanation**

The CSA scan routine was unable to locate the tables that IMS ETO Support loads at IMS restart.

# System action

No processing is performed.

#### **User response**

Search the IMS job log for IZT-series messages that were issued at IMS restart. If IMS ETO Support was installed properly the IMS job log should contain message IZT1011I. Otherwise, there will be other IZT-series messages that describe errors that were encountered by IMS ETO Support.

#### Module

IZTJLST0

IZT5903E AN INVALID COMMAND HAS BEEN ATTEMPTED

# **Explanation**

An unsupported value was entered on the command line.

# **System action**

No processing is performed.

#### **User response**

Enter a valid option on the command line and try the operation again.

#### Module

**IZTJLST0** 

IZT5904E AN INVALID ROW COMMAND HAS BEEN ATTEMPTED

# **Explanation**

An invalid command was entered.

### System action

No processing is attempted.

### User response

Enter a valid command and try again.

#### Module

**IZTJLST0** 

IZT5905E MORE THAN 1 ENTRY SELECTED FOR LISTING

#### **Explanation**

More than one entry has been selected for listing. Only one entry can be listed at a time.

#### System action

Processing ends.

#### User response

Select a single entry and try again.

#### Module

**IZTJLST0** 

IZT5906E REQUESTED ENTRY NO LONGER IN TABLE

The selected entry no longer exists in the E/CSA table. This is probably because one user deleted it while another user attempted to process the record.

### **System action**

Processing ends.

# **User response**

Display the entries again. If the problem persists, contact IBM Software Support.

#### Module

**IZTJLST0** 

IZT6001W xxxxx FAILURE - KEY=yyyyyyyy,
FDBK=zzzzzz

# **Explanation**

An error occurred accessing the options data set. Access type is designated by *xxxxx*, and the record key is designated by *yyyyyyyy*. Valid values for access type are:

- GET (a VSAM GET operation)
- PUT (a VSAM PUT operation)
- ERASE (a VSAM ERASE operation)

The values for the RPL feedback (FDBK=zzzzzz) area are described in *DFSMS Macro Instructions for Data Sets* in the MVS library.

#### **System action**

Processing continues.

#### **User response**

Follow the action for RPL feedback as described in DFSMS Macro Instructions for Data Sets.

#### Module

**IZTBKOTO** 

IZT6002W BACKOUT PROCESSING TERMINATED

#### **Explanation**

The options data set backout ended due to conditions described in prior messages.

# **System action**

Processing continues but without backout.

### **User response**

Take action based on prior messages.

#### Module

**IZTBKOTO** 

IZT6003I CLEANUP OF INDOUBT RECORDS SUCCESSFUL

#### **Explanation**

During open processing for the options data set, IMS ETO Support determined that an in-doubt condition existed in the options data set. When an in-doubt condition exists, IMS ETO Support automatically attempts to resolve the condition. This message indicates the in-doubt condition was detected and corrected.

### **System action**

Processing continues.

### **User response**

None. This message is informational.

#### Module

**IZTBKOTO** 

IZT6004W ERRORS DURING INDOUBT RECORD CLEANUP

#### **Explanation**

During open processing for the options data set, IMS ETO Support determined an in-doubt condition existed in the options data set. When an in-doubt condition exists, IMS ETO Support automatically attempts to resolve the condition. This message indicates that an error occurred while IMS ETO Support was trying to ensure the integrity of the options data set.

# System action

Processing continues.

#### User response

Contact IBM Software Support, and keep an unloaded copy of the options data set for documentation.

**IZTBKOTO** 

IZT6005W OPTIONS DATA SET RESTORE RECOMMENDED

# **Explanation**

Unrecoverable errors were found in the options data set. Processing continues, but it is recommended that the options data set be either restored or rebuilt.

### **System action**

Processing continues.

### **User response**

At your earliest convenience, restore or rebuild the options data set.

#### Module

**IZTBKOTO** 

IZT6006I RECORD DELETED FOR xxxx - yyyyyyyy

### **Explanation**

IMS ETO Support found inconsistencies in the options data set during in-doubt processing. IMS ETO Support determined that the best course of action was to delete records containing inconsistencies. The record type is designated by xxxx and the record key by yyyyyyyy. Valid record types can be any of the following values:

- SLU1
- SLU2
- SLUP
- USER

### **System action**

Processing continues.

#### User response

If the deleted record is required, take manual action to add the record back to the options data set.

#### Module

IZTBKOT0

IZT6007W xxxx yyyyyyy IS A DUPLICATE
NODE NAME

# **Explanation**

A duplicate NODE name was found in the options data set for different devices. The device type is represented by xxxx and the NODE name by yyyyyyyy. Valid values for device type (xxxx) are:

- SLU1
- SLU2
- SLUP

### **System action**

Processing continues.

### **User response**

Determine the correct device type for the specified NODE, and delete the invalid entry.

#### Module

**IZTBKOTO** 

IZT6008I xxxx yyyyyyy RECORD
CONTAINED ERRORS, RECORD
DELETED

# **Explanation**

IMS ETO Support found inconsistencies in the options data set during in-doubt processing. IMS ETO Support determined that the best course of action was to delete the records containing the inconsistencies. The record type is designated by xxxx and the record key by yyyyyyyy. Valid values for device type (xxxx) are:

- SLU1
- SLU2
- SLUP

# **System action**

The listed record is deleted from the options data set, and processing continues.

#### User response

If the deleted record is required for normal operation, recreate the deleted record.

#### Module

**IZTBKOT0** 

IZT6201E BLDL FAILED FOR DBIZT1

Dynamic allocation member DBIZT1 was not found in any STEPLIB library.

# **System action**

Processing ends.

### **User response**

Add either the DBIZT1 DD name or the dynamic allocation member to the failing job.

#### Module

**IZTTDLI** 

IZT6202E INVALID DFSMDA MEMBER FOR DBIZT1

# **Explanation**

Member DBIZT1 did not contain a valid DFSMDA dynamic allocation entry.

# **System action**

Processing ends.

# **User response**

Add either the DBIZT1 DD name or a valid dynamic allocation member to the failing job.

#### Module

**IZTTDLI** 

IZT6203E DYNALLOC FAILED FOR DBIZT1, RC=xxxxxxxx / REASON=yyyy

# **Explanation**

Dynamic allocation (SVC 99) failed with return code = xxxxxxxx and reason code = yyyy.

# **System action**

Processing ends.

#### **User response**

Determine why dynamic allocation failed, and correct the problem. The dynamic allocation return/reason codes are documented in MVS Programming: Authorized Assembler Services Guide.

#### Module

**IZTTDLI** 

IZT6204E OPEN FAILED FOR DBIZT1

# **Explanation**

The MVS OPEN service failed to open options data set DBIZT1.

# **System action**

Processing ends.

### **User response**

Determine why OPEN failed, and then correct the problem. Additional messages should appear in the job log.

#### Module

**IZTTDLI** 

IZT6205E GET FAILED FOR CONTROL RECORD

### **Explanation**

An error occurred trying to read the options data set control record.

#### **System action**

Processing ends.

#### User response

Make sure that the options data set was correctly initialized. Run an IDCAMS print against the data set. The control record should contain hexadecimal zeros in the first 9 bytes.

#### Module

**IZTTDLI** 

IZT6206E xxxx - RPLFDBK - yyyyyy

#### **Explanation**

An error occurred trying to process a record in the options data set. The operation type is designated by *xxxx*. The value for RPLFDBK (*yyyyyy*) can be found in *DFSMS Macro Instructions for Data Sets* in the MVS library. Valid values for operation type are:

- · GET (VSAM GET operation)
- GET (VSAM GET operation)

- Gxxx (any IMS Get type call VSAM GET operation)
- ISRT (VSAM PUT operation)
- UOWG (VSAM GET operation)
- UOWP (VSAM PUT operation)

# **System action**

Processing continues.

# **User response**

Determine the cause of this failure, and review the job log for additional messages. Correct the problem and continue.

#### Module

**IZTTDLI** 

IZT6207E VINT NOT FIRST CALL TYPE

### **Explanation**

The first call type to module IZTTDLI was not a VINT call. This is an internal IMS ETO Support error.

# **System action**

The job step abends with a U4044.

#### **User response**

Contact IBM Software Support.

#### Module

**IZTTDLI** 

IZT6301E IZTMBLKS MEMBER NAME MISSING

#### **Explanation**

Member IZTMBLKS was specified in the IMS control region, but the member name was omitted.

### **System action**

IMS restart continues but without IMS ETO Support enhanced dynamic transactions.

### **User response**

If IMS ETO Support enhanced dynamic transactions is desired, correct the IZTMBLKS DD statement and restart IMS.

#### Module

IZTDYN00

IZT6302E IZTMBLKS MEMBER NAME INVALID

### **Explanation**

The member name for IZTMBLKS must be in the format DFSSMB0x (where x is the suffix of the IMS sysgen from which you want the transaction table built).

### System action

IMS restart continues, but without IMS ETO Support enhanced dynamic transactions.

### **User response**

If IMS ETO Support enhanced dynamic transactions is desired, correct the IZTMBLKS DD statement and restart IMS.

#### Module

IZTDYN00

IZT6303E DYNALLOC FAILED FOR
IZTMBLKS, RC=xxxxxxxx,
RSN=yyyy

# **Explanation**

Dynamic allocation (SVC 99) failed with return code = xxxxxxxx and reason code = yyyy.

# System action

IMS restart continues but without IMS ETO Support enhanced dynamic transactions.

#### **User response**

Determine why dynamic allocation failed, and correct the problem. The dynamic allocation return/reason codes are documented in MVS Programming: Authorized Assembler Services Guide. If IMS ETO Support enhanced dynamic transactions is desired, correct the problem and restart IMS.

#### Module

IZTDYN00

IZT6304E OPEN FAILED FOR IZTMBLKS

The MVS OPEN service failed to open the IZTMBLKS data set.

### **System action**

IMS restart continues but without IMS ETO Support enhanced dynamic transactions.

### **User response**

Determine why OPEN failed, and then correct the problem. Additional messages should appear in the job log. If IMS ETO Support enhanced dynamic transactions is desired, correct the problem and restart IMS.

#### Module

IZTDYN00

IZT6305E BLDL FAILED FOR MEMBER XXXXXXXX IN DDN IZTMBLKS

# **Explanation**

Member xxxxxxxx was not found in the data set associated with DD IZTMBLKS.

# **System action**

IMS restart continues but without IMS ETO Support enhanced dynamic transactions.

# **User response**

Specify a valid member name for the IZTMBLKS DD, and if IMS ETO Support enhanced dynamic transactions is desired, restart IMS.

#### Module

IZTDYN00

IZT6310I ENHANCED DYNAMIC
TRANSACTION TABLE BUILD
STARTED

#### **Explanation**

IMS ETO Support found no errors in the IZTMBLKS DD statement, and IMS ETO Support has started building the enhanced dynamic transaction table.

#### **System action**

Processing continues.

#### User response

None. This message is informational.

#### Module

IZTDYN00

IZT6311I ENHANCED DYNAMIC
TRANSACTION TABLE BUILD
COMPLETED

# **Explanation**

IMS ETO Support has completed building the table used by IMS ETO Support enhanced dynamic transactions.

# **System action**

Processing continues.

### **User response**

None. This message is informational.

#### Module

IZTDYN00

IZT6312E ENHANCED DYNAMIC
TRANSACTION CREATION
INACTIVE

#### **Explanation**

Due to an initialization error, IMS ETO Support has deactivated enhanced dynamic transactions.

# System action

IMS restart continues but without IMS ETO Support enhanced dynamic transactions.

# User response

Follow instructions for previous IMS ETO Support enhanced dynamic transactions messages.

#### Module

IZTDYN00

IZT6801E AN INVALID COMMAND HAS BEEN ATTEMPTED

#### **Explanation**

An unsupported value was entered on the command line.

# System action

No processing is attempted.

# **User response**

Enter a valid option, and try the operation again.

#### Module

**IZTJUPD0** 

IZT6802E ERROR ON GU CALL, STATUS CODE=xx

### **Explanation**

An error was encountered while attempting to read the options data set.

### **System action**

Processing ends.

# **User response**

Determine the cause of the bad status code, correct the problem, and try again.

#### Module

**IZTJUPD0** 

IZT6803E ERROR ON GN CALL, STATUS
CODE=xx

# **Explanation**

An error was encountered while attempting to read the options data set.

#### System action

Processing ends.

#### User response

Determine the cause of the bad status code, correct the problem, and try again.

#### Module

IZTJUPD0

IZT6805E AN INVALID ROW COMMAND WAS ENTERED: x

# **Explanation**

An unsupported value was entered on one of the displayed member rows.

# System action

No processing is performed.

### User response

Enter a valid option, and try the operation again.

#### Module

**IZTJUPD0** 

IZT6806I ENTRY NO LONGER EXISTS IN OPTIONS DATA SET: xxxxxxxx

### **Explanation**

Member xxxxxxxx was selected for processing, but it no longer exists in the options data set. It probably no longer exists because the entry was deleted by another user after the member list was obtained.

# System action

No processing is performed.

#### **User response**

If the entry is necessary, add a new entry with the appropriate name.

#### Module

**IZTJUPD0** 

IZT6807E ERROR ON GHU CALL, STATUS
CODE = xx

# **Explanation**

An error was encountered during an attempt to read the options data set.

#### System action

Processing ends.

#### User response

Determine the cause of the error status code and correct the problem.

**IZTJUPD0** 

IZT6808E ERROR ON GN CALL, STATUS
CODE = xx

Module

**IZTJUPD0** 

IZT6811E ERROR ON GHU CALL, STATUS CODE = xx

**Explanation** 

An error was encountered during an attempt to read the options data set.

**Explanation** 

An error was encountered during an attempt to read the options data set.

**System action** 

Processing ends.

System action

Processing ends.

**User response** 

Determine the cause of the error status code and correct the problem.

**User response** 

Determine the cause of the error status code and correct the problem.

Module

IZTJUPD0

IZT6809E CONFLICTING ROW COMMANDS

**HAVE BEEN ENTERED** 

Module

IZTJUPD0

IZT6812E

ERROR ON DLET CALL, STATUS CODE = xx

**Explanation** 

Only one type of row command can be processed at a time.

**Explanation** 

An error was encountered during an attempt to remove a record from the options data set.

User response

Enter only one type of row command and try the operation again.

**System action** 

Processing ends.

Module

IZTJUPD0

User response

Determine the cause of the error status code and correct the problem.

IZT6810E

**NAME IS A REQUIRED FIELD** 

Module

**IZTJUPD0** 

**Explanation** 

An attempt was made to add a new entry but the name field was omitted. The name field is required in order to add a new record.

IZT6813E

INVALID VALUE SPECIFIED FOR TYPE

**System action** 

Processing ends.

**Explanation** 

An incorrect value was specified in the TYPE field. The TYPE field must contain either an N for a node name entry, or a U for a userid entry.

**User response** 

Specify the name and try the operation again.

**System action** 

Processing ends.

Enter a valid option, and continue.

#### Module

**IZTJUPD0** 

IZT6814E ASTERISK (\*) MUST BE THE LAST CHARACTER IN THE NAME

# **Explanation**

If an asterisk is specified in the NAME field, it must be the last character in the specification.

### **System action**

Processing ends.

### **User response**

Correct the value in the NAME field and try the operation again.

#### Module

**IZTJUPD0** 

IZT6815E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxxx

#### **Explanation**

An error was encountered by subroutine IZTTDLI. Review the MVS syslog for additional error messages.

#### **System action**

Processing ends.

#### **User response**

Correct the problem that is identified by the additional error messages in the MVS syslog and try the operation again.

#### Module

**IZTJUPD0** 

IZT6816E NAME MUST START WITH AN ALPHANUMERIC OR WILDCARD

#### **Explanation**

A syntax error was detected for the value that was specified in the NAME field. The NAME field must contain alphanumeric (A-Z, 0-9, #, \$, or @) or wildcard (\*, %, or ?) characters.

# **System action**

Processing ends.

#### **User response**

Correct the NAME field and try the operation again.

#### Module

**IZTJUPD0** 

IZT6817E INVALID CHARACTER DETECTED
IN THE NAME MASK

### **Explanation**

A syntax error was detected for the value that was specified in the NAME field. The NAME field must contain alphanumeric (A-Z, 0-9, #, \$, or @) or wildcard (\*, %, or ?) characters.

### System action

Processing ends.

### **User response**

Correct the NAME field and try the operation again.

#### Module

**IZTJUPD0** 

IZT6820E ERROR ON REPL CALL, STATUS
CODE = xx

# **Explanation**

An error was encountered while attempting to update a record in the options data set.

# System action

Processing ends.

#### User response

Determine the cause of the error status code and correct the problem.

#### Module

**IZTJUPD0** 

IZT6821E NON-NUMERIC VALUE IN XXXX

A non-numeric value was specified in either the FROM or TO (xxxx) fields. The format of the TIME field is hhmm where hh must be 00 - 23, and mm must be 00 - 59.

# **System action**

Processing ends.

# **User response**

Correct the value in the TIME fields and try the operation again.

#### Module

**IZTJUPD0** 

IZT6822E ERROR ON GHU CALL, STATUS
CODE = xx

# **Explanation**

An error was encountered while attempting to read a record from the options data set.

# **System action**

Processing ends.

### **User response**

Determine the cause of the error status code and correct the problem.

#### Module

**IZTJUPD0** 

IZT6823E ERROR ON REPL CALL, STATUS
CODE = xx

# **Explanation**

An error was encountered while attempting to update a record in the options data set.

# System action

Processing ends.

#### **User response**

Determine the cause of the error status code and correct the problem.

#### Module

**IZTJUPD0** 

IZT6824E ERROR ON ISRT CALL, STATUS
CODE = xx

# **Explanation**

An error was encountered while attempting to add a record to the options data set.

# System action

Processing ends.

#### **User response**

Determine the cause of the error status code and correct the problem.

#### Module

IZTJUPD0

IZT6825I RECORD HAS BEEN REPLACED

### **Explanation**

A record has been successfully updated in the options data set.

#### **System action**

Processing ends.

#### User response

None. This message is informational.

#### Module

IZTJUPD0

IZT6826I RECORD HAS BEEN ADDED

# **Explanation**

A record has been successfully added to the options data set.

#### **System action**

Processing ends.

#### User response

None. This message is informational.

**IZTJUPD0** 

IZT6827E INVALID HOUR VALUE IN xxxx
TIME

# **Explanation**

An invalid value has been specified in bytes 1 and 2 of the FROM or TO (xxxx) time. Bytes 1 and 2 of the time field contain the hour value, and must be in the range of 00 - 23.

### **System action**

Processing ends.

# **User response**

Correct the hour value and try the operation again.

#### Module

**IZTJUPD0** 

IZT6828E INVALID MINUTE VALUE IN XXXX
TIME

### **Explanation**

An invalid valued was specified in bytes 3 and 4 of the FROM or TO (xxxx) time. Bytes 3 and 4 of the time field contain the minute value, and they must be in the range of 00 - 59.

#### **System action**

Processing ends.

#### **User response**

Correct the minute value and try the operation again.

#### Module

IZTJUPD0

IZT6899E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE = xx

# **Explanation**

An error was encountered while attempting to read the control record in the options data set.

# **System action**

Processing ends.

#### **User response**

Determine the cause of the bad status code, correct the problem and try the operation again.

#### Module

**IZTJUPD0** 

IZT7001I DBIZT1 OPTIONS DATA SET INIT STARTED FOR xxxxxxxx

### **Explanation**

The options data set name displayed in the message is initialized by the utility.

# **System action**

The utility tries to initialize the data set named in the message.

### **User response**

None. This message is informational.

#### Module

IZTUD1I0

IZT7002I DBIZT1 OPTIONS DATA SET INIT SUCCESSFUL

#### **Explanation**

The options data set was successfully initialized.

# System action

The options data set named in the IZT7001I message was initialized.

#### User response

None. This message is informational.

#### Module

IZTUD1I0

IZT7003E EXEC PARM= TITLE AREA NOT PROVIDED

# **Explanation**

The JCL did not have PARM= specified on the EXEC PGM= statement.

# System action

The job step abends with a U0999.

# **User response**

Supply the 1- to 50-byte parameter, and rerun the job step executing the IZTUD1IO utility.

#### Module

IZTUD1I0

IZT7004E EXEC PARM= LENGTH CANNOT BE > 50

# **Explanation**

The value specified for PARM= had more than 50 characters.

# **System action**

The job step abends with a U0999.

### **User response**

Supply the 1-to-50 byte parameter, and rerun the job step executing the IZTUD1IO utility.

#### Module

IZTUD1I0

IZT7005E DBIZT1 DD STMT CANNOT BE DUMMY

# **Explanation**

The allocated options data set was defined as DUMMY or was allocated with a data set name of NULLFILE.

#### System action

The job step abends with a U0999.

#### **User response**

None. This message is informational.

#### Module

IZTUD1I0

IZT7006E DBIZT1 ALREADY INITIALIZED

# **Explanation**

The allocated options data set has already been initialized.

# **System action**

The job step abends with a U0999.

#### User response

If you want to reinitialize the options data set, then rerun the IDCAMS job defining the data set before rerunning the job step executing the IZTUD110 utility.

#### Module

IZTUD1I0

IZT7007E DBIZT1 OPTIONS DATA SET MUST BE KSDS CLUSTER

# **Explanation**

The allocated options data set was not a VSAM KSDS cluster.

### System action

The job step abends with a U0999.

### **User response**

Make sure the IDCAMS job used to define the cluster is correct; rerun the job (after making any necessary corrections) before rerunning the job step executing the IZTUD110 utility.

### Module

IZTUD1I0

IZT7008E DBIZT1 OPTIONS DATA SET RECORDSIZE NOT CORRECT

#### **Explanation**

RECORDSIZE(120 120) must be specified.

#### System action

The job step abends with a U0999.

#### User response

Make sure the IDCAMS job used to define the cluster is correct; rerun the job (after making any necessary corrections) before rerunning the job step executing the IZTUD110 utility.

#### Module

IZTUD1I0

# IZT7009E DBIZT1 OPTIONS DATA SET KEY LENGTH NOT CORRECT

# **Explanation**

KEY(9 0) must be specified.

# **System action**

The job step abends with a U0999.

# **User response**

Make sure the IDCAMS job used to define the cluster is correct; rerun the job (after making any necessary corrections) before rerunning the job step executing the IZTUD110 utility.

#### Module

IZTUD1I0

IZT7010E DBIZT1 OPTIONS DATA SET KEY
OFFSET NOT CORRECT

### **Explanation**

KEY(9 0) must be specified.

# **System action**

The job step abends with a U0999.

### **User response**

Make sure the IDCAMS job used to define the cluster is correct; rerun the job (after making any necessary corrections) before rerunning the job step executing the IZTUD110 utility.

#### Module

IZTUD1I0

IZT7011E DBIZT1 OPTIONS DATA SET OPEN ERROR RC=#######

# **Explanation**

The VSAM cluster was not successfully opened in load mode.

# **System action**

The job step abends with a U0999.

#### User response

If you cannot determine the appropriate response from the return code or from other messages displayed at the time of the abend, contact IBM Software Support for help. Otherwise, take the appropriate corrective action, and rerun the job step that executes the IZTUD110 utility.

#### Module

IZTUD1I0

IZT7012E PUT RECID=## RC=#######
FDBK=#######

# **Explanation**

The attempt to add a DBIZT1 record failed.

### **System action**

The job step abends with a U0999.

### User response

If you cannot determine the appropriate response from the return code or from other messages displayed at the time of the abend, contact IBM Software Support for help. Otherwise, take the appropriate corrective action and rerun the job step executing the IZTUD110 utility.

#### Module

IZTUD1I0

IZT7013E DBIZT1 OPTIONS DATA SET CLOSE ERROR RC=#######

# **Explanation**

The VSAM cluster may not have been successfully closed.

# System action

The job step abends with a U0999.

#### User response

If you cannot determine the appropriate response from the return code or from other messages displayed at the time of the abend, contact IBM Software Support for help. Otherwise, take the appropriate corrective action, and rerun the job step executing the IZTUD110 utility.

IZTUD1I0

IZT7014E

NO DD STATEMENT OR DYNALLOC MEMBER FOR DBIZT1

### **Explanation**

The options data set initialization utility encountered an error. The utility was unable to find a DD statement or dynamic allocation member for the options data set, DBIZT1.

### **System action**

The jobs terminates with a U0999 ABEND.

# **User response**

Either add a DD statement for DBIZT1, or add the dynamic allocation member to a STEPLIB library, and rerun the job.

#### Module

IZTUD1I0

IZT7101I

###########

# **Explanation**

The message displays a control statement supplied by the user for the //IZTIN DD statement.

#### **System action**

None.

#### **User response**

None. This message is informational.

#### Module

IZTUD1U0

IZT7103E

DBIZT1 OPTIONS DATA SET NOT ALLOCATED

### **Explanation**

This message is displayed if no //DBIZT1 DD statement was specified in the JCL and the update utility was not able to dynamically allocate the options data set.

#### **System action**

The job step abends with a U0999.

#### **User response**

Make sure that the DFSMDA member for the DBIZT1 options data set is present in one of the //STEPLIB DD statements or that a //DBIZT1 DD statement is present in the JCL before rerunning the job step.

#### Module

IZTUD1U0

**IZT7104W** 

ABOVE CONTROL STATEMENT IGNORED

### **Explanation**

The above message is displayed whenever a comment record is being ignored, or whenever errors were encountered processing the control statement.

### **System action**

None.

#### User response

No action is required.

#### Module

IZTUD1U0

**IZT7106E** 

%% PROCESSING NOT SUCCESSFUL

#### **Explanation**

The processing for the current group of transactions was not successful. The function being attempted is represented by %% ( ZP, ZN, and so on).

#### System action

If any options data set updates were performed, the updates were backed out.

#### User response

Based on the information displayed in previous error messages, correct or remove any erroneous control statements before rerunning the update utility.

#### Module

IZTUD1U0

IZT7110E

\*\* POSITIONAL PARM MISSING

The positional parameter (first parameter) was not specified.

### **System action**

The batch update utility terminates with a nonzero return code.

#### **User response**

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7115E ASOT MUST BE 0 OR 10 - 1440

### **Explanation**

An invalid numeric value was entered for ASOT.

# System action

The control statement is rejected, followed by message IZT7104W.

### **User response**

Correct the ASOT value and try the transaction again.

#### Module

IZTUD1U0

IZT7116E ALOT MUST BE 0 OR 10 - 1440

#### **Explanation**

An invalid numeric value was entered for ALOT.

# **System action**

The control statement is rejected, followed by message IZT7104W.

#### User response

Correct the ALOT value and try the transaction again.

#### Module

IZTUD1U0

IZT7117E DFS3650 USER MOD IS MISSING

#### **Explanation**

The DFS3650=MOD keyword was specified, but MOD3650= was not.

#### System action

The control statement is rejected, followed by message IZT7104W.

#### User response

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7118E \*\* MOD3650= USER MOD CANNOT
BE SPECIFIED WITH OTHER
DFS3650 OPTIONS

### **Explanation**

A value for the MOD3650= option cannot be specified if any option for the DFS3650= option has also been specified.

# System action

The batch transaction is rejected.

#### User response

If a value for MOD3650= needs to be specified, make sure no option is specified for DFS3650=.

#### Module

IZTUD1U0

IZT7119E DFS3649 USER MOD IS MISSING

# **Explanation**

The DFS3649=MOD keyword was specified, but MOD3649= was not.

#### System action

The control statement is rejected, followed by message IZT7104W.

#### User response

Correct or remove the control statement as required.

IZTUD1U0

IZT7120E DFS3649 USER MOD SHOULD NOT BE SPECIFIED

# **Explanation**

The MOD3649= keyword was specified, but DFS3649=MOD was not.

# **System action**

The control statement is rejected, followed by message IZT7104W.

# **User response**

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7121E \*\* TRX NAME CANNOT BE
SPECIFIED WITH OTHER DFS3650
OPTIONS

### **Explanation**

A value for the TRX3650= option cannot be specified if any option for the DFS3650= option has also been specified.

#### **System action**

The batch transaction is rejected.

#### **User response**

If a value for TRX3650= needs to be specified, make sure no option is specified for DFS3650=.

#### Module

IZTUD1U0

### **Explanation**

An unrecognized keyword was specified in the control statement.

# **System action**

The control statement is rejected, followed by message IZT7104W.

#### **User response**

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7123E NON-NUMERIC VALUE SPECIFIED FOR ######

# **Explanation**

A numeric value was expected for the ASOT= or ALOT= keywords.

### System action

The control statement is rejected, followed by message IZT7104W.

# User response

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7124E \*\* OFFSET GREATER THAN MAX
(99) FOR xxxx

#### **Explanation**

An invalid value was specified for parameter *xxxx*. The maximum value allowed for the parameter is 99.

# **System action**

The batch update utility terminates with a nonzero return code.

#### User response

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7126E MISSING PRINTER LTERM (2ND POS PARM)

#### **Explanation**

Function ZP was specified, but no LTERM was specified as the next word in the control statement.

# System action

The control statement is rejected, followed by message IZT7104W.

### **User response**

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7127E MISSING USERID (2ND POS PARM)

# **Explanation**

Function ZU was specified, but no USERID was specified as the next word in the control statement.

# **System action**

The control statement is rejected, followed by message IZT7104W.

#### **User response**

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7128E MISSING NODE (2ND POS PARM)

# **Explanation**

Function ZN was specified, but no NODE was specified as the next word in the control statement.

### System action

The control statement is rejected, followed by message IZT7104W.

#### **User response**

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7129E CANNOT SPECIFY BOTH OFFSET AND KEYWORD FOR xx

#### **Explanation**

The control statement contained both an offset and a keyword value for the VTAM USERDATA field. IMS ETO Support obtains logon and signon information from the VTAM USERDATA based upon either the data offset, or by the preceding keyword.

# **System action**

The control statement is ignored.

#### User response

Correct the control statement by specifying either an offset or a keyword, and rerun the job.

#### Module

IZTUD1U0

IZT7130I ## PROCESSING SUCCESSFUL

# **Explanation**

The requested function control statement was successfully processed. ## is ZP, ZU, or ZN.

# System action

All database changes are committed.

#### User response

None. This message is informational.

#### Module

IZTUD1U0

IZT7131I ORPHAN CLEANUP FAILED FOR nodename STAT=sc

# **Explanation**

During SLU1 printer orphan record cleanup, a non-blank status code (sc) was returned during the reading of the record *nodename*.

# **System action**

Processing continues.

#### User response

Because the record was to be deleted anyway, this does not pose a problem. However, if the message persists, contact IBM Software Support for assistance.

IZTUD1U0

IZT7132E MAX CHARACTERS EXCEEDED FOR #####

# **Explanation**

Too many characters were specified for the value portion of the #### keyword.

# **System action**

The control statement is rejected, followed by message IZT7104W.

# **User response**

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7133I SLU1 PRINTER ORPHAN RECORD CLEANUP STARTED

### **Explanation**

IMS ETO Support determined that there might be orphan SLU1 printer records in the options data set, so it initiated the ORPAHN record cleanup.

#### **System action**

Processing continues.

#### User response

None. This message is informational.

#### Module

IZTUD1U0

IZT7134E \*\* ABEND CODE 0000 NOT SUPPORTED

#### **Explanation**

An abend code of 0000 was specified, but it is not a valid value.

# **System action**

The batch update utility terminates with a nonzero return code.

#### User response

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7135E \*\* BAD RETURN CODE FROM IZTCTRX0

# **Explanation**

An abend code of 0000 was specified, but it is not a valid value.

### System action

The batch update utility terminates with a nonzero return code.

# User response

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7136E \*\* INVALID TRAN/LTERM ABEND
STATEMENT

#### **Explanation**

The format of the ABEND statement is invalid. The ABEND CODE/ABEND TYPE must be in the following format:

name

or

name/type/code

where type = U or S, and code is the abend code.

# System action

The batch update utility terminates with a nonzero return code.

#### User response

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7137E NODE ALREADY DEFINED AS TYPE # (1/2)

# **Explanation**

A node cannot be added as a SLUTYPE1 if it has already been added as a SLUTYPE2 (or vice versa).

# **System action**

The control statement is rejected, followed by message IZT7104W.

# **User response**

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7138E LTERM ALREADY IN USE AS SPQB

# **Explanation**

An attempt was made to add a printer LTERM, but a user with the same name has already been added.

# **System action**

The control statement is rejected, followed by message IZT7104W.

#### **User response**

Correct or remove the control statement as required.

#### Module

IZTUD1U0

# **Explanation**

A record with the indicated key was added to the database. In the message text, xxx can be IZN (for node), IZL (for printer LTERM), or IZU (for user ID).

# **System action**

All database changes are committed.

### **User response**

None. This message is informational.

#### Module

IZTUD1U0

# **Explanation**

A record with the indicated key was deleted from the database. In the message text, xxx can be IZN (for node), IZL (for printer LTERM), or IZU (for user ID).

# System action

All database changes are committed.

### **User response**

None. This message is informational.

#### Module

IZTUD1U0

# **Explanation**

A record with the indicated key was replaced in the database. In the message text, xxx can be IZN (for node), IZL (for printer LTERM), or IZU (for user ID).

# **System action**

All database changes are committed.

# User response

None. This message is informational.

#### Module

IZTUD1U0

IZT7142I DL/I CALL xxxx STATUS=yy

#### **Explanation**

The DL/I call and its status code are displayed.

#### System action

None.

#### User response

None. This message is informational.

IZTUD1U0

IZT7143E DL/I CALL . STATUS=##

# **Explanation**

An unexpected status code was received after trying to issue the DL/I call specified as ####.

# **System action**

The control statement is rejected, followed by message IZT7104W.

### **User response**

Correct or remove the control statement as required.

#### Module

IZTUD1U0

IZT7144I LTERM RECORD CLEANUP STARTED

### **Explanation**

In a prior version of the batch update utility, it was possible for LTERM records that contained wildcards to be written to the options data set. This situation should not happen. Therefore, the utility has been changed to automatically delete any of the records that should not be in the options data set in the first place.

# System action

Processing continues.

#### **User response**

None. This message is informational.

#### Module

IZTUD1U0

IZT7145E INVALID CHARACTERS IN SYSTEM ABEND

# **Explanation**

The control statement requested that an ABEND record be created for a specific system ABEND, but the value specified for the ABEND code was invalid. System ABEND codes must be in the hexadecimal format (001 - FFF).

# System action

The control statement is ignored.

### **User response**

Correct the ABEND code, and rerun the job.

# Module

IZTUD1U0

IZT7146E NON-NUMERIC VALUE IN USER ABEND CODE

### **Explanation**

The control statement requested that an ABEND record be created for a specific user ABEND, but the value specified for the ABEND code was invalid. User ABEND codes must be a decimal number (0001 - 4095).

# System action

The control statement is ignored.

# **User response**

Correct the ABEND code, and rerun the job.

#### Module

IZTUD1U0

IZT7147E \*\* USER ABEND CODE GREATER
THAN 4095

#### **Explanation**

An invalid value was specified for a user abend code. The maximum value allowed for a user abend code is 4095.

# **System action**

The batch update utility terminates with a nonzero return code.

#### User response

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7156W MAX LTERMS ALREADY IN USE

An attempt was made to add more than 8 LTERMs to an existing LUNAME or USERID record.

# **System action**

System rejects the batch transaction.

### **User response**

Do not specify more than 8 LTERMs.

#### Module

IZTUD1U0

IZT7158E NODE= OR USER= PARM MISSING

# **Explanation**

Function ZL was being attempted for an LTERM without a NODE= or USER= specification.

# System action

System rejects the batch transaction.

### **User response**

Add the appropriate parameters and try the transaction again.

#### Module

IZTUD1U0

IZT7160W LTERM DOES NOT EXIST

#### **Explanation**

Function ZL was being attempted for an LTERM but the LTERM does not exist.

# **System action**

System rejects the transaction.

#### **User response**

Make any necessary correction and try the transaction again.

#### Module

IZTUD1U0

IZT7162W SYMDEST DOES NOT EXIST

#### **Explanation**

An attempt was made to delete an APPC/MVS symbolic destination from the refresh list; however, the destination had not been previously added.

# **System action**

The control statement is ignored.

### **User response**

No action is required.

#### Module

IZTUD1U0

IZT7163W MAX SYMDESTS ALREADY IN USE

### **Explanation**

The maximum number of APPC/MVS symbolic destinations in the refresh list (64) was already reached.

### System action

The control statement is ignored.

### User response

No action is required.

#### Module

IZTUD1U0

IZT7164W SYMDEST ALREADY ADDED

#### **Explanation**

An attempt was made to add an APPC/MVS symbolic destination to the refresh list; however, the destination was already added.

#### System action

The control statement is ignored.

#### User response

No action is required.

#### Module

IZTUD1U0

IZT7177E NODE STILL IN USE BY PRINTER LTERM xxxxxxxx

An attempt was made to delete a printer node; however, the node is still being used by a different printer LTERM and cannot be deleted.

# **System action**

The control statement is ignored.

### **User response**

No action is required.

#### Module

IZTUD1U0

IZT7178E INVALID WILDCARD CHARACTER SPECIFIED

# **Explanation**

A wildcard character cannot be specified for an LTERM using the ZL function.

# **System action**

The requested entry is not added/updated in the database.

#### **User response**

Correct the invalid control cards, and rerun the job.

#### Module

IZTUD1U0

IZT7183E ONLY "!" ALLOWED AS WILDCARD FOR PRINTER LTERM

# **Explanation**

An exclamation point (!) is the only valid mask character allowed in printer LTERM names.

# **System action**

The requested entry is not added/updated in the database.

#### **User response**

Correct the invalid entry, and rerun the job.

#### Module

IZTUD1U0

IZT7185E

WILDCARD "\*" CAN ONLY BE THE LAST CHARACTER FOR NODE MASK

# **Explanation**

If used, the asterisk must be the last character in the node name.

### System action

The requested entry is not added/updated in the database.

### **User response**

Correct the invalid entry, and rerun the job.

#### Module

IZTUD1U0

IZT7186E \*\* WILDCARD "\*" CAN ONLY BE
THE LAST CHARACTER IN XXXX

### **Explanation**

The parameter in the control statement listed in the previous IZT7101I message contained an asterisk (\*), but the asterisk (\*) was not the last character in the parameter.

# **System action**

The control statement is ignored, and the batch update utility will terminate with a nonzero return code.

# **User response**

Correct the parameter in the control statement and rerun the job.

#### Module

IZTUD1U0

IZT7188E NO WILDCARD CHARACTER
ALLOWED FOR XXXXXXXXX

#### **Explanation**

No wildcard character can be specified in the indicated parameter of the associated control statement.

# **System action**

The control statement is ignored.

Correct the parameter in the control statement, or remove it, before rerunning the update utility.

#### Module

IZTUD1U0

IZT7189E MISSING VALUE FOR XXXXXXXX

# **Explanation**

No value was specified after the equal (=) character in the indicated parameter of the associated control statement.

### **System action**

The control statement is ignored.

# **User response**

Correct the parameter in the control statement, or remove it, before rerunning the update utility.

#### Module

IZTUD1U0

IZT7190E INVALID VALUE SPECIFIED FOR XXXXXXXXX

# **Explanation**

The value specified for xxxxxxxx = was not a valid choice for the indicated parameter of the associated control statement.

# **System action**

The control statement is ignored.

#### **User response**

Correct the value specified in the parameter using the choices documented for the parameter in Chapter 10, "Updating the options data set (batch update utility)," on page 165. Or remove the parameter from the control statement before rerunning the update utility.

#### Module

IZTUD1U0

IZT7191E VALUE PREVIOUSLY SPECIFIED FOR xxxxxxxx=

#### **Explanation**

The xxxxxxxx = parameter cannot be specified more than once for the current control statement.

# **System action**

The control statement is ignored.

### **User response**

Make sure the indicated parameter was specified only once before. Or remove the parameter from the control statement before rerunning the update utility.

#### Module

IZTUD1U0

IZT7192E INVALID CHARACTER SPECIFIED FOR XXXXXXXX

### **Explanation**

One of the characters specified in the indicated xxxxxxxx = parameter is not allowed for the current control statement.

# System action

The control statement is ignored.

#### User response

Make sure only valid characters are specified for the indicated parameter. Or remove the parameter from the control statement before rerunning the update utility.

#### Module

IZTUD1U0

IZT7193E \*\* LTERM WILDCARDS NOT SUPPORTED FOR THIS DEVICE TYPE

#### **Explanation**

An attempt was made to add an LTERM that contained a mask character (!) to a device type where mask characters are not supported. Mask characters are valid on printer and SLU2/3270 devices only.

### **System action**

The batch update utility terminates with a nonzero return code.

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7194E \*\* USERDATA MORE THAN 4
BYTES NOT ALLOWED WITH
PREXIMSID=Y

### **Explanation**

When PRFXIMSID=Y is specified, the value specified for USERDATA cannot be more than 4 bytes long.

# **System action**

The batch update utility terminates with a nonzero return code.

### **User response**

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7195E \*\* MEMBER NAME IS REQUIRED

#### **Explanation**

The MEMBER= parameter must be specified.

# **System action**

The batch update utility terminates with a nonzero return code.

#### **User response**

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7196E \*\* USERDATA REQUIRED WHEN PRFXIMSID=Y

# **Explanation**

If PRFXIMSID=Y is specified, the USERDATA parameter must also be specified.

# **System action**

The batch update utility terminates with a nonzero return code.

#### User response

Correct the invalid control statement and rerun the job.

#### Module

IZTUD1U0

IZT7198I RECORD NOT FOUND FOR

### **Explanation**

A DELETE action was requested for the indicated key, but the record was not located in the options data set.

# System action

The control statement is ignored.

### **User response**

Make sure the options data set key was specified correctly. Or remove the control statement before rerunning the update utility.

#### Module

IZTUD1U0

IZT7199E IZTTDLI CALL=VINT R15=xxxxxxxx

# **Explanation**

An invalid return code was received on a call to routine IZTTDLI. The return code is shown as xxxxxxxx.

# System action

The job step abends with a U0999.

#### User response

The description of the return code (xxxxxxxx) can be found in Chapter 23, "Return codes for options data set access module (IZTTDLI)," on page 467. Correct the error described by the return code, and rerun the job. Additional messages might be present in the syslog.

#### Module

IZTUD1U0

# IZT7201E PASSWORD RESET FAILED FOR nodename, RC=rc

# **Explanation**

A SLU1 Console or SLUP/FINANCE/3660 device had LOGON PROCESS set to AUTO RACF SIGNON. During logon, an error was encountered while the device attempted to reset the SAF password for the user ID *nodename*. The SAF return code is displayed in the *rc* field.

# **System action**

Logon is rejected.

# **User response**

Use the SAF return code from the message to determine the cause of the password reset failure. Additional error messages might be displayed in the z/OS log. Contact IBM Software Support if additional assistance is required.

#### Module

**IZTSGNXX** 

# IZT7301W LOG CALL FAILED FOR USER SIGNON

# **Explanation**

An error was encountered during an attempt to write a signon failure log record.

### System action

Processing continues, but the log record is not written to the log.

### **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTSGNX0** 

IZT7302I AUTO /TEST MFS DISABLED, /
TEST MFS NOT SUPPORTED

# **Explanation**

Auto /TEST MFS was requested, but the IMS system generation did not allow for test MFS. Either the IMS COMM macro specified NOMFSTEST, or the IMSGEN macro contained the MFSTEST=NO parameter.

# **System action**

Processing continues.

# **User response**

None. This message is informational.

# Module

**IZTSGNX0** 

IZT7303W FREEMAIN FAILED FOR USER TABLE

### **Explanation**

An error occurred during an attempt to free a table.

# System action

Processing continues.

#### User response

Review the z/OS log for additional information, and contact IBM Software Support if additional assistance is required.

#### Module

**IZTSGNX0** 

IZT7304W GETMAIN FAILED FOR USER TABLE

# **Explanation**

An error occurred during an attempt to GETMAIN storage for a table.

#### System action

Processing continues.

#### User response

Review the z/OS log for additional information, and contact IBM Software Support if additional assistance is required.

#### Module

**IZTSGNX0** 

IZT7402E UNABLE TO OPEN SMUIN DD

An error was encountered while attempting to open the DD statement SMUIN data set.

# **System action**

The batch job is terminated with a nonzero return code.

### **User response**

Ensure that the SMUIN DD statement is coded properly, and run the job again.

#### Module

IZTSMU00

IZT7403E UNABLE TO OPEN SMUOUT DD

### **Explanation**

An error was encountered while attempting to open the DD statement SMUOUT data set.

### System action

The batch job is terminated with a nonzero return code.

### **User response**

Ensure that the SMUOUT DD statement is coded properly, and run the job again.

#### Module

IZTSMU00

IZT7404I TO OPEN RACFLTRM DD, LTERM RECORDS WILL BE SKIPPED

# **Explanation**

An error was encountered while attempting to open the DD statement RACFLTRM data set.

# System action

Processing continues, but the RACF Transaction / LTERM control statements that are normally written to this DD are not created.

#### **User response**

If you want the RACF Transaction/LTERM control records, correct the JCL error for this DD and run the job again.

#### Module

IZTSMU00

IZT7405W UNABLE TO DETERMINE RECORD
TYPE, RECORD SKIPPED
record\_in\_error

#### **Explanation**

The indicated record (*record\_in\_error*) was read from the SMUIN DD statement, but it contained an unknown control statement.

# System action

Processing continues but the job ends with a nonzero return code. The unknown control record is written to the SMUOUT DD.

### **User response**

Correct the invalid record and run the job again.

#### Module

IZTSMU00

IZT7406W NO PARAMETER SPECIFIED ON THE INPUT RECORD, RECORD SKIPPED record\_in\_error

#### **Explanation**

The indicated record (*record\_in\_error*) did not contain a parameter value.

# System action

Processing continues, but the job ends with a nonzero return code. The record in error is written to the SMUOUT DD.

#### User response

Correct the invalid record and run the job again.

#### Module

IZTSMU00

IZT7407W INVALID PARAMETER LENGTH,
RECORD REJECTED
record in error

#### **Explanation**

The indicated record (*record\_in\_error*) contained an invalid parameter.

# **System action**

Processing continues, but the job ends with a nonzero return code. The record in error is written to the SMUOUT DD.

### **User response**

Correct the invalid record and run the job again.

#### Module

IZTSMU00

IZT7408W UNKNOWN PARAMETER TYPE,
RECORD REJECTED
record\_in\_error

# **Explanation**

The indicated record (*record\_in\_error*) contained an unknown record type.

# **System action**

Processing continues, but the job ends with a nonzero return code. The invalid record is discarded.

# **User response**

Correct the invalid record and run the job again.

#### Module

IZTSMU00

IZT7409W PASSWORD NOT SUPPORTED FOR TERMINAL STATEMENTS, RECORD SKIPPED

#### **Explanation**

IMS ETO Support does not support PASSWORDS on TERMINAL statements.

# System action

Processing continues but the job ends with a nonzero return code. The TERMINAL/PASSWORD record is discarded.

#### **User response**

No action is required.

#### **Module**

IZTSMU00

IZT7410I

UNABLE TO OPEN RACFPSWD DD, PASSWORD RECORDS WILL BE SKIPPED

# **Explanation**

An error was encountered while attempting to open the DD statement RACFPSWD data set.

### System action

Processing continues, but the RACF Transaction/ PASSWORD control statements that are normally written to this DD are not created.

#### User response

If you want the RACF Transaction/PASSWORD control records, correct the JCL and run the job again.

#### Module

IZTSMU00

IZT7411I

UNABLE TO OPEN ETOCMD DD, IZTUD1U0 RECORDS WILL BE SKIPPED

### **Explanation**

An error was encountered while attempting to open DD statement ETOCMD data set.

# **System action**

Processing continues, but the Terminal Command control cards for the options data set batch update utility IZTUD1U0, are not produced.

# User response

If you want the Terminal Command control cards for the options data set batch update utility IZTUD1U0, correct the error in DD ETOCMD and run the job again.

#### Module

IZTSMU00

IZT7412I

RECORD SEQUENCE NUMBER: nnnnnn

#### **Explanation**

This message is issued with another previous error message. The previous message describes the error that was encountered in the SMUIN data set. This message lists the record sequence number in the SMUIN data set that encountered the error.

# **System action**

Processing continues.

# **User response**

Use the previous associated error message to determine your next step.

#### Module

IZTSMU00

**IZT7413E** 

ONE OF THE FOLLOWING DDS
MUST BE OPENED

# **Explanation**

This message is issued with IZT7414E when none of the described DD statement data sets were opened. IZTSMU00 requires at least one of the described DD names to be present.

### **System action**

Processing terminates with a nonzero return code.

#### User response

Provide at least one of the described DD statements and run the job again.

#### Module

IZTSMU00

IZT7414E

RACFLTRM, RACFPSWD, ETOCMD

#### **Explanation**

This message is issued with IZT7413E when none of the described DD statement data sets were opened. IZTSMU00 requires at least one of the described DD names to be present.

# System action

Processing terminates with a nonzero return code.

#### User response

Provide at least one of the described DD statements and run the job again.

#### Module

IZTSMU00

**IZT7415I** 

CMD xxx FOR LTERM yyyyyyyy IS BYPASSED, NOT RESTRICTED BY ETO/S

# **Explanation**

Command xxx is not restricted by IMS ETO Support. Therefore, LTERM yyyyyyyy is allowed to run this command and no entry is required in the IMS ETO Support options data set.

# **System action**

Processing continues.

### User response

No action is required.

#### Module

IZTSMU00

IZT7420E INVALID PARM DATA FORMAT

### **Explanation**

The data specified on the PARM statement is incorrect.

# **System action**

The batch job terminates with a nonzero return code.

#### User response

Correct the parameter data and run the job again.

#### Module

IZTSMU00

IZT7421E INVALID CHARACTER IN PARMDATA

# **Explanation**

The data specified on the PARM statement contains invalid characters.

#### System action

The batch job terminates with a nonzero return code.

#### **User response**

Correct the PARM data and run the job again.

IZTSMU00

IZT7422E UNABLE TO OPEN SYSPRINT DD

# **Explanation**

An error was encountered while attempting to open DD statement SYSPRINT data set.

# System action

The batch job terminates with a nonzero return code.

### **User response**

Ensure that the SYSPRINT DD statement is coded properly and run the job again.

#### Module

IZTSMU00

IZT7501E GETMAIN FAILED FOR IZTPRINT DCB STORAGE

### **Explanation**

An error occurred during an attempt to GETMAIN storage for a work area.

# System action

The job terminates with a U0998 ABEND.

#### User response

Review the z/OS log for additional information, and contact IBM Software Support if additional assistance is required.

#### Module

**IZTLIST** 

IZT7502E OPEN FAILED FOR IZTPRINT

#### **Explanation**

An error occurred during an attempt to open DDNAME IZTPRINT.

# System action

The job terminates with a U0998 ABEND.

#### User response

Review the z/OS log for additional information, and contact IBM Software Support if additional assistance is required.

#### Module

**IZTLIST** 

IZT7503E OPEN FAILED FOR IZTPUNCH

### **Explanation**

An error occurred during an attempt to open DDNAME IZTPUNCH.

### System action

The job terminates with a U0998 ABEND.

# User response

Review the z/OS log for additional information, and contact IBM Software Support if additional assistance is required.

#### Module

**IZTLIST** 

IZT7504E MESSAGE EXCEEDS xxx BYTES

### **Explanation**

An internal logic error occurred in the IZTLIST utility.

# System action

The job terminates with a U0998 ABEND.

#### User response

Contact IBM Software Support for assistance.

#### Module

**IZTLIST** 

IZT7505E TIME MACRO RETURNED RC=xx

#### **Explanation**

An nonzero return code was received during a call to the z/OS TIME service.

#### System action

The job terminates with a U0998 ABEND.

Review the z/OS log for additional information, and contact IBM Software Support if further assistance is required.

#### Module

**IZTLIST** 

IZT7506E GETMAIN FAILED FOR STORAGE ABOVE THE 16M LINE

# **Explanation**

An error occurred during an attempt to GETMAIN storage for a table.

# System action

The job terminates with a U0998 ABEND.

### **User response**

Review the z/OS log for additional information, and contact IBM Software Support if additional assistance is required.

#### Module

**IZTLIST** 

IZT7507E PARM ERROR - NOT OF FORM
PARM=PUNCH(SLU2,USER,PRINT
ER,
GLOBAL)

#### **Explanation**

An error occurred during the parsing of the job step PARM data. The PARM statement appears to be in error.

# **System action**

The job terminates with a U0998 ABEND.

#### **User response**

Correct the PARM statement format, and rerun the job.

#### Module

**IZTLIST** 

IZT7508E INTERNAL ERROR PROCESSING PUNCH INDICATORS

#### **Explanation**

An internal logic error occurred in the IZTLIST utility.

### **System action**

The job terminates with a U0998 ABEND.

### **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTLIST** 

IZT7509E INTERNAL ERROR PROCESSING LTERM INDICATORS

# **Explanation**

An internal logic error occurred in the IZTLIST utility.

# System action

The job terminates with a U0998 ABEND.

### **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTLIST** 

IZT7601E INVALID CHARACTER IN RESOURCE NAME

#### **Explanation**

This is an internal logic error. The transaction/ LTERM name compression routine detected an invalid character in the passed parameter.

### System action

A nonzero return code is returned to the calling program.

# User response

Contact IBM Software Support.

#### Module

**IZTCTRX0** 

IZT7602E INVALID ABEND TYPE, MUST BE "USER" OR "SYS "

This is an internal logic error. The transaction/ LTERM name compression routine passed an invalid parameter.

# **System action**

A nonzero return code is returned to the calling program.

# **User response**

Contact IBM Software Support.

#### Module

**IZTCTRX0** 

IZT7603E USER ABEND CODE 0000 NOT SUPPORTED

### **Explanation**

This is an internal logic error. The transaction/ LTERM name compression routine passed an invalid parameter.

### **System action**

A nonzero return code is returned to the calling program.

#### **User response**

Contact IBM Software Support.

#### Module

IZTCTRX0

IZT7604E USER ABEND CODE GREATER
THAN 4095

# **Explanation**

This is an internal logic error. The transaction/ LTERM name compression routine passed an invalid parameter.

# **System action**

A nonzero return code is returned to the calling program.

#### **User response**

Contact IBM Software Support.

#### Module

**IZTCTRX0** 

IZT7605E INVALID SYS ABEND CHARACTER, MUST BE 0-9, A-F

# **Explanation**

This is an internal logic error. The transaction/ LTERM name compression routine passed an invalid parameter.

### **System action**

A nonzero return code is returned to the calling program.

# **User response**

Contact IBM Software Support.

#### Module

**IZTCTRX0** 

IZT7701E AN INVALID COMMAND HAS BEEN ATTEMPTED

# **Explanation**

An invalid command was entered.

#### **System action**

No processing is attempted.

#### User response

Enter a valid command and try again.

#### Module

IZTJLST4/IZTJUPD5

IZT7702E AN INVALID VALUE WAS SPECIFIED IN THE XXXXX PROCESS OPTION FIELD

#### **Explanation**

An invalid value was specified in xxxxx field.

#### **System action**

No processing is attempted.

Correct the invalid value in field xxxxx and try the operation again.

#### Module

IZTJUPD4/IZTJUPD5

**IZT7703E** 

XXXXX DEST REQUIRED WHEN XXXXX OPTION "NEW DEST" SPECIFIED

### **Explanation**

The option field for xxxxx requested that the message that caused the abend be routed to a new destination. However, the NEW DEST field for xxxxx was not specified.

# **System action**

No processing is attempted.

# **User response**

Either specify a NEW DEST, or choose another option, and try the operation again.

#### Module

IZTJUPD4/IZTJUPD5

IZT7704E

XXXXX DEST NOT ALLOWED UNLESS XXXXX OPTION "NEW DEST" SPECIFIED

### **Explanation**

The NEW DEST field for xxxxx contained a destination name, but the option for xxxxx did not specify that the message that caused the ABEND be routed to a new destination.

# System action

No processing is attempted.

#### **User response**

Either remove the NEW DEST name, or specify that the message be routed to a NEWDEST in the option field, and try the operation again.

#### Module

IZTJUPD4/IZTJUPD5

IZT7705E ASTERISK (\*) MUST BE THE LAST
CHARACTER IN XXXXX NAME

# **Explanation**

An asterisk was specified in the *xxxxx* name, but it was not the last character.

### **System action**

No processing is attempted.

### **User response**

Correct the name and try the operation again.

#### Module

IZTJUPD4/IZTJUPD5

IZT7706E

BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

### **Explanation**

An error occurred processing the options data set. The z/OS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

# System action

The options data set I/O operation ends.

#### **User response**

Check the z/OS syslog for additional messages. If any messages are found, take appropriate action based on those messages. If there are no additional messages in the z/OS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

IZTJUPD4/IZTJUPD5

**IZT7707E** 

ERROR ON REPL CALL, STATUS
CODE = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

#### System action

Processing ends.

### **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD4/IZTJUPD5

#### **IZT7708E**

**INVALID ABEND TYPE SPECIFIED** 

## **Explanation**

An invalid value was specified in the ABEND TYPE field.

### System action

No processing is attempted.

### User response

Correct the invalid value and try the operation again.

#### Module

IZTJUPD4/IZTJUPD5

#### IZT7709E

ABEND CODE SPECIFIED WITHOUT ABEND TYPE

## **Explanation**

The ABEND TYPE must be specified if an ABEND CODE is specified.

### System action

No processing is attempted.

#### User response

Either remove the ABEND CODE, or add the ABEND TYPE, and try the operation again.

#### Module

IZTJUPD4/IZTJUPD5

IZT7710E

ABEND TYPE SPECIFIED WITHOUT ABEND CODE

## **Explanation**

The ABEND CODE must be specified if an ABEND TYPE is specified.

## System action

No processing is attempted.

### User response

Either remove the ABEND TYPE, or add an ABEND CODE, and retry the operation.

#### Module

IZTJUPD4/IZTJUPD5

IZT7711E NON-NUMERIC VALUE SPECIFIED IN USER ABEND CODE

### **Explanation**

An ABEND TYPE of USER was specified, but the ABEND CODE contained a non-numeric value.

## System action

No processing is attempted.

## User response

Ensure only numeric values are specified for USER ABEND CODE, and retry the operation.

#### Module

IZTJUPD4/IZTJUPD5

IZT7712E SYSTEM ABEND CODE MUST BE THREE BYTES LONG

#### **Explanation**

An ABEND TYPE of SYSTEM was specified, but the ABEND CODE did not specify 3 characters.

## System action

No processing is attempted.

#### User response

Specify 3 characters for a SYSTEM ABEND CODE, and retry the operation.

#### Module

IZTJUPD4/IZTJUPD5

IZT7713E SYSTEM ABEND CHARACTERS
MUST BE 0-9, A-F

#### **Explanation**

Invalid characters were specified for a SYSTEM ABEND CODE. Valid values for SYSTEM ABEND CODEs are 0-9, and A-F.

No processing is attempted.

**User response** 

Correct the invalid ABEND CODE and try the operation again.

Module

IZTJUPD4/IZTJUPD5

**IZT7714E** 

**ABEND CODE 000 NOT** SUPPORTED

**Explanation** 

IMS ETO Support does not allow the ABEND CODE to be specified as all zeros.

**System action** 

No processing is attempted.

**User response** 

Specify a valid ABEND CODE and try the operation again.

Module

IZTJUPD4/IZTJUPD5

**IZT7715E** AN INVALID COMMAND HAS BEEN **ATTEMPTED** 

**Explanation** 

An invalid command was entered.

**System action** 

No processing is attempted.

**User response** 

Enter a valid command and try again.

Module

IZTJLST4/IZTJUPD5

IZT7716E

= yy

**ERROR ON GU CALL, STATUS CODE** 

**Explanation** 

An invalid status code was returned by IMS from a DL/I call.

System action

Processing ends.

User response

Determine the cause of the error code and correct the problem.

Module

IZTJUPD4/IZTJUPD5

**IZT7717E** 

**ERROR ON GN CALL, STATUS** CODE = xx

**Explanation** 

An invalid status code was returned by IMS from a DL/I call.

System action

Processing ends.

User response

Determine the cause of the error code and correct the problem.

Module

IZTJUPD4/IZTJUPD5

**IZT7718E** 

AN INVALID ROW COMMAND WAS **ENTERED:** x

**Explanation** 

An invalid command was entered.

System action

No processing is attempted.

User response

Enter a valid command and try again.

Module

IZTJUPD4/IZTJUPD5

IZT7719I

**ENTRY NO LONGER EXISTS IN OPTIONS DATASET: XXXXXXXX** 

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The selected entry no longer exists in the options data set. This is probably because one user deleted it while another user attempted to process the record.

## **System action**

Processing ends.

## **User response**

Display the entries again, and if the problem persists, contact IBM Software Support.

#### Module

IZTJUPD4/IZTJUPD5

IZT7720E ERROR ON GHU CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

### **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD4/IZTJUPD5

IZT7721E ERROR ON GN CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

#### User response

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD4/IZTJUPD5

**IZT7722E** 

CONFLICTING ROW COMMANDS HAVE BEEN ENTERED

## **Explanation**

Conflicting row commands were entered. Only one type of command can be entered at a time. You can enter multiple **D** (delete) commands, but you cannot enter different command types.

## System action

No processing is attempted.

## **User response**

Determine which commands you want and remove the others.

#### Module

IZTJUPD4/IZTJUPD5

**IZT7723E** 

**XXXXX** NAME IS A REQUIRED FIELD

## **Explanation**

The NAME field for the *xxxxx* record was not specified, and it is a required field.

#### **System action**

No processing is attempted.

## User response

Specify the NAME field and retry the operation.

### Module

IZTJUPD4/IZTJUPD5

**IZT7724E** 

ERROR ON GHU CALL, STATUS
CODE = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD4/IZTJUPD5

IZT7725E ERROR ON DLET CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD4/IZTJUPD5

IZT7726E ERROR ON GHU CALL, STATUS CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD4/IZTJUPD5

IZT7727E ERROR ON REPL CALL, STATUS
CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code and correct the problem.

### Module

IZTJUPD4/IZTJUPD5

IZT7728E ERROR ON ISRT CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

## User response

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD4/IZTJUPD5

IZT7729I RECORD HAS BEEN REPLACED

## **Explanation**

The record has been successfully replaced in the options data set.

#### System action

Processing continues.

#### User response

None. This message is informational.

#### Module

IZTJUPD4/IZTJUPD5

IZT7730I RECORD HAS BEEN ADDED

### **Explanation**

The record has been successfully added to the options data set.

Processing continues.

**User response** 

None. This message is informational.

Module

IZTJUPD4/IZTJUPD5

**IZT7731E** 

INVALID VALUE SPECIFEID FOR XXXXX "SUPRESS DFS555I"

**Explanation** 

A value other than Y (yes) or N (no) was specified for the SUPPRESS DFS555I option.

System action

The input is ignored.

**User response** 

Specify either Y (yes) or N (no) and try again.

Module

IZTJUPD4/IZTJUPD5

**IZT7732E** 

INVALID VALUE SPECIFIED FOR XXXXX "WTO IZT92011"

**Explanation** 

A value other than Y (yes) or N (no) was specified for the WTO IZT9201I option.

**System action** 

The input is ignored.

**User response** 

Specify either Y (yes) or N (no) and try again.

Module

IZTJUPD4/IZTJUPD5

IZT7733E WTO IZT9201I CANNOT BE "Y"
UNLESS SUPP DFS555I IS "Y" FOR

xxxxx

**Explanation** 

When Y (yes) is specified for WTO IZT9201I, Y (yes) must also be specified for SUPPRESS DFS555I.

**System action** 

No processing is attempted.

**User response** 

Correct the invalid option and try the operation again.

Module

IZTJUPD4/IZTJUPD5

**IZT7734E** 

INVALID VALUE SPECIFIED FOR XXXXX TRAN/PSB OPTION

**Explanation** 

A value other than Y (yes) or N (no) was specified for the NO USTOP TRAN/PSB option.

**System action** 

The input is ignored.

User response

Specify either Y (yes) or N (no) and try again.

Module

IZTJUPD4/IZTJUPD5

**IZT7799E** 

ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE

= xx

**Explanation** 

An invalid status code was returned by IMS from a DL/I call while attempting to access the IMS ETO Support control record.

**System action** 

Processing ends.

**User response** 

Determine the cause for the error code and correct the problem.

Module

IZTJUPD4/IZTJUPD5

**IZT7801**E

FIND SCD FAILED IN IZTPPUEZ imsid

An error occurred in the IMS ETO Support E/CSA search routine.

## **System action**

Processing ends.

## **User response**

Verify that IMS ETO Support is installed properly by checking the messages issued at IMS initialization.

#### Module

**IZTPPUEZ** 

IZT7802W OPEN FAILED FOR DDNAME PROCLIB imsid

## **Explanation**

An error was encountered attempting an OPEN for ddname PROCLIB.

## **System action**

IMS initialization terminates.

## **User response**

Review the z/OS syslog for additional messages, take an appropriate action based upon those messages, and restart IMS.

#### Module

**IZTPPUEZ** 

IZT7803W INVALID CONTROL CARD IN PROCLIB MEMBER IZTimsid

## **Explanation**

An invalid record was read from member IZT*imsid* in ddname PROCLIB. A WTO is issued for the invalid record and can be found in the z/OS syslog as message IZT7899I.

## System action

The invalid record is ignored and IMS restart continues.

#### **User response**

Identify the invalid record by reviewing message IZT7899I in the z/OS syslog, and correct the record

in member IZT*imsid* in ddname PROCLIB. Restart IMS if needed.

#### Module

**IZTPPUEZ** 

IZT7804W EXIT NAME MORE THAN
8 CHARACTERS IN PROCLIB
MEMBER IZTimsid

## **Explanation**

An invalid record was read from member IZTimsid in ddname PROCLIB. The invalid input statement specified a user Partner Product user exit name (PPUE=) that was more than 8 characters in length. A WTO is issued for the invalid record, and can be found in the z/OS syslog as message IZT7899I.

## **System action**

The invalid record is ignored and IMS restart continues.

## **User response**

Identify the invalid record by reviewing message IZT7899I in the z/OS syslog, and correct the record in member IZT*imsid* in ddname PROCLIB. Restart IMS if needed.

#### Module

**IZTPPUEZ** 

IZT7805W INVALID VALUE SPECIFIED FOR WTO= PARM IN PROCLIB MEMBER IZTimsid

## **Explanation**

A value other than Y (yes) or N (no) was specified for the WTO option.

## **System action**

The invalid parameter is ignored, default WTO=N is used, and IMS restart continues.

#### User response

Correct member IZTimsid in ddname PROCLIB.

#### Module

**IZTPPUEZ** 

# IZT7806E PPUE=xxxxxxxx ENDED WITH RETURN CODE rc imsid

## **Explanation**

A Partner Product user exit was specified in member IZT*imsid* of ddname PROCLIB, but the specified exit terminated with a nonzero return code. The return code is displayed as *rc*.

## **System action**

IMS restart terminates.

## **User response**

Determine the reason for the bad return code from Partner Product user exit *xxxxxxxx*, take corrective action, and restart IMS.

#### Module

**IZTPPUEZ** 

IZT7807I PPUE=xxxxxxxx COMPLETED WITH
A ZERO RETURN CODE imsid

## **Explanation**

A Partner Product user exit (PPUE=xxxxxxxx) was called, and it completed with a return code of 0.

### **System action**

IMS restart continues.

#### User response

None. This message is informational.

#### Module

**IZTPPUEZ** 

IZT7808E INITIALIZATION FAILED FOR ETO SUPPORT DFSPPUE0 imsid

## **Explanation**

An error was encountered during IMS initialization.

### **System action**

IMS restart terminates.

#### User response

Review the z/OS syslog for additional messages, take corrective action, and restart IMS.

#### Module

IZTPPUEZ

IZT7809I INITIALIZATION COMPLETED ETO SUPPORT DFSPPUE0 imsid

## **Explanation**

IMS ETO Support Partner Product user exit successfully completed initialization.

## **System action**

IMS restart continues.

### **User response**

None. This message is informational.

#### Module

**IZTPPUEZ** 

IZT7810W PPUE=xxxxxxxx IS A DUPLICATE,
EXIT WILL BE CALLED ONCE imsid

## **Explanation**

Member IZT*imsid* of ddname PROCLIB specified the same named Partner Product user exit (PPUE=xxxxxxxx) more than once. IMS ETO Support calls the same Partner Product user exit only once.

### System action

The specified Partner Product user exit is called once, and IMS restart continues.

### User response

Remove the duplicate Partner Product user exit (PPUE=xxxxxxxxx) input statement from member IZTimsid in ddname PROCLIB.

#### Module

**IZTPPUEZ** 

IZT7811W LOAD FAILED FOR PPUE=xxxxxxxx imsid

## **Explanation**

Member IZT*imsid* of ddname PROCLIB specified that a Partner Product user exit (PPUE=*xxxxxxxx*) be called, but the exit could not be loaded.

IMS restart terminates.

## **User response**

Ensure the specified exit is available to the IMS control region, and restart IMS.

#### Module

**IZTPPUEZ** 

IZT7812W

PPUE=DFSPPUE0 IS NOT ALLOWED, AND WILL BE IGNORED imsid

## **Explanation**

Member IZTimsid of ddname PROCLIB specified that a Partner Product user exit (PPUE=DFSPPUE0) be called, but exit name DFSPPUE0 is reserved for IMS.

## System action

IMS restart continues, but exit DFSPPUE0 is not called by IMS ETO Support.

## **User response**

Remove PPUE=DFSPPUE0 from member IZT*imsid* of the data set identified by ddname PROCLIB.

#### Module

IZTPPUEZ

**IZT7813W** 

PPUE=IZTPPUEZ IS NOT ALLOWED, AND WILL BE IGNORED imsid

### **Explanation**

Member IZTimsid of ddname PROCLIB specified that a Partner Product user exit (PPUE=IZTPPUEZ) be called, but exit name IZTPPUEZ is already running.

## **System action**

IMS restart continues, but exit IZTPPUEZ is not called by IMS ETO Support.

#### **User response**

Remove PPUE=IZTPPUEZ from member IZTimsid of the data set identified by ddname PROCLIB.

#### Module

**IZTPPUEZ** 

IZT7899I

XXXXXXXX

## **Explanation**

This message displays an invalid input statement from member IZTimsid of ddname PROCLIB. There is an additional message describing the error in the input statement.

## **System action**

Depending upon the additional message describing the error, IMS restart either continues, or terminates.

## **User response**

Follow instructions in the additional message that describes the error encountered.

#### Module

**IZTPPUEZ** 

**IZT7901W** 

OTMA DESCRIPTOR REC SKIPPED, COLUMN 72 IS NOT BLANK

## **Explanation**

While reading IMS PROCLIB member OPDimsid, an invalid record was encountered. Column 72 of the invalid record contained a non-blank character. The accompanying message IZT7999W displays the invalid record.

## **System action**

The invalid record is ignored, and IMS restart continues.

### User response

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

IZT7902W

OTMA DESCRIPTOR REC SKIPPED, PATTERN= KEYWORD EXPECTED

## **Explanation**

While reading IMS PROCLIB member OPD*imsid*, an error was encountered. The first non-comment control statement must contain PATTERN= in column 1. The

accompanying message IZT7999W displays the invalid record.

## **System action**

The invalid record is ignored, and IMS restart continues.

## **User response**

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

IZT7903W OTMA DESCRIPTOR REC SKIPPED, FAILED EDITING

## **Explanation**

A syntax error was encountered while reading IMS PROCLIB member OPD*imsid*. The accompanying message IZT7999W displays the invalid record.

## **System action**

The invalid record is ignored, and IMS restart continues.

### **User response**

Correct the invalid record in PROCLIB member OPD*imsid*, and, if necessary, restart IMS.

#### Module

IZTBOPD0

IZT7904W OTMA DESCRIPTOR REC SKIPPED, INVALID PATTERN NAME

### **Explanation**

An error was encountered while reading IMS PROCLIB member OPD*imsid*. A PATTERN= record contained an invalid pattern name. The name was either omitted, or was greater than 16 bytes long. The accompanying message IZT7999W displays the invalid record.

## **System action**

The invalid record is ignored, and IMS restart continues.

## **User response**

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

## **Explanation**

An error was encountered while reading IMS PROCLIB member OPD*imsid*. While attempting to build an OTMA pattern descriptor entry for pattern *ppppppppppppppppppp*, no parameter records were found.

## System action

The invalid pattern is ignored, and IMS restart continues.

### User response

Correct the invalid pattern descriptor in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

## **Explanation**

## System action

The invalid record is ignored, and IMS restart continues.

## User response

Correct the invalid record in PROCLIB member OPD*imsid*, and, if necessary, restart IMS.

IZTBOPD0

**IZT7908W** 

## **Explanation**

An error was encountered while reading IMS PROCLIB member OPDimsid. A parameter record for pattern ppppppppppppppppp had either LTH=0 or POS=0. Valid numeric digits are 01 - 16. The accompanying message IZT7999W displays the invalid record.

## **System action**

The invalid record is ignored, and IMS restart continues.

## **User response**

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

**IZT7909W** 

## **Explanation**

## **System action**

The invalid record is ignored, and IMS restart continues.

## **User response**

Correct the invalid record in PROCLIB member OPD*imsid*, and, if necessary, restart IMS.

#### Module

IZTBOPD0

**IZT7910W** 

## **Explanation**

## System action

The invalid record is ignored, and IMS restart continues.

### User response

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

**IZT7911W** 

## **Explanation**

An error was encountered while reading IMS PROCLIB member OPDimsid. A parameter record for pattern pppppppppppppppp did not contain both the LTH= and POS= parameters. The accompanying message IZT7999W displays the invalid record.

## **System action**

The invalid record is ignored, and IMS restart continues.

## User response

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

**IZT7912W** 

### **Explanation**

The invalid record is ignored, and IMS restart continues.

### **User response**

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

### Module

IZTBOPD0

**IZT7913W** 

## **Explanation**

## System action

The invalid record is ignored, and IMS restart continues.

## User response

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

**IZT7916W** 

### **Explanation**

## **System action**

The invalid record is ignored, and IMS restart continues.

### **User response**

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

**IZT7917W** 

## **Explanation**

## System action

The invalid record is ignored, and IMS restart continues.

## **User response**

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

**IZT7918W** 

## **Explanation**

## **System action**

The invalid record is ignored, and IMS restart continues.

## User response

Correct the invalid record in PROCLIB member OPD*imsid*, and, if necessary, restart IMS.

IZTBOPD0

**IZT7919W** 

## **Explanation**

## **System action**

The invalid record is ignored, and IMS restart continues.

## **User response**

Correct the invalid record in PROCLIB member OPDimsid, and, if necessary, restart IMS.

#### Module

IZTBOPD0

**IZT7921W** 

## **Explanation**

## **System action**

The invalid pattern is ignored, and IMS restart continues.

## **User response**

#### Module

IZTBOPD0

**IZT7990W** 

### **Explanation**

## **System action**

The maximum length value of 8 is used, and IMS restart continues.

### User response

Correct the LTH= value in IMS PROCLIB member OPDimsid.

#### Module

IZTBOPD0

IZT7991I MEMBER(OPDimsid)
SUCCESSFULLY LOADED

## **Explanation**

This is an informational message. Member OPD*imsid* was successfully loaded.

## **System action**

IMS startup continues.

## User response

None. This message is informational.

## Module

IZTBOPD0

IZT7992W BAD RETURN CODE FROM FREE ROUTINE

### **Explanation**

An error was encountered during the attempt to free storage used in the OTMA pattern descriptor build process.

## System action

IMS startup continues.

## **User response**

Review the z/OS syslog and follow instructions for any additional messages. If there are no additional messages, contact IBM Software Support.

#### Module

IZTBOPD0

IZT7999W INVALID CONTROL STATEMENT

## **Explanation**

This message lists an OTMA pattern descriptor (OPD) control statement that encountered an edit error. The error is described in a prior message.

## **System action**

IMS startup continues, but the erroneous control statement is ignored.

### **User response**

Correct the erroneous control statement, and restart IMS if required.

#### Module

IZTBOPD0

IZT8001E AN INVALID COMMAND HAS BEEN ATTEMPTED

#### **Explanation**

An invalid command was entered.

#### **System action**

No processing is attempted.

#### **User response**

Enter a valid command and try again.

### Module

IZTJUPD2

IZT8003E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxxx

### **Explanation**

An error occurred while processing the options data set. The z/OS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

### **System action**

The options data set I/O operation ends.

### User response

Check the z/OS syslog for additional messages. If any messages are found, take appropriate action based on those messages. If there are no additional messages in the z/OS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

IZTJUPD2

IZT8006E ERROR ON REPL CALL, STATUS
CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### System action

Processing ends.

## User response

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD2

IZT8007E AN INVALID COMMAND HAS BEEN ATTEMPTED

## **Explanation**

An invalid command was entered.

### System action

No processing is attempted.

### User response

Enter a valid command and try again.

#### Module

IZTJUPD2

IZT8008E ERROR ON GU CALL, STATUS
CODE= xx

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD2

IZT8009E ERROR ON GN CALL, STATUS
CODE= xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD2

IZT8010E AN INVALID ROW COMMAND WAS ENTERED: x

### **Explanation**

An invalid command was entered.

### **System action**

No processing is attempted.

## **User response**

Enter a valid command and try again.

#### Module

IZTJUPD2

IZT8011I ENTRY NO LONGER EXISTS IN OPTIONS DATASET: xxxxxxxx

## **Explanation**

The selected entry no longer exists in the options data set. This is probably because one user deleted it while another user attempted to process the record.

## **System action**

Processing ends.

## **User response**

Display the entries again. If the problem persists, contact IBM Software Support.

### Module

IZTJUPD2

IZT8012E ERROR ON GHU CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

### User response

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD2

IZT8013E ERROR ON GN CALL, STATUS CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### System action

Processing ends.

#### User response

Determine the cause of the error code and correct the problem.

IZTJUPD2

IZT8014E CONFLICTING ROW COMMANDS
HAVE BEEN ENTERED

## **Explanation**

Conflicting row commands were entered. Only one type of command can be entered at a time. You can enter multiple **D** (delete) commands, but you cannot enter different command types.

## **System action**

No processing is attempted.

## **User response**

Determine which commands you want, and remove the others.

#### Module

IZTJUPD2

IZT8015E LOGMODE IS A REQUIRED FIELD

## **Explanation**

LOGMODE is required, but has not been specified.

#### **System action**

No processing is attempted.

### **User response**

Specify the LOGMODE and retry the operation.

### Module

IZTJUPD2

IZT8016E ERROR ON GHU CALL, STATUS
CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

### **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD2

IZT8017E ERROR ON DLET CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

### User response

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD2

IZT8018E ERROR ON GHU CALL, STATUS
CODE = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### **System action**

Processing ends.

#### User response

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD2

IZT8019E ERROR ON REPL CALL, STATUS
CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

Processing ends.

## **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD2

IZT8020E ERROR ON ISRT CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

### **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD2

IZT8021I RECORD HAS BEEN REPLACED

## **Explanation**

The record has been successfully replaced in the options data set.

### System action

Processing continues.

#### **User response**

None. This message is informational.

#### Module

IZTJUPD2

IZT8022I RECORD HAS BEEN ADDED

### **Explanation**

The record has been successfully added to the options data set.

## **System action**

Processing continues.

### **User response**

None. This message is informational.

#### Module

IZTJUPD2

IZT8023E LOGOND IS A REQUIRED FIELD

## **Explanation**

LOGOND is required, but has not been specified.

## System action

No processing is attempted.

## User response

Specify the LOGOND and try the operation again.

#### Module

IZTJUPD2

IZT8099E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call while attempting to access the IMS ETO Support control record.

### System action

Processing ends.

#### User response

Determine the cause for the error code and correct the problem.

#### Module

IZTJUPD2

IZT8101E AN INVALID COMMAND HAS BEEN ATTEMPTED

### **Explanation**

An invalid command was entered.

No processing is attempted.

## **User response**

Enter a valid command and try again.

#### Module

IZTJUPD3

IZT8102E INVALID VALUE SPECIFIED FOR SYNC'D SESSION

## **Explanation**

A value other than Y (yes) or N (no) was specified for the SYNC'D option.

## System action

The input is ignored.

## **User response**

Specify either Y (yes) or N (no) and try again.

#### Module

IZTJUPD3

IZT8103E INVALID VALUE SPECIFIED FOR PERSISTENT SESSION

## **Explanation**

A value other than Y (yes) or N (no) was specified for the PERSISTENT option.

## **System action**

The input is ignored.

#### User response

Specify either Y (yes) or N (no) and try again.

#### Module

IZTJUPD3

IZT8104E INVALID VALUE SPECIFIED FOR HOLD QUEUE

### **Explanation**

A value other than Y (yes) or N (no) was specified for the HOLD QUEUE option.

## **System action**

The input is ignored.

### **User response**

Specify either Y (yes) or N (no) and try again.

#### Module

IZTJUPD3

IZT8105E MEMBER NAME IS REQUIRED

## **Explanation**

MEMBER name is required, but has not been specified.

### System action

No processing is attempted.

## User response

Specify either a MEMBER or OTMA pattern descriptor (OPD) name, and try the operation again.

### Module

IZTJUPD3

IZT8106E PERSISTENT=Y REQUIRES
SYNC'D=Y

#### **Explanation**

In order to have a PERSISTENT session, it must also be a synchronized session. Therefore, when PERSISTENT=Y is specified, SYNC'D=Y must also be specified.

#### System action

No processing is attempted.

#### User response

Correct the conflicting parameters and try the operation again.

#### Module

IZTJUPD3

IZT8107E INVALID VALUE SPECIFIED FOR "PREFIX W/IMSID"

A value other than Y (yes) or N (no) was specified for the PREFIX MEMBER NAME W/IMSID option.

## System action

The input is ignored.

### User response

Specify either Y (yes) or N (no) and try again.

#### Module

IZTJUPD3

IZT8108E PDS MEMBER MUST BE 4 BYTES
OR LESS WHEN PREFIX W/IMSID
= Y

## **Explanation**

When IZTUDATA member name is prefixed with the IMSID (PREFIX MEMBER NAME W/IMSID=Y), the value specified for PDS MEMBER must be 1 - 4 characters long.

## **System action**

No processing is attempted.

#### User response

Either correct the invalid PDS MEMBER name, or set PREFIX MEMBER NAME W/IMSID to N (no), and try the operation again.

## Module

IZTJUPD3

IZT8109E PDS MEMBER MUST BE SPECIFIED WHEN PREFIX W/IMSID = Y

## **Explanation**

PREFIX MEMBER NAME W/IMSID is set to Y (yes), but the member name suffix (PDS MEMBER) is not specified.

## System action

No processing is attempted.

### **User response**

Either set PREFIX MEMBER NAME W/IMSID to N (no), or add the PDS MEMBER name suffix, and try the operation again.

#### Module

IZTJUPD3

IZT8110E ASTERISK (\*) MUST BE LAST
CHARACTER IN DESTINATION
LTERM

## **Explanation**

An asterisk was specified in the DEST LTERM name, but it was not the last character.

## System action

No processing is attempted.

## **User response**

Correct the name and try the operation again.

#### Module

IZTJUPD3

IZT8111E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxxx

### **Explanation**

An error occurred processing the options data set. The z/OS syslog probably contains additional error messages. The return code (xxxxxxxx) is of value only if you need help from IBM Software Support.

### System action

The options data set I/O operation ends.

## User response

Check the z/OS syslog for additional messages. If any messages are found, take appropriate action based on those messages. If there are no additional messages in the z/OS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

IZTJUPD3

IZT8112E DEST LTERM MUST START
WITH AN ALPHANUMERIC OR

WILDCARD

## **Explanation**

The first character of the DEST LTERM field must be alphanumeric (A-Z, 0-9), national (@ # \$), or a wildcard (%?\*).

## **System action**

No processing is attempted.

## **User response**

Correct the first character of the DEST LTERM, and try the operation again.

#### Module

IZTJUPD3

IZT8113E INVALID CHARACTER DETECTED IN THE DEST LTERM FIELD

## **Explanation**

An invalid character was found in the DEST LTERM field. Valid DEST LTERM characters are alphanumeric (A-Z, 0-9), national (@ # \$), and wildcards (%?\*).

## **System action**

No processing is attempted.

## **User response**

Correct the DEST LTERM name and try the operation again.

#### Module

IZTJUPD3

IZT8114E ERROR ON REPL CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code and correct the problem.

#### Module

IZTJUPD3

IZT8115E AN INVALID COMMAND HAS BEEN ATTEMPTED

## **Explanation**

An invalid command was entered.

## System action

No processing is attempted.

## **User response**

Enter a valid command and try again.

#### Module

IZTJUPD3

IZT8116E ERROR ON GU CALL, STATUS CODE=xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

**IZTJUPD3** 

IZT8117E ERROR ON GN CALL, STATUS
CODE=xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTJUPD3

IZT8118E AN INVALID ROW COMMAND WAS ENTERED: x

## **Explanation**

An invalid command was entered.

## **System action**

No processing is attempted.

### User response

Enter a valid command and try again.

#### Module

IZTJUPD3

IZT8119I ENTRY NO LONGER EXISTS IN OPTIONS DATASET: xxxxxxxx

## **Explanation**

The selected entry no longer exists in the options data set. This is probably because one user deleted it while another user attempted to process the record.

### **System action**

Processing ends.

#### **User response**

Display the entries again, and if the problem persists, contact IBM Software Support.

#### Module

IZTJUPD3

IZT8120E ERROR ON GHU CALL, STATUS
CODE = xx

#### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

#### Module

**IZTJUPD3** 

IZT8121E ERROR ON GN CALL, STATUS
CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTJUPD3

IZT8122E CONFLICTING ROW COMMANDS
HAVE BEEN ENTERED

## **Explanation**

Conflicting row commands were entered. Only one type of command can be entered at a time. You can enter multiple **D** (delete) commands, but you cannot enter different command types.

### System action

No processing is attempted.

#### User response

Determine which commands you want, and remove the others.

#### Module

**IZTJUPD3** 

IZT8123E DESTINATION LTERM IS A REQUIRED FIELD

DEST LTERM is a required field, but has not been specified.

## **System action**

No processing is attempted.

## **User response**

Add the DEST LTERM name, and try the operation again.

#### Module

IZTJUPD3

IZT8124E ERROR ON GHU CALL, STATUS CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTJUPD3

IZT8125E ERROR ON DLET CALL, STATUS

CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

### **User response**

Determine the cause of the error code, and correct the problem.

#### Module

IZTJUPD3

IZT8126E ERROR ON GHU CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error code, and correct the problem.

## Module

IZTJUPD3

IZT8127E ERROR ON REPL CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call.

## System action

Processing ends.

#### User response

Determine the cause of the error code, and correct the problem.

#### Module

**IZTJUPD3** 

IZT8128E ERROR ON ISRT CALL, STATUS
CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DL/I call.

### System action

Processing ends.

### User response

Determine the cause of the error code, and correct the problem.

IZTJUPD3

IZT8129I RECORD HAS BEEN REPLACED

## **Explanation**

The record has been successfully replaced in the options data set.

## **System action**

Processing continues.

## **User response**

None. This message is informational.

#### Module

IZTJUPD3

IZT8130I RECORD HAS BEEN ADDED

### **Explanation**

The record has been successfully added to the options data set.

## **System action**

Processing continues.

#### User response

None. This message is informational.

#### Module

IZTJUPD3

IZT8131E LOGOND IS A REQUIRED FIELD

### **Explanation**

LOGOND is a required field, but has not been specified.

### **System action**

No processing is attempted.

#### **User response**

Specify the LOGOND field, and try the operation again.

### **Module**

IZTJUPD3

IZT8132E INVALID VALUE SPECIFIED FOR "REJECT FOR UNKNOWN MEMBER"

## **Explanation**

An invalid value was specified in the REJECT FOR UNKNOWN MEMBER field.

## **System action**

No processing is attempted.

## **User response**

Specify a valid value, and retry the operation.

#### Module

IZTJUPD3

IZT8199E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DL/I call while attempting to access the IMS ETO Support control record.

## System action

Processing ends.

#### User response

Determine the cause for the error code, and correct the problem.

#### Module

IZTJUPD3

IZT8201E \*\* PASSSIZE NOT ALLOWED
UNLESS DFS3649=ETOS
SPECIFIED

#### **Explanation**

The PASSSIZE= parameter was specified, but DFS3649=ETOS was not specified.

### **System action**

The control statement is ignored.

## **User response**

Correct the control statement by taking one of the following actions:

- Add DFS3649=ETOS to the control statement.
- Remove PASSSIZE= parameter from the control statement.

### Module

IZTUD1U0

IZT8202E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

## **Explanation**

An error occurred while processing the options data set. The MVS syslog probably contains additional error messages. The return code (*xxxxxxxx*) is of value only if you need help from IBM Software Support.

## **System action**

No processing is performed.

## User response

Check the MVS syslog for additional messages. If any messages are found, take an appropriate action based on those messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTJUPDB** 

IZT8203E ERROR ON REPL CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

IZTJUPDB

IZT8205E ERROR ON GU CALL, STATUS CODE

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

### **System action**

Processing ends.

## **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDB** 

IZT8206E ERROR ON GN CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

#### **System action**

Processing ends.

## **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDB** 

IZT8207E AN INVALID ROW COMMAND WAS ENTERED: x

#### **Explanation**

An invalid line command was entered.

## **System action**

No processing is attempted.

#### User response

Enter a valid line command, and try again.

**IZTJUPDB** 

IZT8208I ENTRY NO LONGER EXISTS IN OPTIONS DATASET: xxxxxxxxx

## **Explanation**

Member xxxxxxxx was selected for processing, but it no longer exists in the options data set, probably because the entry was deleted by another user after the member list was obtained.

## **System action**

No processing is performed.

## **User response**

If the entry is necessary, add a new entry with the appropriate name.

#### Module

**IZTJUPDB** 

IZT8209E ERROR ON GHU CALL, STATUS CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDB** 

IZT8210E ERROR ON GN CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

## User response

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDB** 

IZT8211E CONFLICTING ROW COMMANDS
HAVE BEEN ENTERED

## **Explanation**

There is a conflict in the row commands that you entered. Only one type of command can be entered at a time. You can enter multiple D (delete) commands, but you cannot enter commands of different command types.

## **System action**

No processing is attempted.

## User response

Determine which commands you want, and remove the others.

### Module

**IZTJUPDB** 

IZT8212E TRANSACTION NAME IS A REQUIRED FIELD

### **Explanation**

The TRANSACTION name field is required, but no value was specified.

### **System action**

No processing is attempted.

## User response

Enter a transaction name, and try again.

### Module

**IZTJUPDB** 

IZT8213E ERROR ON GHU CALL, STATUS
CODE = xx

#### **Explanation**

An invalid status code was returned by IMS from a DLI call.

Processing ends.

## User response

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDB** 

IZT8214E ERROR ON DLET CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## System action

Processing ends.

## **User response**

Determine the cause of the error, correct the problem, and retry the operation.

### Module

**IZTJUPDB** 

IZT8215E ERROR ON GHU CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

#### User response

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDB** 

IZT8216E ERROR ON REPL CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDB** 

IZT8217E ERROR ON ISRT CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## System action

Processing ends.

### User response

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDB** 

IZT8218I RECORD HAS BEEN REPLACED

### **Explanation**

The record has been successfully replaced in the options data set.

### **System action**

Processing ends.

## User response

None. This message is informational.

#### Module

**IZTJUPDB** 

IZT8219I RECORD HAS BEEN ADDED

The record has been successfully added to the options data set.

## **System action**

Processing ends.

## User response

None. This message is informational.

### Module

**IZTJUPDB** 

## IZT8220E RETURN CODE REQUIRED

## **Explanation**

The RETURN CODE field is required, but no value was specified.

## **System action**

No processing is attempted.

## **User response**

Enter a return code, and try again.

## Module

**IZTJUPDB** 

IZT8221E	RETURN CODE CONTAINS NON-
	NUMERIC DATA

### **Explanation**

The RETURN CODE field contains non-numeric data.

## **System action**

No processing is attempted.

### **User response**

Correct the data in the RETURN CODE field, and try again.

### Module

**IZTJUPDB** 

IZT8222E	IF USED, AN ASTERISK (*) MUST
	BE THE LAST CHARACTER IN
	TDAN NAME

## **Explanation**

An asterisk (\*) was specified in the TRAN name field, but it was not the last character in the name.

## **System action**

No processing is performed.

## **User response**

Correct the name specified in the TRAN field, and try again.

### Module

IZTJUPDB

IZT8223E	INVALID CHARACTER IN
	TRANSACTION NAME

## **Explanation**

An invalid character was specified in the TRANSACTION name field. Only national, alphanumeric, and wildcard characters are allowed in the transaction name.

## **System action**

No processing is attempted.

#### **User response**

Remove the invalid character in the TRANSACTION name field, and try again.

#### Module

**IZTJUPDB** 

IZT8299E	ERROR ENCOUNTERED ON GU TO
	DBIZT1 CONTROL RECORD, CODE
	= <i>xx</i>

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## System action

Processing ends.

#### User response

Determine the cause of the error, correct the problem, and retry the operation.

**IZTJUPDB** 

IZT8301E AN INVALID COMMAND HAS BEEN ATTEMPTED

## **Explanation**

An unknown or invalid option was specified on the command line.

## **System action**

No processing is attempted.

## **User response**

Choose a valid option, and try again.

## Module

**IZTJUPDD** 

IZT8302E BAD RETURN CODE FROM IZTTDLI
= xxxxxxxx

## **Explanation**

An error occurred while processing the options data set. The MVS syslog probably contains additional error messages. The return code (*xxxxxxxx*) is of value only if you need help from IBM Software Support.

## **System action**

No processing is performed.

### User response

Check the MVS syslog for additional messages. If any messages are found, take an appropriate action based on those messages. If there are no additional messages in the MVS syslog, verify that the options data set is valid by running an IDCAMS print of the data set. Contact IBM Software Support if additional help is needed.

#### Module

**IZTJUPDD** 

IZT8303E ERROR ON REPL CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

### **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDD** 

IZT8305E ERROR ON GU CALL, STATUS CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## System action

Processing ends.

## **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDD** 

IZT8306E ERROR ON GN CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## System action

Processing ends.

#### User response

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDD** 

IZT8307E AN INVALID ROW COMMAND WAS ENTERED: x

An invalid line command was entered.

## **System action**

No processing is attempted.

## User response

Enter a valid line command, and try again.

### Module

**IZTJUPDD** 

IZT8308I **ENTRY NO LONGER EXISTS IN OPTIONS DATASET: XXXXXXXX** 

## **Explanation**

Member xxxxxxxx was selected for processing, but it no longer exists in the options data set, probably because the entry was deleted by another user after the member list was obtained.

## **System action**

No processing is performed.

## User response

If the entry is necessary, add a new entry with the appropriate name.

#### Module

**IZTJUPDD** 

**ERROR ON GHU CALL, STATUS** IZT8309E CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI IZTJUPDD call.

## **System action**

Processing ends.

## User response

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDD** 

IZT8310E **ERROR ON GN CALL, STATUS** CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

## User response

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDD** 

**IZT8311E** CONFLICTING ROW COMMANDS **HAVE BEEN ENTERED** 

## **Explanation**

There is a conflict in the row commands that you entered. Only one type of command can be entered at a time. You can enter multiple D (delete) commands, but you cannot enter commands of different command types.

## **System action**

No processing is attempted.

### User response

Determine which commands you want, and remove the others.

#### Module

PSB NAME IS A REQUIRED FIELD IZT8312E

### **Explanation**

The PSB name field is required, but no value was specified.

## **System action**

No processing is attempted.

### **User response**

Enter a PSB name, and try again.

IZTJUPDD

IZT8313E ERROR ON GHU CALL, STATUS CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

## **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDD** 

IZT8314E ERROR ON DLET CALL, STATUS
CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DLI call.

### **System action**

Processing ends.

### **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDD** 

IZT8315E ERROR ON GHU CALL, STATUS CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DLI call.

### **System action**

Processing ends.

### **User response**

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDD** 

IZT8316E ERROR ON REPL CALL, STATUS
CODE = xx

## **Explanation**

An invalid status code was returned by IMS from a DLI call.

## System action

Processing ends.

## User response

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

IZTJUPDD

IZT8317E ERROR ON ISRT CALL, STATUS
CODE = xx

### **Explanation**

An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

#### User response

Determine the cause of the error, correct the problem, and retry the operation.

## Module

**IZTJUPDD** 

IZT8318I RECORD HAS BEEN REPLACED

## **Explanation**

The record has been successfully replaced in the options data set.

Processing ends.

## User response

None. This message is informational.

## Module

**IZTJUPDD** 

IZT8319I RECORD HAS BEEN ADDED

## **Explanation**

The record has been successfully added to the options data set.

## **System action**

Processing ends.

## User response

None. This message is informational.

#### Module

**IZTJUPDD** 

IZT8320E RETURN CODE REQUIRED

#### **Explanation**

The RETURN CODE field is required, but no value was specified.

### **System action**

No processing is attempted.

### **User response**

Enter the return code, and try again.

#### Module

**IZTJUPDD** 

IZT8321E RETURN CODE CONTAINS NON-NUMERIC DATA

#### **Explanation**

The RETURN CODE field contains non-numeric data.

## System action

No processing is attempted.

### **User response**

Correct the data in the RETURN CODE field, and try again.

#### Module

**IZTJUPDD** 

IZT8322E IF USED, AN ASTERISK (\*) MUST BE THE LAST CHARACTER IN PSB NAME

## **Explanation**

An asterisk (\*) was specified in the PSB name field, but it was not the last character in the name.

## **System action**

No processing is performed.

## User response

Correct the name specified in the PSB field, and try again.

#### Module

IZTJUPDD

IZT8323E INVALID CHARACTER IN PSB
NAME

## **Explanation**

An invalid character was specified in the PSB name field. Only national, alphanumeric, and wildcard characters are allowed in the PSB name.

## System action

No processing is attempted.

### User response

Remove the invalid character in the PSB name field, and try again.

### Module

**IZTJUPDD** 

IZT8399E ERROR ENCOUNTERED ON GU TO DBIZT1 CONTROL RECORD, CODE = xx

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An invalid status code was returned by IMS from a DLI call.

## **System action**

Processing ends.

## User response

Determine the cause of the error, correct the problem, and retry the operation.

#### Module

**IZTJUPDD** 

IZT8801E PARM INVALID OR MISSING

## **Explanation**

The EXEC statement PARM field was either not specified, or is invalid. The PARM must contain the IMSID of the system where the IZTUDATA table should be refreshed.

## System action

The job step terminates with a return code 12.

## **User response**

Add or correct the PARM statement, and run the job again.

#### Module

**IZTUDATO** 

IZT8802E ETO SUPPORT ECSA ANCHOR NOT FOUND

## **Explanation**

An error occurred in the IMS ETO Support E/CSA search routine.

## System action

The job step terminates with a return code 12.

#### **User response**

Verify that the IZTUDATA refresh job ran on the correct CPU. If so, verify the IZT prefixed messages in the IMS control region to ensure that IMS ETO Support initialized properly. If additional assistance is needed, contact IBM Software Support.

#### Module

**IZTUDATO** 

IZT8803E INVALID ADDRESS RETURNED FROM ECSA SEARCH ROUTINE

## **Explanation**

An error occurred in the IMS ETO Support E/CSA search routine. It appears the IMS ETO Support E/CSA tables were not properly initialized.

## **System action**

The job step terminates with a return code 12.

## **User response**

Verify that the IZTUDATA refresh job ran on the correct CPU. If so, verify the IZT prefixed messages in the IMS control region to ensure that IMS ETO Support initialized properly. If additional assistance is needed, contact IBM Software Support.

#### Module

**IZTUDATO** 

IZT8804E ECSA TABLE FOR imsid NOT FOUND

## **Explanation**

The IMS ETO Support E/CSA tables did not contain information for the IMSID specified in the EXEC statement PARM data.

## System action

The job step terminates with a return code 12.

### **User response**

Verify that the IZTUDATA refresh job ran on the correct CPU. If so, verify the IZT prefixed messages in the IMS control region to ensure that IMS ETO Support initialized properly. If additional assistance is needed, contact IBM Software Support.

### Module

**IZTUDATO** 

IZT8901E INVALID REQUEST TYPE

#### **Explanation**

An IMS ETO Support internal error occurred.

The job step terminates with a return code 12.

## **User response**

Contact IBM Software Support.

#### Module

IZTUDAT1

IZT8902E ERROR OPENING DDNAME IZTUDATA

## **Explanation**

An error occurred opening the data set specified in ddname IZTUDATA.

## **System action**

The job step terminates with a return code 12.

## **User response**

Review the job log for the failed job for additional messages, take an appropriate action based upon those messages, and run the job again.

#### Module

IZTUDAT1

IZT8903E IZTUDATA DD STATEMENT MISSING

## **Explanation**

The DD statement for ddname IZTUDATA was not present.

## **System action**

The job step terminates with a return code 12.

#### **User response**

Add the DD statement and rerun the job.

#### Module

IZTUDAT1

IZT8904W BLDL FAILED FOR USERDATA MEMBER xxxxxxxx / yyyyyyyy

### **Explanation**

Member xxxxxxxx was specified as a user data member in OTMA record yyyyyyyy, but the load module was not found in the data set identified by ddname IZTUDATA.

## **System action**

Processing continues, but the job step terminates with a return code 4, unless a more severe error is encountered.

## User response

Create user data member xxxxxxxx in the data set identified by ddname IZTUDATA, or remove the specification in the OTMA record yyyyyyyy.

#### Module

IZTUDAT1

IZT8905W INVALID LENGTH IN USERDATA
MEMBER xxxxxxxx

## **Explanation**

An edit error occurred in member xxxxxxxx, which was loaded from the data set identified by ddname IZTUDATA.

## **System action**

Processing continues, but the job step terminates with a return code 4, unless a more severe error is encountered.

#### User response

Ensure that user data member xxxxxxxx is created using either macro \$IZTIC1 or \$IZTMQ1. If additional assistance is required, contact IBM Software Support.

#### Module

IZTUDAT1

IZT8906W INVALID LENGTH IN USERDATA
MEMBER xxxxxxxx

## **Explanation**

An edit error occurred in member xxxxxxxx, which was loaded from the data set identified by ddname IZTUDATA.

Processing continues, but the job step terminates with a return code 4, unless a more severe error is encountered.

### **User response**

Ensure that user data member xxxxxxxx is created using either macro \$IZTIC1 or \$IZTMQ1. If additional assistance is required, contact IBM Software Support.

## Module

IZTUDAT1

IZT8907W INVALID LENGTH IN USERDATA MEMBER XXXXXXXX

### **Explanation**

An edit error occurred in member xxxxxxxx, which was loaded from the data set identified by ddname IZTUDATA.

### **System action**

Processing continues, but the job step terminates with a return code 4, unless a more severe error is encountered.

#### **User response**

Ensure that user data member xxxxxxxx is created using either macro \$IZTIC1 or \$IZTMQ1. If additional assistance is required, contact IBM Software Support.

#### Module

IZTUDAT1

IZT8908W USERDATA MEMBER XXXXXXXX CONTAINED INVALID NAME

### **Explanation**

An edit error occurred in member xxxxxxxx, which was loaded from the data set identified by ddname IZTUDATA.

## **System action**

Processing continues, but the job step terminates with a return code 4, unless a more severe error is encountered.

### **User response**

Ensure that user data member xxxxxxxx is created using either macro \$IZTIC1 or \$IZTMQ1. If additional assistance is required, contact IBM Software Support.

#### Module

IZTUDAT1

IZT8909W USERDATA MEMBER XXXXXXXX CONTAINED INVALID TYPE

## **Explanation**

An edit error occurred in member xxxxxxxx, which was loaded from the data set identified by ddname IZTUDATA.

## System action

Processing continues, but the job step terminates with a return code 4, unless a more severe error is encountered.

### User response

Ensure that user data member xxxxxxxx is created using either macro \$IZTIC1 or \$IZTMQ1. If additional assistance is required, contact IBM Software Support.

#### Module

IZTUDAT1

IZT8910W USERDATA MEMBER XXXXXXXX

CONTAINED UNSUPPORTED

VERSION ID

## **Explanation**

An edit error occurred in member xxxxxxxx, which was loaded from the data set identified by ddname IZTUDATA.

## System action

Processing continues, but the job step terminates with a return code 4, unless a more severe error is encountered.

### User response

Ensure that user data member xxxxxxxx is created using either macro \$IZTIC1 or \$IZTMQ1. If additional assistance is required, contact IBM Software Support.

IZTUDAT1

IZT8911E

INTERNAL ERROR, DBIZT1
SECTION NOT FOUND

#### Module

IZTUDAT1

**IZT8914W** 

NO VALID OTMA USERDATA MEMBERS FOUND/REQUESTED

## **Explanation**

An IMS ETO Support internal error occurred.

## **System action**

The job step terminates with a return code 12.

## **User response**

Contact IBM Software Support.

#### Module

IZTUDAT1

**IZT8912E** 

INTERNAL ERROR, ECSA SECTION WAS LOADED WITH A DIFFERENT VERSION OF ETO SUPPORT

## **Explanation**

An IMS ETO Support internal error occurred.

## **System action**

The job step terminates with a return code 12.

### User response

Contact IBM Software Support.

#### Module

IZTUDAT1

IZT8913E ERROR ENCOUNTERED
OBTAINING OTMA USERDATA
TABLE

#### **Explanation**

An IMS ETO Support internal error occurred.

## **System action**

The job step terminates with a return code 12.

#### **User response**

Contact IBM Software Support.

## **Explanation**

The OTMA members in the E/CSA tables did not have any entries that specified user data, or all specified user data members were not present in the data set identified by ddname IZTUDATA.

## **System action**

The job step terminates with either a return code 4 if no user data members were specified, or a return code of 12 if any members failed during LOAD.

## **User response**

Ensure that the proper data set was specified for ddname IZTUDATA, and that the OTMA members specify the correct user data member names, and run the job again.

#### Module

IZTUDAT1

IZT8915I OTMA USERDATA TABLE INITIALIZATION COMPLETED

### **Explanation**

The user data members were successfully loaded from the data set identified by ddname IZTUDATA.

## **System action**

The job step terminates with a return code 0.

### User response

None. This message is informational.

#### Module

IZTUDAT1

IZT8916W TABLE OVERFLOW, ERROR
MESSAGE SUPPRESSION
TERMINATED

#### **Explanation**

An internal error occurred.

The job step terminates with a return code 12.

## **User response**

Contact IBM Software Support.

#### Module

IZTUDAT1

IZT8917W ERROR ENCOUNTERED IN TABLE FREE ROUTINE

## **Explanation**

An IMS ETO Support internal error occurred.

## **System action**

Processing continues.

## **User response**

Contact IBM Software Support.

#### Module

IZTUDAT1

IZT8918E OPEN FAILED FOR DDNAME
IZTPRINT

### **Explanation**

An error was encountered while attempting to OPEN ddname IZTPRINT.

## **System action**

The job step terminates with a return code 12.

## **User response**

Ensure ddname IZTPRINT is properly specified in the JCL, and run the job again.

#### Module

IZTUDAT1

IZT9001E UNABLE TO OBTAIN STORAGE

#### **Explanation**

DFS3650I Transaction Replacement was unable to acquire storage to build the input message.

## **System action**

DFS3650I Transaction Replacement is bypassed, and processing continues using the IMS default for DFS3650I.

## **User response**

Increase the REGION size in the IMS control region JCL. and restart IMS.

#### Module

**IZTINITO** 

IZT9002E INVALID TRAN TEXT DESCRIPTOR
TYPE

## **Explanation**

An IMS ETO Support internal error occurred.

## System action

DFS3650I Transaction Replacement is bypassed, and processing continues using IMS default actions.

## User response

Contact IBM Software Support.

#### Module

**IZTINITO** 

IZT9101E UNABLE TO OBTAIN HIOP STORAGE

## **Explanation**

DFS3650I Transaction Replacement was unable to acquire storage to build the input message.

## System action

DFS3650I Transaction Replacement is bypassed, and processing continues using the IMS default for DFS3650I.

#### User response

Increase the value specified for the HIOP parameter, and restart IMS.

#### Module

**IZTLGNX0** 

IZT9102I AUTO SIGNON - LU=luname USER=userid imsid

User ID (*userid*) was used to perform an auto signon for LU name (*luname*) on IMS ID (*imsid*).

## **System action**

Processing continues.

## **User response**

None. This message is informational.

#### Module

**IZTLGNX0** 

ABEND=aaaaa,USER=uuuuuuuu

**Explanation** 

Transaction *tttttttt /* PSB *pppppppp* entered by USER *uuuuuuuu* abended with code *aaaaa*. Message DFS555I, which is typically returned following an abend, was suppressed.

## **System action**

Processing continues.

#### **User response**

Determine the cause of the abend, correct the error, and have the USER retry the transaction.

#### Module

**IZTNDMX0** 

IZT9901W SIGNON REJECTED USER uuuuuuuu

### **Explanation**

USER REC REQUIRED FOR SIGNON was specified in the LU 6.1 (ISC) device global record, but there is no LU 6.1 user ID record for *uuuuuuuu*.

## **System action**

The session fails.

### **User response**

Verify that the **/OPNDST** command was coded properly, and create an LU 6.1 (ISC) user ID record for *uuuuuuuu*, and try the **/OPNDST** command again.

#### Module

**IZTSGNX0** 

IZT9999E NDMX MODULE ERROR

## **Explanation**

A critical error occurred setting the intercept for ABEND message routing.

## **System action**

IMS abends with a U4008 ABEND.

### **User response**

Contact IBM Software Support for assistance. In order to restart IMS, you can remove the IMS ETO Support version of exit IZTPPUEZ.

#### Module

**IZTUXITO** 

IZTM001E IZTGENX EXIT ROUTINE CALLED FOR INCORRECT EXIT TYPE

## **Explanation**

An error was encountered during an attempt to convert IMS stage1 source to IMS ETO Support batch update (IZTUD1U0) control statements using the IZTGEN process. This message indicates that an internal logic error occurred.

### System action

The job terminates with a nonzero return code.

## User response

Contact IBM Software Support for assistance.

#### Module

**IZTGENX** 

IZTM002E IZTGENX EXIT ROUTINE CALLED
WITH UNEXPECTED REQUEST
TYPE

### **Explanation**

An error was encountered during an attempt to convert IMS stage1 source to IMS ETO Support batch update (IZTUD1U0) control statements using the IZTGEN process. This message indicates that an internal logic error occurred.

# **System action**

The job terminates with a nonzero return code.

# **User response**

Contact IBM Software Support for assistance.

#### Module

**IZTGENX** 

IZTM003E DFSDSCXX STMT ERROR - xxxxxxxxx

# **Explanation**

An error was encountered during an attempt to convert IMS stage1 source to IMS ETO Support batch update (IZTUD1U0) control statements using the IZTGEN process. An invalid record was read from the DFSDSCxx PROCLIB member. The error is further described by xxxxxxxxx.

# System action

The job terminates with a nonzero return code.

# **User response**

Correct the erroneous record in PROCLIB member DFSDSCxx, and rerun the job.

#### Module

**IZTGENX** 

IZTM004E IZTGENX EXIT - OPEN FAILED FOR PROCLIB DD

# **Explanation**

An error was encountered during an attempt to convert IMS stage1 source to IMS ETO Support batch update (IZTUD1U0) control statements using the IZTGEN process. The open for DDNAME PROCLIB failed.

# **System action**

The job terminates with a nonzero return code.

#### User response

Review the z/OS log for additional information, correct the error, and rerun the job.

#### Module

**IZTGENX** 

# IZTM005E IZTGENX EXIT - FIND FAILED FOR PROCLIB MEMBER XXXXXXXX

## **Explanation**

An error was encountered during an attempt to convert IMS stage1 source to IMS ETO Support batch update (IZTUD1U0) control statements using the IZTGEN process. Member xxxxxxxx was not found in the DDNAME PROCLIB.

# **System action**

The job terminates with a nonzero return code.

## User response

Correct the member name, and rerun the job.

#### Module

**IZTGENX** 

IZTM006E IZTGENX EXIT - MACRO/COPY
EMBEDDED IN PROCLIB MEMBER
- XXXXXXXX

# **Explanation**

An error was encountered during an attempt to convert IMS stage1 source to IMS ETO Support batch update (IZTUD1U0) control statements using the IZTGEN process. Member xxxxxxxx contained an unknown operation code (Macro/COPY).

# **System action**

The job terminates with a nonzero return code.

# User response

Remove the unknown operation code, and rerun the job.

# Module

**IZTGENX** 

IZTM007E IZTGENX EXIT - SWAREQ FAILED RC=rc

# **Explanation**

An error was encountered during an attempt to convert IMS stage1 source to IMS ETO Support batch update (IZTUD1U0) control statements using the IZTGEN process. An SWAREQ macro failed with the indicated return code.

# **System action**

The job terminates with a nonzero return code.

# **User response**

Contact IBM Software Support.

# Module

**IZTGENX** 

IZTM008E IZTGENX EXIT - UNABLE TO FIND PROCLIB DD

# **Explanation**

An error was encountered during an attempt to convert IMS stage1 source to IMS ETO Support batch update

(IZTUD1U0) control statements using the IZTGEN process. There was no PROCLIB DDNAME specified in the JCL.

# **System action**

The job terminates with a nonzero return code.

## **User response**

Add the required PROCLIB DDNAME, and rerun the job.

#### Module

**IZTGENX** 

# Chapter 21. Abend codes

This reference section provides detailed information about IMS ETO Support abend codes.

For each abend code, the following information is provided where applicable:

#### **Explanation**

The Explanation section explains what the abend code means, why it occurred, and what its variable entry fields are (if any).

#### **Programmer response**

The Programmer response section describes whether a response is necessary, what the appropriate response is, and how the response will effect the system or program.

#### Module

The Module section lists the names of the modules that might have issued the abend code and ended abnormally.

#### **U0998**

# **Explanation**

See the accompanying error message in the job log or SYSOUT.

## **Programmer response**

Verify that the correct version of IMS and IMS ETO Support are installed on the system.

#### Module

**IZTLIST** 

U0999

## **Explanation**

One of the following message numbers (with a suffix of E) was displayed just before execution of this utility.

#### **Programmer response**

Review the previous message, and make the appropriate corrections; then rerun the job step executing the IZTUD1U0 utility.

#### Module

IZTUD1U0

**U4001** 

#### **Explanation**

An error occurred while doing a batch refresh of the IMS ETO Support E/CSA tables. The message preceding the abend indicates the reason for the failure.

## **Programmer response**

Correct the problem described by the preceding message.

#### Module

IZTLOAD2

U4002

## **Explanation**

A severe error occurred in the IMS terminal cleanup process. A descriptive error message immediately precedes this abend.

#### **Programmer response**

Contact IBM Software Support. For a temporary bypass, deactivate terminal cleanup.

#### Module

IZTCLNB0

U4003

# **Explanation**

The installed version of IMS ETO Support is incompatible with the version of IMS.

#### **Programmer response**

Install a compatible version of IMS ETO Support.

#### Module

**IZTINTXZ** 

**U4004** 

# **Explanation**

A severe error occurred during the IMS ETO Support E/CSA table load process during IMS restart. A descriptive message should precede the abend.

## **Programmer response**

Correct the problem described by the preceding message.

#### Module

**IZTINTXL** 

**U4021** 

## **Explanation**

See the accompanying error message in the job log or SYSOUT.

## **Programmer response**

Follow instructions for the accompanying error message.

#### Module

Multiple modules.

**U4044** 

#### **Explanation**

An internal error occurred in the IMS ETO Support options data set access module.

#### **Programmer response**

Check for any preceding error messages in the MVS syslog. If there are no error messages, contact IBM Software Support.

#### Module

**IZTTDLI** 

**U4049** 

#### **Explanation**

IMS ETO Support received a bad return code when attempting to create an MVS NAME/TOKEN entry.

#### **Programmer response**

Determine cause of the bad return code from the NAME/TOKEN creation routine (IEANTCR). The

return codes are documented in MVS Programming: Authorized Assembler Services Reference.

#### Module

**IZTINTXZ** 

U4051

# **Explanation**

An internal error occurred in the IMS ETO Support E/CSA GETMAIN routine.

# **Programmer response**

Contact IBM Software Support.

#### Module

IZTCSA02

U4052

## **Explanation**

An internal error occurred in the IMS ETO Support E/CSA FREEMAIN routine.

## **Programmer response**

Contact IBM Software Support.

#### Module

IZTCSA03

U4053

#### **Explanation**

One of the preceding modules does not support the version of IMS that is currently installed.

#### **Programmer response**

Make sure IMS ETO Support was properly installed. Contact IBM Software Support if further help is needed.

#### Module

IZTCLN00, IZTCCMDZ, IZTDYN0Z, IZTGMSGZ, IZTINSXZ, IZTLGNXZ, IZTPFKI0, IZTSGFXZ, IZTSGNXZ

**U4054** 

## **Explanation**

Module IZTSRCH1 is running in an unsupported version of IMS.

## **Programmer response**

Make sure IMS ETO Support was properly installed. Contact IBM Software Support if further help is needed.

#### Module

IZTSRCH1

U4055

# **Explanation**

An internal error occurred in the auto RACF signon processing.

## **Programmer response**

Contact IBM Software Support. For a temporary fix, disable any SLU1 or SLUTYPEP devices that are using auto RACF signon.

#### Module

**IZTSGNX0** 

**U4060** 

# **Explanation**

An invalid length was supplied in the call to the IMS ETO Support search subroutine.

# **Programmer response**

Correct the length, and try the program again.

#### Module

IZTSRCH5

**U4069** 

# **Explanation**

A table overflow occurred in the IMS ETO Support message builder.

# **Programmer response**

Contact IBM Software Support.

#### Module

IZTBMSG0

U4070

# **Explanation**

An error occurred while trying to open the data set referenced by DDNAME APPCERR.

# **Programmer response**

Verify that the APPCERR DDNAME points to a valid data set.

#### Module

IZTAPPC9

U4071

# **Explanation**

An error occurred in the APPC/MVS error extract service.

## **Programmer response**

Obtain a storage dump, and contact IBM Software Support.

#### Module

IZTAPPC9

U4072

#### **Explanation**

An error occurred during execution of an APPC/MVS service. There should be other messages associated with this error.

#### **Programmer response**

Look for messages indicating the cause of the failure, and make the appropriate corrections.

#### Module

IZTAPPC9

**U4073** 

# **Explanation**

An internal error occurred in the IMS ETO Support online transaction program.

## **Programmer response**

Obtain a storage dump, and contact IBM Software Support.

#### Module

**IZTRAN** 

**U4074** 

# **Explanation**

An internal error occurred in the IMS ETO Support online transaction program.

## **Programmer response**

Obtain a storage dump, and contact IBM Software Support.

#### Module

**IZTRAN** 

**U4090** 

# **Explanation**

An internal error occurred in the IMS ETO Support signoff cleanup process.

#### **Programmer response**

Obtain a storage dump, and contact IBM Software Support. You can temporarily bypass the problem by deactivating IMS ETO Support signoff cleanup.

#### Module

IZTCLNA0

U4091

# **Explanation**

An internal error occurred in the IMS ETO Support signoff cleanup process.

#### **Programmer response**

Obtain a storage dump, and contact IBM Software Support. You can temporarily bypass the problem by deactivating IMS ETO Support signoff cleanup.

#### Module

**IZTCLNA0** 

U4092

# **Explanation**

An internal error occurred in the IMS ETO Support signoff cleanup process.

## **Programmer response**

Obtain a storage dump, and contact IBM Software Support. You can temporarily bypass the problem by deactivating IMS ETO Support signoff cleanup.

#### Module

**IZTCLNA0** 

U4093

# **Explanation**

An error was encountered while IMS ETO Support attempted to release storage from the high I/O pool (HIOP).

## **Programmer response**

Obtain a storage dump, and contact IBM Software Support. You can temporarily bypass the problem by deactivating ETO Support signoff cleanup.

#### Module

**IZTCTRNO** 

# **Chapter 22. Return codes for IZTSRCH0 search subroutine**

This section describes the return codes that can be issued by the printer LTERM table search subroutine (IZTSRCH0).

The description of each return code includes the associated reason codes and their meanings.

In the parameter list, the return code is found in the PARMIRET field, and the reason code is found in the PARMIRSN field.

Return code	Meaning			
X'00001000'	An error occurred while issuing the ICMD call. The reason code provides further information.			
	X'00000100' Indicates that the failed command was a /DIS ASMT NODE.			
	X'00000101' Indicates that the failed command was a /DIS ASMT LTERM.			
	X'00000102' Indicates that the failed command was a /DIS NODE.			
	PARMARET and PARMARSN contain the IMS AIB return code and reason code. Values for PARMARET and PARMARSN are described in <i>IMS Application Programming</i> .			
X'00002000'	An error occurred while issuing an RCMD call. The reason code in the PARMIRSN field indicates which IMS command response encountered the error condition.			
	X'00000100' Indicates the RCMD failed for a /DIS ASMT NODE command.			
	X'00000101' Indicates the RCMD failed for a /DIS ASMT LTERM command.			
	X'0000102' Indicates the RCMD failed for a /DIS NODE command.			
	PARMARET and PARMARSN contain the IMS AIB return code and reason code. Values for PARMARET and PARMARSN are described in <i>IMS Application Programming</i> .			
X'00003000'	An invalid parameter was encountered. The PARMIRSN reason code helps identify the invalid parameter.			
	X'0000100'  A required parameter was not supplied. PARMNAME is required, but contains either blanks or low values.			
	X'0000101' An invalid parameter was passed. PARMTYPE does not contain LTERM or NODE. Note that this 8-byte field must be padded with blanks.			

Return code	Meaning		
X'00004000'	An error occurred while trying to locate the ETO Support E/CSA tables. Make sure that ETO Support was properly installed and active in the IMS region from which the search subroutine is being called.		
	The reason code in the PARMIRSN field provides additional information.		
	X'0000100'  The search subroutine was unable to locate an ETO Support E/CSA anchor block. Make sure that ETO Support was properly installed and active in the IMS region from which the search subroutine is being called.		
	X'0000101'  The search subroutine was unable to locate ETO Support E/CSA tables for the IMSID from which this subroutine is being called. Make sure that ETO Support was properly installed and active at IMS startup.		
X'00005000'	An error occurred while executing an IMS call using the AIB interface.		
	The reason code in the PARMIRSN field provides additional information.		
	X'0000100' An invalid return code was received in the AIB while attempting an IMS INQY call. Check PARMARET and PARMIRSN for the IMS AIB return code and reason code.		
X'00009000'	No data is returned.		
	X'0000100'  No data matched the input request, therefore no data is returned to the caller.		

# **Chapter 23. Return codes for options data set access module (IZTTDLI)**

When an unacceptable condition is encountered in IZTTDLI, it returns a nonzero return code to the calling program. In some cases, additional error messages are written to the MVS syslog.

The following table describes the return codes issued by the options data set access module IZTTDLI:

Table 5. IZTTDLI return codes				
Meaning				
BLDL failed for the options data set dynamic allocation member DBIZT1.				
Options data set dynamic allocation member DBIZT1 appears to be invalid. DBIZT1 should contain MDA 8 bytes into the module.				
Unable to obtain the ENQ that ensures serialized access to the options data set.				
Dynamic allocation of the options data set failed.				
Open failed for the options data set.				
An error occurred while trying to read a record from the options data set.				
An IMS ETO Support internal error occurred.				
An IMS ETO Support internal error occurred.				
An IMS ETO Support internal error occurred.				
An error occurred while trying to replace the options data set control record.				
An error occurred while trying to add a record to the options data set.				
An error occurred while trying to delete a record from the options data set.				
An IMS ETO Support internal error occurred.				
An error occurred while trying to replace a record in the options data set.				
An error occurred while trying to read the options data set control record.				
An error occurred while trying to replace the options data set control record.				
An error occurred while trying to read an options data set record.				
An IMS ETO Support internal error occurred.				
BLDL failed for the options data set dynamic allocation member DBIZT1.				
Dynamic deallocation of the options data set failed.				

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Product Number: 5655-L61

SC19-3982-03

