

**IBM Sterling Gentran:Server for UNIX**  
**IBM Sterling Gentran:Server for UNIX - Workstation**

---

## **Upgrade and Data Conversion Guide**

**Version 6.2**



## Copyright

This edition applies to the 6.2 Version of IBM® Sterling Gentran:Server® for UNIX and IBM® Sterling Gentran:Server® for UNIX - Workstation and to all subsequent releases and modifications until otherwise indicated in new editions.

Before using this information and the product it supports, read the information in *Notices* on page N-1.

Licensed Materials - Property of IBM

IBM® Sterling Gentran:Server® for UNIX and IBM® Sterling Gentran:Server® for UNIX - Workstation

© Copyright IBM Corp. 1991, 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

# Table of Contents

## About This Guide

- ▶ Welcome ..... vi
- ▶ Related Publications ..... viii
- ▶ Documentation Conventions ..... xi

## Upgrading to Version 6.2

### Overview

- ▶ Introduction ..... 1-2

### Upgrading IBM® Sterling Gentran:Server® for UNIX

- ▶ The Sterling Gentran:Server Upgrade Process ..... 1-4
- ▶ Preparing to Upgrade ..... 1-7
- ▶ How to Stop Server Processes ..... 1-8

### Upgrading IBM® Sterling Gentran:Server® for UNIX - Workstation

- ▶ The Sterling Gentran:Server Upgrade Process ..... 1-11
- ▶ How to Upgrade to Workstation Version 6.2 ..... 1-12

## Converting Data with allcnvrt

### Overview

- ▶ Introduction ..... 2-2
- ▶ The allcnvrt Utility ..... 2-3
- ▶ Data Files that allcnvrt Converts ..... 2-4

### Procedures

- ▶ Data Conversion Process ..... 2-7
- ▶ Preparing for Data Conversion ..... 2-9
- ▶ How to Run the allcnvrt Utility ..... 2-11
- ▶ How to Convert Data from Multiple Installations ..... 2-14

## Converting Data with Individual Conversion Programs

### Overview

- ▶ Introduction ..... 3-2
- ▶ Conversion Process ..... 3-4
- ▶ Preparing for Data Conversion ..... 3-6

### Procedures

- ▶ How to Convert Trading Partnership Records with tpcnvrt ..... 3-8

- ▶ How to Convert Audit Archive Records with edicnvt .....3-12
- ▶ How to Convert Maps and Related Files with mapcnvt .....3-16
- ▶ How to Convert Synonym and Thesaurus Lists with syncnvt .....3-19
- ▶ How to Convert Data Flow Files with maint\_cnv .....3-22
- ▶ How to Convert Security Files with sec\_cnv .....3-25

## Notices

---

# About This Guide

---

**Contents**

- ▶ Welcome . . . . . vi
  - ▶ Related Publications . . . . . viii
  - ▶ Documentation Conventions . . . . . xi
-

# Welcome

Welcome to the IBM® Sterling Gentran:Server® for UNIX and IBM® Sterling Gentran:Server® for UNIX - Workstation Upgrade and Data Conversion Guide for Version 6.2.

---

## In this guide

The *Upgrade and Data Conversion Guide* describes the procedures for upgrading and converting Sterling Gentran:Server data to version 6.2 from these versions:

- ▶ IBM® Sterling Gentran:Server® for UNIX, versions 6.0 or 6.1
- ▶ IBM® Sterling Gentran:Server® for UNIX - Workstation, versions 6.0 or 6.1

The specific procedures covered are:

- ▶ Running the **allcnvrt** utility, which converts all the main types of Sterling Gentran:Server data through one program
- ▶ Converting your existing data files manually by running each of the separate programs that converts a specific type of data, such as Trading Partnership records or audit data.

### Notes

To ensure correct results when converting data, you must know the product version you are currently using.

To convert from versions and products other than those listed, you may need assistance from IBM Client Services.

---

## Installing the Sterling Gentran:Server software

You must perform a complete installation of the Sterling Gentran:Server, version 6.2 software in order to upgrade from previous versions.

### Reference

See the *IBM® Sterling Gentran:Server® for UNIX Getting Started Guide* or *IBM® Sterling Gentran:Server® for UNIX - Workstation Getting Started Guide* and the Installation Checklist for the product level you are installing for details.

---

**Contents of chapters**

In addition to this preface, the *IBM® Sterling Gentran:Server® for UNIX and IBM® Sterling Gentran:Server® for UNIX - Workstation Upgrade and Data Conversion Guide* contains two chapters. This table describes the contents of each chapter.

Chapter	Contents
Upgrading to Version 6.2	Description of the upgrade process and a list of upgrade tasks for Sterling Gentran:Server.
Converting Data with allcnvrt	Procedures for using the <b>allcnvrt</b> utility to convert data from a previous version to the Sterling Gentran:Server 6.2 version.
Converting Data with Individual Conversion Programs	Instructions for running each of the programs that convert a specific type of Sterling Gentran:Server data.

---

**In this preface**

This preface:

- Describes the set of Sterling Gentran:Server user documentation
  - Describes the contents of the chapters in this guide
  - Lists the typographic conventions, symbols, and icons used in the documentation
  - Explains how to get help.
-

## Related Publications

### Sterling Gentran:Server documentation

This table describes additional documentation for the Sterling Gentran:Server software.

Document	Description
<i>IBM® Sterling Gentran:Server® for UNIX Installation Checklist</i>	Description of the recommended sequence in which you should install and configure system components.
<i>IBM® Sterling Gentran:Server® for UNIX Getting Started Guide</i>	Instructions for installing the Sterling Gentran:Server software and performing setup tasks, such as setting up security.  Instructions for starting and exiting Sterling Gentran:Server and for setting preferences and default values. Also includes instructions for checking files in and out and saving files.
<i>IBM® Sterling Gentran:Server® for UNIX - Workstation Getting Started Guide</i>	Instructions for installing the IBM® Sterling Gentran:Server® for UNIX - Workstation software and performing setup tasks.  Instructions for starting and exiting Sterling Gentran:Server and for setting preferences and default values. Also includes instructions for checking files in and out and saving files.
<i>IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide</i>	Instructions for performing mapping and translation tasks using the Sterling Gentran:Server Application Integration system.
<i>IBM® Sterling Gentran:Server® for UNIX HIPAA Compliance and NCPDP User Guide</i>	Instructions for mapping and translating NCPDP files with the Application Integration system.
<i>IBM® Sterling Gentran:Server® for UNIX GENCOD User Guide</i>	Instructions for mapping and translating GENCOD files with the Application Integration system.

Document	Description
<i>IBM® Sterling Gentran:Server® for UNIX VDA User Guide</i>	Instructions for mapping and translating VDA files with the Application Integration system.
<i>IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide</i>	Describes processes, lists command-line commands in alphabetical order, and describes file record layouts and data type formats.
<i>IBM® Sterling Gentran:Server® for UNIX - EC Workbench Data Flow Administration Guide</i>	User instructions for configuring data flows using the Sterling Gentran:Server software.
<i>IBM® Sterling Gentran:Server® for UNIX - Process Control Manager Data Flow Administration Guide</i>	User instructions for configuring data flows using the Sterling Gentran:Server software.
<i>IBM® Sterling Gentran:Server® for UNIX Maintenance and Troubleshooting Guide</i>	Instructions for maintaining your Sterling Gentran:Server installation. Also provides troubleshooting information to help determine the cause and solution of problems that may occur.
<i>IBM® Sterling Gentran:Server® for UNIX - Workstation Maintenance and Troubleshooting Guide</i>	Instructions for maintaining your workstation installation. Also provides troubleshooting information to help determine the cause and solution of problems that may occur.
<i>IBM® Sterling Gentran:Server® for UNIX with ADD User Guide</i>	Instructions for configuring and using the Advanced Data Distribution system.
<i>IBM® Sterling Gentran:Server® for UNIX XML Translation User Guide</i>	Instructions for mapping and translating XML files with the Application Integration system.

Document	Description
<i>IBM® Sterling Gentran:Server® for UNIX FTP Daemon User Guide</i>	Instructions for configuring and using the FTP Daemon tool with IBM® Sterling Gentran:Server® for UNIX with ADD.
Online Help	Context-sensitive help screens describing the Sterling Gentran:Server dialog boxes and features. Also includes procedures for using the mapping and translation and the data flow administration software.

### Other documentation

This table lists other types of documentation you may need to refer to when converting your Sterling Gentran:Server data.

Description	Source
Instructions for using the operating system on your UNIX computer or Windows workstation	Documentation provided by your operating system vendor Documentation provided by the computer manufacturer
Information about one of the relational databases compatible with the Sterling Gentran:Server Life Cycle facility	The Informix, Oracle, or Sybase documentation provided with your database product
Instructions for using the vi text editor or another text editor	Documentation provided with the text editor

# Documentation Conventions

## Typographic conventions

This table describes the typographic conventions used in this guide.

Convention	Use
Italics	<p>This typeface is used for titles of other manuals and documents, and for names of files and file extensions.</p> <p><b>Example</b>  <i>IBM® Sterling Gentran:Server® for UNIX and IBM® Sterling Gentran:Server® for UNIX - Workstation Mapping and Translation Guide</i></p>
Bold	<p><b>Bold</b> type is used for</p> <ul style="list-style-type: none"> <li>▶ Program names</li> <li>▶ Key terms the first time they are used within a chapter</li> <li>▶ Characters entered onto a screen.</li> </ul> <p><b>Example</b>  A <b>password</b> is a set of characters a user must enter to gain access to a system.</p>
<Angle brackets>	<p>Angle brackets indicate variable information, such as the name of a file that you created.</p> <p><b>Example</b>  &lt;scriptname&gt;.scr</p>

**Symbols used  
within syntax  
statements**

This table describes symbols used within syntax statements.

Symbol	Use
< >	Substitute a value for any term that appears within angle brackets. Do not enter angle brackets unless specifically told to do so.  <b>Example</b> rm <filename> means that you should type the name of the file you want to delete.
{ }	Braces indicate a required part of a statement. Do not enter the braces.  <b>Example</b> {-f <filename>} means you must enter the f parameter followed by a filename.
[ ]	Brackets indicate an optional part of a statement. Do not enter the brackets.  <b>Example</b> [-f <filename>] means you have the option of typing the f parameter followed by a filename.
...	An ellipse indicates that the immediately preceding item can be repeated indefinitely. Do not enter the ellipse.  <b>Example</b> -e... means that you can repeat -e with other values.
( )	Parentheses should be entered as shown. They are part of the syntax of a statement and are not special symbols.  <b>Example</b> (n) means that you should type a number enclosed by parentheses.

---

# Upgrading to Version 6.2

---

<b>Contents</b>	<b>Overview</b>	
	▶ Introduction .....	2
	<b>Upgrading IBM® Sterling Gentran:Server® for UNIX</b>	
	▶ The Sterling Gentran:Server Upgrade Process .....	4
	▶ Preparing to Upgrade .....	7
	▶ How to Stop Server Processes .....	8
	<b>Upgrading IBM® Sterling Gentran:Server® for UNIX - Workstation</b>	
	▶ The Sterling Gentran:Server Upgrade Process .....	11
	▶ How to Upgrade to Workstation Version 6.2 .....	12

# Overview

## Introduction

---

### Introduction

This guide explains how to upgrade to Sterling Gentran:Server for UNIX Version 6.2 from these versions:

- ▶ 6.0
- ▶ 6.1

### CAUTIONS

**To ensure correct results, you must know the version you have installed.**

**Do not use the version 6.2 conversion programs to convert data from versions prior to 6.0.**

---

### Upgrade process

You upgrade Versions 6.0 or 6.1 by:

- ▶ Installing Version 6.2 in a new location
- ▶ Using the data conversion tools described in this guide to convert and move copies of your data files to the new installation. There are two ways to convert your data: You can use the **allcnvrt** utility to run all the conversion programs consecutively, or run individual conversion programs to convert specific types of data files.

### WARNING

**To avoid overwriting your existing data, do not install the new Sterling Gentran:Server software onto your existing Sterling Gentran:Server directory structure.**

---

**Upgrading from earlier versions**

If you have a version of IBM® Sterling Gentran:Server® for UNIX prior to 6.0, contact IBM Customer Support for information about converting your data for use in IBM® Sterling Gentran:Server® for UNIX Version 6.2. You will need to do interim installations and data conversions.

---

**Data types to convert**

These are the types of data files you need to convert before you use them with IBM® Sterling Gentran:Server® for UNIX Version 6.2.

- ▶ Trading Partnership files
- ▶ Mapping and translation audit archive files
- ▶ Application Integration maps and file definitions
- ▶ Data Flow archive files
- ▶ Data Flow maintenance files
- ▶ Data Flow security files
- ▶ Advanced Data Distribution files

**CAUTION**

**Once you convert your files, you will not be able to use them with older versions of Sterling Gentran:Server. The conversion programs do not move or delete original data files. Do not remove your original files. Leave them intact if you plan to continue running an older version of Sterling Gentran:Server.**

---

**Data you need to move manually**

These are the files you need to copy and move manually to your new 6.2 installation:

- ▶ UNIX scripts and MS-DOS batch files

---

**EDI standards**

The Application Integration system use different storage structures for EDI standards. They are not compatible with one another. The Standards CD contains the standards file for the Application Integration system.

---

# Upgrading IBM® Sterling Gentran:Server® for UNIX

## The Sterling Gentran:Server Upgrade Process

---

**Introduction**    This topic describes the tasks in the upgrade process for IBM® Sterling Gentran:Server® for UNIX.

**Reference**

See the section [Upgrading IBM® Sterling Gentran:Server® for UNIX - Workstation](#) for information about upgrading Sterling Gentran:Server for UNIX - Workstation.

---

**Stage table**    This table describes the procedure for upgrading Sterling Gentran:Server for UNIX. The table refers you to detailed instructions for completing each step.

Step	Action
1	Complete the preparation tasks.  <b>Reference</b> See the <a href="#">Preparing to Upgrade</a> topic.
2	Are you installing Sterling Gentran:Server version 6.2 on the host that has your current installation? <ul style="list-style-type: none"><li>▶ If YES, complete Steps 3 and 4.</li><li>▶ If NO, go to Step 5.</li></ul>

(Contd) Step	Action
3	<p>Stop the Sterling Gentran:Server processes for the installation you want to upgrade on the UNIX host. Wait until any queued processes are finished and then stop, in routing order, the data managers and any other processes running in your current Sterling Gentran:Server installation.</p> <p><b>References</b> See the <a href="#">How to Stop Server Processes</a> topic.</p> <p><b>CAUTION</b> <b>This procedure stop processes in all environments that the ltb_server process controls. This may include environments that you are not upgrading at this time. Perform this procedure only when it is safe to stop all environments under ltb_server's control.</b></p>
4	<p>Back up the current UNIX host installation. Be sure to include these items in your backup:</p> <ul style="list-style-type: none"> <li>▶ All the directories for the Security installation.</li> <li>▶ All the directories for the Sterling Gentran:Server host environment to be upgraded.</li> <li>▶ All the directories for any other environments you stopped.</li> <li>▶ The UNIX <i>.profile</i> or <i>.login</i> for the owner of the security installation.</li> <li>▶ The UNIX <i>.profile</i> or <i>.login</i> for the owner of the host environment.</li> <li>▶ Hidden files in all of the directories you back up.</li> </ul> <p><b>Reference</b> Refer to your company's backup procedures or to your UNIX manuals for instructions.</p>
5	<p>Install IBM® Sterling Gentran:Server® for UNIX 6.2 into a new directory on the UNIX host.</p> <p><b>WARNING</b> <b>To avoid overwriting your existing data, do not install the new Sterling Gentran:Server software onto your existing Sterling Gentran:Server directory structure.</b></p>
6	<p>Define all of your environments.</p> <p><b>Reference</b> See the <i>How to Add a New Environment Record</i> topic of the <i>IBM® Sterling Gentran:Server® for UNIX Getting Started Guide</i>.</p>

<b>(Contd) Step</b>	<b>Action</b>
7	Select the optimum time to convert your data. Choose a time when you can stop Sterling Gentran:Server processes with little or no disruption to your production processes.
8	<p>If you plan to move your translation audit data, purge and compress the data.</p> <p><b>Reference</b> See the <i>Archiving Translation Data</i> chapter in the <i>IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide</i> for instructions.</p>
9	<p>Wait until any queued processes are finished and then stop, in routing order, the data managers and any other processes running in your current Sterling Gentran:Server installation.</p> <p><b>Reference</b> See the <i>How to Stop Data Managers</i> topic in the <i>Monitoring Processes</i> chapter of the <i>IBM® Sterling Gentran:Server® for UNIX with Process Control Manager Data Flow Administration Guide</i> or the <i>IBM® Sterling Gentran:Server® for UNIX with EC Workbench Data Flow Administration Guide</i>.</p>
10	<p>Did you stop the Sterling Gentran:Server processes in Step 3?</p> <ul style="list-style-type: none"> <li>▶ If YES, restart the Sterling Gentran:Server processes and then continue with the next step.</li> <li>▶ If NO, continue with the next step.</li> </ul>
11	<p>Install the Sterling Gentran:Server for UNIX client software.</p> <p><b>Reference</b> See the <i>IBM® Sterling Gentran:Server® for UNIX Getting Started Guide</i> for instructions.</p>
12	<p>Convert your data.</p> <p><b>Reference</b> See the chapter <a href="#">Converting Data with allcnvrt</a> to run all conversion programs consecutively with one command.</p> <p>See the chapter <a href="#">Converting Data with Individual Conversion Programs</a> to run the conversion programs separately</p>

## Preparing to Upgrade

**Introduction** You need to perform certain tasks before you can upgrade Sterling Gentran:Server to Version 6.2.

**Before you begin** Use this table as a checklist to prepare for upgrading your IBM® Sterling Gentran:Server® for UNIX installation to Version 6.2.

Done	Item
<input type="checkbox"/>	Make sure that you have received: <ul style="list-style-type: none"> <li>▶ An <i>Installation Checklist</i>.</li> <li>▶ A <i>IBM® Sterling Gentran:Server® for UNIX Getting Started Guide</i>.</li> <li>▶ The version 6.2 host software compact disk.</li> <li>▶ The version 6.2 client software compact disk.</li> <li>▶ The version 6.2 online documentation compact disk.</li> <li>▶ Any optional software that you want to upgrade or install at this time.</li> </ul>
<input type="checkbox"/>	Complete the <i>Installation checklist</i> . <ul style="list-style-type: none"> <li>▶ Collect all of the information requested in the <i>Installation Checklist</i>.</li> <li>▶ Keep the checklist with you as you perform the upgrade procedures.</li> </ul>
<input type="checkbox"/>	Review your current installations. Be sure that you know the product levels and versions you are currently running.
<input type="checkbox"/>	Document the environment structure for each installation.
<input type="checkbox"/>	Review and understand your current security administration information.

## How to Stop Server Processes

### Introduction

This procedure stops:

- ▶ The namebroker process (**ltb\_server**) that controls the host you are working on or upgrading.
- ▶ All **mhs\_server** and **mhp\_server** processes running under that **ltb\_server** process.

### Procedure

Use this procedure to stop Sterling Gentran:Server processes.

Step	Action
1	Log on to the UNIX machine as the owner of the security environment that controls the host environment you are upgrading.
2	Start the Security Administration utility.  <b>Reference</b> See the <i>IBM® Sterling Gentran:Server® for UNIX Getting Started Guide</i> for instructions.
3	Verify that all clients are logged out.  <b>Reference</b> See the <i>Client Administration</i> chapter in the <i>IBM® Sterling Gentran:Server® for UNIX Maintenance and Troubleshooting Guide</i> .
4	Exit the Security Administration utility.
5	Log on to the host as the owner of the environment you are upgrading or of another host environment controlled by the same namebroker process.
6	Are you upgrading Sterling Gentran:Server with Process Control Manager or higher?  <ul style="list-style-type: none"> <li>▶ If NO continue with step 7.</li> <li>▶ If YES, stop the environment's data managers in routing sequence to avoid incompletely processed data.</li> </ul> <b>Reference</b> See the <i>IBM® Sterling Gentran:Server® for UNIX Data Flow Administration Guide</i> for instructions.

<b>(Contd) Step</b>	<b>Action</b>
7	<p>Stop any Sterling Gentran:Server scripts or <b>cron</b> jobs that are running in the host environment.</p> <p><b>Reference</b> See the <i>IBM® Sterling Gentran:Server® for UNIX Data Flow Administration Guide</i> for more information on this subject.</p>
8	<p>Are you are at the directory that contains the program files for the host environment?</p> <ul style="list-style-type: none"> <li>▶ If YES, continue with Step 10.</li> <li>▶ If NO, change directories using the following command.</li> </ul> <pre>cd \$EDI_ROOT/bin</pre>
9	<p>Enter the following command to check whether instances of the <b>mhs_server</b> or <b>mhp_server</b> processes are running for the host environment.</p> <pre>stopprcs.sh</pre> <p><b>System Response</b> The system lists the value for the SADMIN_ROOT environment variable for the UNIX user <i>.login</i> or <i>.profile</i> you are currently using, and prompts you for whether the value is correct.</p>
10	<p>Is SADMIN_ROOT set correctly?</p> <ul style="list-style-type: none"> <li>▶ If YES, enter <b>Y</b> or <b>y</b>, and then press ENTER.</li> <li>▶ If NO, enter <b>N</b> or <b>n</b>, press ENTER, then enter the correct value.</li> </ul> <p><b>System Response</b> The system lists the value for the NAMEBROKER environment variable and prompts you for whether the value is correct.</p>
11	<p>Is NAMEBROKER set correctly?</p> <ul style="list-style-type: none"> <li>▶ If YES, enter <b>Y</b> or <b>y</b>, and then press ENTER.</li> <li>▶ If NO, enter <b>N</b> or <b>n</b>, press ENTER, then enter the correct value.</li> </ul> <p><b>System Response</b> The system lists the name of each environment that is currently running, and prompts you to identify an environment to halt.</p>

<b>(Contd) Step</b>	<b>Action</b>
12	<p>Is the environment you are logged in to shown in the list?</p> <ul style="list-style-type: none"><li>▶ If NO, then press <code>CTRL+C</code> to exit the script.</li><li>▶ If YES, enter the name of the environment to stop.</li></ul> <p><b>System Response</b> If you entered an environment name, then the script stops the <b>mhs_server</b> and <b>mhp_server</b> processes in the specified environment.</p>
13	<p>Are other environments currently running under this broker process?</p> <ul style="list-style-type: none"><li>▶ If NO, continue with Step 15.</li><li>▶ If YES, repeat Steps 5 through 12 for each additional environment.</li></ul>
14	Log onto the host as the owner of the Security Administration utility.
15	Enter the following command.  <code>ps -ef   grep ltb_server</code>
16	Locate the value in the second column of the line containing the <b>ltb_server</b> program name and make a note of it. This is the process ID for the namebroker process.
17	Enter the following command:  <code>kill &lt;PID&gt;</code>  where <PID> is the process ID you noted in Step 17.

---

# Upgrading IBM® Sterling Gentran:Server® for UNIX - Workstation

## The Sterling Gentran:Server Upgrade Process

---

**Introduction** You must install your IBM® Sterling Gentran:Server® for UNIX - Workstation 6.2 software in a new directory and then copy and convert your data files into the new installation.

---

**The upgrade process** This upgrade process entails:

- ▶ Installing Sterling Gentran:Server Version 6.2 into a new directory structure on the workstation or PC
- ▶ Running conversion utilities that copy the previous data to the new directory structure. The utilities convert the data formats to the version 6.2 formats.

**CAUTION**

**To ensure correct results, you must know the version you have installed.**

---

## How to Upgrade to Workstation Version 6.2

**Procedure**    Use this procedure to upgrade your current installation to Version 6.2.

Step	Action
1	<p>Install the new IBM® Sterling Gentran:Server® for UNIX - Workstation 6.2 software to a new location.</p> <p><b>WARNING</b></p> <p><b>To avoid overwriting your existing data, do not install the new Workstation software onto your existing Sterling Gentran:Server directory structure. You must install version 6.2 into a new location. Do not use spaces in the directory path.</b></p> <p><b>Reference</b></p> <p>See the <i>IBM® Sterling Gentran:Server® for UNIX - Workstation Getting Started Guide</i>.</p>
2	<p>Select the optimum time to convert your data. Choose a time when you can stop Sterling Gentran:Server processes with little or no disruption to your production processes.</p>
3	<p>Purge and compress your translation audit data.</p> <p><b>Reference</b></p> <p>See the <i>Archiving Translation Data</i> chapter in the <i>IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide</i> for instructions.</p>
4	<p>Stop your Workstation processes.</p>
5	<p>Make a <i>complete</i> backup of your Sterling Gentran:Server data files.</p> <p><b>Reference</b></p> <p>Refer to your company's backup procedures or to your UNIX manuals for instructions.</p>
6	<p>Convert your data.</p> <p><b>Reference</b></p> <p>See the chapter <a href="#">Converting Data with allcnvrt</a> to run all conversion programs consecutively with one command.</p> <p>See the chapter <a href="#">Converting Data with Individual Conversion Programs</a> to run the conversion programs separately.</p>

---

# Converting Data with allcnvrt

---

<b>Contents</b>	<b>Overview</b>
	▶ Introduction ..... 2
	▶ The allcnvrt Utility ..... 3
	▶ Data Files that allcnvrt Converts ..... 4
	<b>Procedures</b>
	▶ Data Conversion Process ..... 7
	▶ Preparing for Data Conversion ..... 9
	▶ How to Run the allcnvrt Utility ..... 11
	▶ How to Convert Data from Multiple Installations ..... 14

# Overview

## Introduction

---

**In this chapter** This chapter explains how to use the **allcnvrt** utility to convert your data.

---

**Manual steps** The **allcnvrt** utility automates most of the work in converting your data. To complete the conversion, you may need to complete some additional steps manually.

These are examples of the manual conversion steps you may need to perform:

- ▶ Editing MS-DOS batch files
  - ▶ Editing UNIX scripts to include the new command line program names or new directory paths.
  - ▶ Using the unload and load utilities to move ISAM files from multiple installations.
  - ▶ Copying working maps and other non-productions files to the new installation
-

# The allcnvrt Utility

---

## Introduction

The **allcnvrt** utility converts your existing data and copies the files to the 6.2 installation you specify. The utility works by automatically starting a sequence of conversion programs.

### Note

You must install Sterling Gentran:Server Version 6.2 into a new directory to use **allcnvrt**.

---

## Versions you can convert from

The **allcnvrt** utility and the other conversion programs described in this guide are designed to convert data from these versions:

- ▶ 6.0
- ▶ 6.1

### CAUTION

**If your current version is not listed above, you must upgrade to one of the versions listed above before you can convert your data to version 6.2 format. Contact IBM Customer Support for information.**

---

## Programs included in allcnvrt

For all Sterling Gentran:Server product levels, **allcnvrt** runs these program:

- ▶ tpcnvrt
- ▶ edicnvrt
- ▶ mapcnvrt

For Sterling Gentran:Server product levels with Data Flow Administration, allcnvrt also runs these programs:

- ▶ sec\_cnv
- ▶ maint\_cnv

### Reference

For details about these programs, see the chapter [Converting Data with Individual Conversion Programs](#).

---

## Data Files that allcnvrt Converts

---

**Introduction**    The **allcnvrt** utility runs a series of conversion programs, each of which converts specific files. This topic lists the files that these programs convert.

---

**Original data retained**    The **allcnvrt** utility reads the original data files and writes converted data to the specified destination. It does not move or delete data, so your original data remains intact.

**Trading Partnership and mapping files**

---

This table lists the Trading Partnership and mapping files that the **allcnvrt** utility converts.

6.0, 6.1 Data File	6.2 Data File	Data File Description
tp.[dat idx]	tp.[dat idx]	Trading Partnership records
tpmisc.[dat idx]	tpmisc.[dat idx]	Additional trading partnership record information
tradacom.[dat idx]	tradacom.[dat idx]	Additional TRADACOM trading partnership information
org.[dat idx]	org.[dat idx]	Group and interchange organization records
cattype.dat	cattype.dat	Category definitions
catvalue.[dat idx]	catvalue.[dat idx]	Values for category definitions
contact.[dat idx]	contact.[dat idx]	Contact records
tprecon.[dat idx]	tprecon.[dat idx]	Reconciliation IDs
edihist.[dat idx]	edihist.[dat idx]	Audit records
<mapname>.vmp	<mapname>.vmp	Uncompiled Visual Mapper maps
<mapname>.TPL	<mapname>.TPL	Translation objects (compiled Visual Mapper maps)
<appname>.app	<appname>.app	Application description files
<igname>.ig	<igname>.ig	Implementation guide files

6.0, 6.1 Data File	6.2 Data File	Data File Description
<mapname>.map	<mapname>.map	Uncompiled Application Integration maps
<mapname>.TBL	<mapname>.TPL	Translation objects (compiled Application Integration maps)
<filename>.ddf	<filename>.ddf	File definition files

**UNIX product levels**

If you have Sterling Gentran:Server with Process Control Manager, EC Workbench, or Advanced Data Distribution, the **allcnvrt utility** converts your Data Flow Administration and master user files.

**Data Flow Administration files**

This table lists the Data Flow Administration files that the **allcnvrt utility** converts.

6.0, 6.1 Data File	6.2 Data File	Data File Description
.dmcfg.[dat   idx]	.dmcfg.[dat   idx]	List of data managers
.q_cl	.q_cl	List of queues
.scrcfg.[dat   idx]	.scrcfg.[dat   idx]	List of scripts
.tr_cl	.tr_cl	List of transaction registers
conf.d/<agent>.init	conf.d/<agent>.init	Directory of initialization files
dm.[dat   idx]	dm.[dat   idx]	Data manager configuration records
ds_map.[dat   idx]	ds_map.[dat   idx]	Document specifier table for EDI data
ds_map_app.[dat   idx]	ds_map_app.[dat   idx]	Document specifier table for application data
ds_name.[dat   idx]	ds_name.[dat   idx]	List of document specifier tables
ds_tptbl.[dat   idx]	ds_tptbl.[dat   idx]	List of Trading Partners and document specifiers that you use.
ds_tptbl_app.[dat   idx]	ds_tptbl_app.[dat   idx]	List of Trading Partners and document specifiers by application that you use.

(Contd) 6.0, 6.1 Data	6.2 Data File	Data File Description
pat.[dat   idx]	pat.[dat   idx]	Pattern records
patlst.[dat   idx]	patlst.[dat   idx]	List of patterns
trn.[dat   idx]	trn.[dat   idx]	Transaction register records
script/<.scrcfg content>.scr	script/<.scrcfg content>.scr	Directory of scripts
mbox.[dat   idx]	mbox.[dat   idx]	Advanced Data Distribution Mailbox file
dlname.[dat   idx]	dlname.[dat   idx]	Distribution list file
dstlst.[dat   idx]	dstlst.[dat   idx]	Distribution mailbox list file
mboxfr.[dat   idx]	mboxfr.[dat   idx]	Mailbox file register

---

### Security files

This table lists the security administration files that **allcnvrt** converts.

6.0, 6.1 Data File	6.2 Data File	Data File Description
db/.usermast.[dat   idx]	db/.usermast.[dat   idx]	User list

---

# Procedures

## Data Conversion Process

**Conversion process**

This table lists the tasks in the process of converting your Sterling Gentran:Server data. See the referenced topic in the task description for the procedure you must perform to complete the task.

Task	Description
1	Complete the items in the Preparation Checklist.  <b>Reference</b> See the <a href="#">Preparing for Data Conversion</a> section for information.
2	Run the <b>allcnvrt</b> utility to convert your data.  <b>References</b> See <a href="#">The allcnvrt Utility</a> , <a href="#">How to Run the allcnvrt Utility</a> , and <a href="#">How to Convert Data from Multiple Installations</a> for information.
3	Check the log files to verify that each conversion program finished properly.  <b>Note</b> Most of the log files are in the <i>temp</i> directory on a UNIX installation, or in the <i>rpt</i> folder on a Workstation installation. The log file for Security Administration files is in \$ADMIN_ROOT/temp.  <b>Reference</b> If you need to run a program again, use the instructions in the <a href="#">Converting Data with Individual Conversion Programs</a> chapter.
4	Manually copy your UNIX scripts and MS-DOS batch files to the appropriate directories in your 6.2 installation. Then, edit the UNIX scripts and batch files to reflect any changes you want to make.  <b>Example</b> Edit scripts or any other locations where you set environment variables. For example, check the <i>.edi_env</i> file if you configured the environment to run cron jobs.

<b>(Contd) Task</b>	<b>Description</b>
5	<p>Test your mapping and translation data to ensure that Sterling Gentran:Server is processing your data and returning the results you want.</p> <p><b>Note</b> We recommend that you recompile your maps in the new installation before testing them.</p>
6	<p>If you are upgrading from Sterling Gentran:Server with Process Control Manager, Sterling Gentran:Server with EC Workbench, or Sterling Gentran:Server with Advanced Data Distribution, run a test flow to ensure that everything is working correctly. Check the log files in the host <i>temp</i> directory to verify the conversions.</p> <p><b>CAUTION</b> <b>Do not remove your existing version of Sterling Gentran:Server until you have completely tested Sterling Gentran:Server and are obtaining satisfactory results.</b></p>
7	<p>Did you create multiple environments in your Sterling Gentran:Server installation?</p> <ul style="list-style-type: none"> <li>▶ If YES, repeat Tasks 1 through 7 for each environment.</li> <li>▶ If NO, you are finished.</li> </ul>

---

# Preparing for Data Conversion

**Introduction** You must complete several tasks before you attempt to convert your data to Sterling Gentran:Server Version 6.2.

**Preparation checklist** This table contains a checklist of procedures you must complete before you begin to convert your data for use with Sterling Gentran:Server 6.2.

Done?	Description
<input type="checkbox"/>	<p>Install the new Sterling Gentran:Server software to a new location.</p> <p><b>WARNING</b>  <b>To avoid overwriting your existing data, do not install the new Sterling Gentran:Server software into your existing Sterling Gentran:Server directory structure.</b></p> <p><b>Reference</b>                      If you are installing IBM® Sterling Gentran:Server® for UNIX - Workstation, see the <i>IBM® Sterling Gentran:Server® for UNIX - Workstation Getting Started Guide</i> provided with your software.</p> <p>If you are installing Sterling Gentran:Server for UNIX, see the <i>IBM® Sterling Gentran:Server® for UNIX Getting Started Guide</i>.</p>
<input type="checkbox"/>	<p>If you are installing Sterling Gentran:Server for UNIX, define all of your environments.</p> <p>Sterling Gentran:Server Version 6.2 enables you to configure multiple environments in a single installation. You must structure the environments in your 6.2 installation before you convert your data.</p> <p><b>Reference</b>                      See the <i>How to Add a New Environment Record</i> topic of the <i>IBM® Sterling Gentran:Server® for UNIX Getting Started Guide</i>.</p>
<input type="checkbox"/>	<p>Select the optimal time to convert your data. Choose a time when you can stop Sterling Gentran:Server processes with little or no disruption to your production processes.</p>

<b>(Contd) Done?</b>	<b>Description</b>
<input type="checkbox"/>	Purge and compress your current translation audit data.  <b>Reference</b> See the <i>Archiving Data</i> chapter in the <i>IBM® Sterling Gentran:Server® for UNIX Mapping and Translation Guide</i> for instructions on this task.
<input type="checkbox"/>	Check in maps and other files you want to convert.
<input type="checkbox"/>	Wait until any queued processes are finished and then stop, in routing order, any processes running in your source Sterling Gentran:Server installation.
<input type="checkbox"/>	Make a <i>complete</i> backup of your Sterling Gentran:Server files.

---

# How to Run the allcnvrt Utility

**Introduction** You have two options for running the **allcnvrt** utility:

- ▶ Interactive mode
- ▶ Full command mode.

**Interactive mode** When you run the **allcnvrt** command without parameters, the program prompts you for the information it needs. This is interactive mode.

**Command format**

allcnvrt

**Full command mode** When you run **allcnvrt** with parameters, the program runs in full command mode. See the Command format for the parameters.

**Command format**

allcnvrt <old\_install\_dir> <new\_install\_dir> -v <version> -o -no  
 -s <filename> -ia <no\_days> -oa <no\_days> [-os <path> -ns <path>]

**Parameters and variables** This table lists the parameters and variables defined for the **allcnvrt** command.

Parameter	Definition
<old_install_dir>	The directory or folder containing your older Sterling Gentran:Server installation.
<new_install_dir>	The directory or folder for the Sterling Gentran:Server 6.2 installation to which your data will be added.
-v <version>	The Sterling Gentran:Server version from which you are converting data. Valid versions are: <ul style="list-style-type: none"> <li>▶ 6.0</li> <li>▶ 6.1</li> </ul>
-o	Overwrite duplicate files.
-no	Do not overwrite duplicate files. This is the default value if you do not enter -o.

Parameter	Definition
-s <filename>	Moves the unloaded audit history file ( <i>edihist.unl</i> ) instead of the ISAM ( <i>edihist.dat/idx</i> ) history file. Enter the full path to the file.  This parameter is optional.  <b>Reference</b> See the <i>edimv</i> command topic in the <i>Command Reference</i> chapter of the <i>IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide</i> for information about unloading the <i>edihist.dat/idx</i> ISAM file.
-ia <no_days>	The number of days to archive input data. The default is 365 days.
-oa <no_days>	Number of days to archive output data. The default is 365 days.
-os <path>	Path to old <i>secadmin</i> root directory (Sterling Gentran:Server for UNIX product levels only)
-ns <path>	Path to new <i>secadmin</i> root directory (Sterling Gentran:Server for UNIX product levels only)

### Log files

This **allcnvrt** command copies the text that is output to the screen into a log file for each program that **allcnvrt** starts:

- tpcnvrt.log
- edicnvrt.log
- mapcnvrt.log
- sec\_cnv.log
- maint\_cnv.log.

The log files are in the *temp* directory on a UNIX installation, or in the *rpt* folder on a Workstation installation. The log file for Security Administration files is in `$SADMIN_ROOT/temp`.

**Workstation procedure**

Use this procedure to run the **allcnvrt** command for your Sterling Gentran:Server for UNIX - Workstation product.

Step	Action
1	Open a DOS window.
2	At the DOS prompt, change to the directory in which your Sterling Gentran:Server 6.2 product is installed.  <b>Example</b> c:\gentran61>
3	Type the <b>allcnvrt</b> command and the parameter values at the prompt.  <b>Example</b> allcnvrt c:\gentran61 c:\gentran62 -v 6.1 -ia 200 -oa 200
4	Press ENTER to start the conversion program.
5	When the program has finished, open the allcnvrt.log file in the rpt folder to check the results.

**UNIX procedure**

Use this procedure to run the **allcnvrt** command for your Sterling Gentran:Server for UNIX product.

Step	Action
1	Go to the command line on your UNIX host machine.
2	Run the <b>allcnvrt</b> command from EDI_ROOT for your Sterling Gentran:Server for UNIX 6.2 installation.  <b>Example</b> allcnvrt /gentran61 /gentran62-v 6.1 -ia180 -oa 180 -os gentran61 /secadmin -ns gentran62/secadmin
3	Press ENTER to start the conversion program.
4	When the program has finished, open the allcnvrt.log file in the temp folder to check the results.

## How to Convert Data from Multiple Installations

---

**Introduction**    Some of the data conversion programs that **allcnvrt** starts overwrite existing ISAM files. Others overwrite just the duplicate entries in ISAM files. If you convert data from only one installation to your 6.2 installation, this is not a concern. However, if you want to combine data from two or more installations into a single 6.2 installation, you must follow the procedure in this topic to avoid loss of data.

---

**Example**    You have a test installation of Sterling Gentran:Server 6.0 and a test installation of Sterling Gentran:Server 6.1. You want to move your data files from these two installations to a Sterling Gentran:Server 6.2 test installation.

### CAUTION

**Sterling Gentran:Server does not allow duplicate files. To avoid loss of data, prevent duplicates by renaming data files that have identical names before you merge them.**

### Reference

You can convert ISAM files to ASCII text files with the Sterling Gentran:Server **isops** utility. Once they are converted, you can use a text editor to edit the data files they contain. See the *IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide* for the **isops** syntax.

---

**Procedure**    Use this procedure to convert data from two installations or versions of Sterling Gentran:Server to a single installation of version 6.2.

Step	Action
1	<p>For the first installation, run <b>allcnvrt</b> to convert the data to the Sterling Gentran:Server 6.2 format.</p> <p><b>Example</b> Run <b>allcnvrt</b> to convert the data files in your 6.0 or 6.1 test installation to your new 6.2 test installation.</p>

<b>(Contd) Step</b>	<b>Action</b>
2	<p>Use the Sterling Gentran:Server <b>isops</b> unload utility to transform all the 6.2 ISAM files you created in Step 1 to ASCII text files (.unl extensions). Store them in an empty directory.</p> <p>This is the basic syntax:</p> <pre>isops -u -f {file name} &gt; {file name.unl}</pre> <p><b>Reference</b> See the <i>IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide</i> for the complete <b>isops</b> syntax.</p> <p><b>CAUTION</b> <b>Sterling Gentran:Server does not allow duplicate files. To avoid loss of data, prevent duplicates by renaming data files that have identical names before you merge them.</b></p>
3	<p>For your other installation, run <b>allcnvrt</b> to convert the data to the Sterling Gentran:Server 6.2 format and build the data files for the 6.2 installation.</p> <p><b>Example</b> Run <b>allcnvrt</b> to convert the data files in your 6.0 or 6.1 test installation to your new 6.2 test installation.</p>
4	<p>Use the <b>isops</b> load utility to append the files (*.unl) you created in Step 2 to the 6.2 ISAM data files created in Step 3.</p>



---

# Converting Data with Individual Conversion Programs

---

<b>Contents</b>	<b>Overview</b>
	▶ Introduction ..... 2
	▶ Conversion Process ..... 4
	▶ Preparing for Data Conversion ..... 6
	<b>Procedures</b>
	▶ How to Convert Trading Partnership Records with tpcnvt ..... 8
	▶ How to Convert Audit Archive Records with edicnvt ..... 12
	▶ How to Convert Maps and Related Files with mapcnvt ..... 16
	▶ How to Convert Synonym and Thesaurus Lists with syncnvt ..... 19
	▶ How to Convert Data Flow Files with maint_cnv ..... 22
	▶ How to Convert Security Files with sec_cnv ..... 25

# Overview

## Introduction

---

**Purpose** This chapter describes how to convert data files by running a conversion program designed to convert a specific type of data, such as Trading Partnership records, from previous versions of Sterling Gentran:Server to Sterling Gentran:Server Version 6.2.

---

**When to use** Use the information in this chapter when you want to:

- ▶ Run one or more programs that did not finish properly when you ran **allcnvrt**.
- ▶ Run each of the individual conversion programs instead of running the **allcnvrt** program described in the previous chapter.

**Example**

You ran **allcnvrt** and checked the log files that the program generated. The *edicnvrt.log* file indicates that the program did not convert all your audit archive records to your 6.2 installation. All the other conversion programs finished successfully. You can use the instructions in [How to Convert Audit Archive Records with edicnvrt](#) in this chapter to run only the **edicnvrt** program.

---

**Versions you can convert from** The commands described in this chapter require you to enter a valid version number as a command parameter.

These are the versions of Sterling Gentran:Server you can convert to IBM® Sterling Gentran:Server® for UNIX 6.2:

- ▶ 6.0
- ▶ 6.2

---

**Converting from earlier versions**

If you have a version prior to 6.0 or an earlier product, you must do an interim upgrade to Sterling Gentran:Server Version 6.0 before you can convert your data. Contact IBM Customer Support for information.

**CAUTION**

**Do not use the version 6.2 conversion programs to convert data from versions prior to 6.0.**

---

**ISAM files**

You do not have to create empty ISAM files in the new installation. The 6.2 installation programs and the conversion programs create them for you if they do not exist.

---

## Conversion Process

**Description**    The conversion process described in this chapter involves running several separate conversion programs. Each program converts a specific type of data.

**Reference**

To automatically run all conversion programs consecutively, use the **allcnvrt** utility described in the [Converting Data with allcnvrt](#) chapter of this guide.

**Tasks in the conversion process**

This table describes the tasks in the process of converting your data manually so that you can use it with Sterling Gentran:Server Version 6.2. See the topic referenced in the task description for the procedure you must follow to perform the task.

Task	Description
1	Complete the preparation checklist. <b>Reference</b> See <a href="#">Preparing for Data Conversion</a> .
2	Convert your Trading Partnership records. <b>Reference</b> See <a href="#">How to Convert Trading Partnership Records with tpcnvrt</a> for more information.
3	Purge and compress your unneeded audit data. Purging your data before you convert it reduces the amount of time it will take to convert the data. <b>Reference</b> See the <i>Archiving Data</i> chapter in the <i>IBM® Sterling Gentran:Server® for UNIX Mapping and Translation Guide</i> for more information.
4	Convert your mapping and translation audit data. <b>Reference</b> See <a href="#">How to Convert Audit Archive Records with edicnvrt</a> for more information.
5	Convert your maps, compiled maps, and related files. <b>Reference</b> See <a href="#">How to Convert Maps and Related Files with mapcnvrt</a> for more information.

<b>(Contd) Task</b>	<b>Description</b>
6	Manually copy your UNIX scripts and MS-DOS batch files to the appropriate directories in your 6.2 installation. Then, edit the UNIX scripts and batch files to reflect any changes you want to make.
7	<p>Test your mapping and translation data to ensure that Sterling Gentran:Server is processing your data and returning the results you want.</p> <p><b>Note</b> We recommend that you recompile your maps in the new installation before testing them.</p>
8	<p>Are you upgrading from IBM® Sterling Gentran:Server® - Process Control Manager, IBM® Sterling Gentran:Server® - EC Workbench, or IBM® Sterling Gentran:Server® with ADD?</p> <ul style="list-style-type: none"> <li>▶ If YES, convert your Sterling Gentran:Server Data Flow archive and data files and then continue with the next task.</li> </ul> <p><b>Reference</b> See <a href="#">How to Convert Data Flow Files with maint_cnv</a> for more information.</p> <ul style="list-style-type: none"> <li>▶ If NO, go to Task 11.</li> </ul>
9	<p>Run a test flow to ensure that everything is working correctly. Check the log files in the host <i>temp</i> directory to verify the conversions.</p> <p><b>CAUTION</b> <b>Do not remove your existing version of Sterling Gentran:Server until you have completely tested Sterling Gentran:Server and are obtaining satisfactory results.</b></p>
10	<p>Did you create multiple environments in your Sterling Gentran:Server installation?</p> <ul style="list-style-type: none"> <li>▶ If YES, repeat Tasks 1 through 11 for each environment.</li> <li>▶ If NO, stop. You have completed the conversion of your data.</li> </ul>

## Preparing for Data Conversion

**Introduction**    You must complete several tasks before you attempt to convert your data from earlier versions to Sterling Gentran:Server Version 6.2.

**Preparation checklist**    This table contains a checklist of procedures you must complete before you begin to convert your data for use with Sterling Gentran:Server 6.2.

Done?	Description
<input type="checkbox"/>	<p>Install the new Sterling Gentran:Server software into a new directory.</p> <p><b>WARNING</b>  <b>To avoid overwriting your existing data, do not install the new Sterling Gentran:Server software onto your existing Sterling Gentran:Server directory structure.</b></p> <p><b>Reference</b>            If you are installing IBM® Sterling Gentran:Server® for UNIX - Workstation, see the <i>IBM® Sterling Gentran:Server® for UNIX - Workstation Getting Started Guide</i> provided with your software.</p> <p>If you are installing Sterling Gentran:Server for UNIX, see the <i>IBM® Sterling Gentran:Server® for UNIX Getting Started Guide</i>.</p>
<input type="checkbox"/>	<p>If you are installing Sterling Gentran:Server for UNIX, define all of your environments.</p> <p><b>Reference</b>            See the <i>How to Add a New Environment Record</i> topic of the <i>IBM® Sterling Gentran:Server® for UNIX Getting Started Guide</i>.</p>
<input type="checkbox"/>	<p>Select the optimum time to convert your data. Choose a time when you can stop Sterling Gentran:Server processes with little or no disruption to your production processes.</p>
<input type="checkbox"/>	<p>Are you converting from a version prior to Sterling Gentran:Server 6.0?</p> <ul style="list-style-type: none"> <li>▶ If YES, complete the interim conversion to Sterling Gentran:Server 6.0.</li> <li>▶ If NO, continue with the next item on the checklist.</li> </ul>

<b>(Contd) Done?</b>	<b>Description</b>
<input type="checkbox"/>	Purge and compress your translation audit data.  <b>Reference</b> See the <i>Archiving Data</i> chapter in the <i>IBM® Sterling Gentran:Server® for UNIX Mapping and Translation Guide</i> for instructions.
<input type="checkbox"/>	Wait until any queued processes are finished and then stop, in routing order, any processes running in your source Sterling Gentran:Server installation.
<input type="checkbox"/>	Make a <i>complete</i> backup of your Sterling Gentran:Server data files.

---

## Procedures

### How to Convert Trading Partnership Records with tpcnvrvt

---

**Introduction**    To convert your Trading Partnership records for use with Sterling Gentran:Server 6.2, use the **tpcnvrvt** program to append your existing data to the new Trading Partnership files that the installation program created for Sterling Gentran:Server 6.2.

---

**Command format**    This is the format of the command to convert Trading Partnership records:

```
tpcnvrvt    {<old_install_dir>} {<new_install_dir>} [-o] [-no] [-v  
<version>]  
[-ia <no_days>] [-oa <no_days>]
```

**Where**

<old_install_dir>	The path to the directory folder containing your prior Sterling Gentran:Server installation and environment configuration file (envprim.cfg).
<new_install_dir>	The path to the directory folder that contains the Sterling Gentran:Server 6.2 installation and environment configuration file (envprim.cfg). This is the destination folder for your data.
-o	Overwrite duplicate records.
-no	Do not overwrite duplicate records. This is the default.
-v <version>	The data version you are converting from. The default value is 6.0.
-ia	Number of days to archive input data. The default is 365 days.
-oa	Number of days to archive output data. The default is 365 days.

**Data conversion**

The following table lists the files that **tpcnvr** converts.

Data File	Description
tp.[dat idx]	Trading Partnership records
tpmisc.[dat idx]	Supplemental Trading Partnership record information
tradacom.[dat idx]	Additional TRADACOM trading partnership information
org.[dat idx]	Group and interchange organization records
cattype.[dat idx]	Category definitions
catvalue.[dat idx]	Values for category definitions
contact.[dat idx]	Contact records
tprecon.[dat idx]	Reconciliation IDs
xtable.[dat idx]	Standard cross reference files
xmltpbl.[dat idx]	XML trading partnership rule files

Data File	Description
xmlxref.[dat idx]	XML cross reference files
xmlspl1.[dat idx]	XML splitter table files
xmlspl2.[dat idx]	
xmlspl3.[dat idx]	

**Note**

The xtable, xmltpubl, xmlxref, and xmlspl1, xmlspl2, and xmlspl3 files exist only if you are converting from version 6.0 or 6.1 and you used the XML option in that version.

**Log file**

The command copies the text that is output to the screen into the file *tpcnvrt.log*. This file is located in the *temp* directory on a UNIX installation, or in the *rpt* folder on a Microsoft Windows installation.

**Workstation procedure**

Use this procedure to run the **tpcnvrt** command for your IBM® Sterling Gentran:Server® for UNIX - Workstation product.

Step	Action
1	Open a DOS window.
2	At the DOS prompt, change to the directory in which your Sterling Gentran:Server 6.2 product is installed.  <b>Example</b> c:\gentran61>
3	Type the <b>tpcnvrt</b> command and the parameter values at the prompt.  <b>Example</b> tpcnvrt c:\gentran60 c:\gentran61 -v 6.0 -ia 200 -oa 200
4	Press ENTER to start the conversion program.
5	When the program has finished, open the tpcnvrt.log file in the rpt folder to check the results.

**UNIX procedure**

Use this procedure to run the **tpcnvrt** command for your IBM® Sterling Gentran:Server® for UNIX product.

Step	Action
1	Go to the command line on your UNIX host machine.
2	Run the <b>tpcnvrt</b> command from EDI_ROOT for your Sterling Gentran:Server for UNIX 6.2 installation.  <b>Example</b> tpcnvrt /gentran60 /gentran61 -v 6.0 -ia180 -oa 180
3	Press ENTER to start the conversion program.
4	When the program has finished, open the tpcnvrt.log file in the temp folder to check the results.

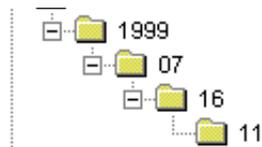
## How to Convert Audit Archive Records with edicnvrt

**Introduction**    To convert your mapping and translation audit archive records for use with Sterling Gentran:Server version 6.2, use the **edicnvrt** program to add your existing data to the new audit archive files.

**Archive file structure**    Sterling Gentran:Server Version 6.0 and higher create separate folders in your EDI history folder for the year, month, day, and hour. The hour folder holds a separate archive file for each interchange.

The **edicnvrt** program creates the appropriate directory structure as it converts your mapping and translation audit archive data for use with Sterling Gentran:Server.

### Example



### Comment

This program leaves the old audit archive data in the prior directory structure.

### Reference

See the *Archiving Translation Data* chapter of the *IBM® Sterling Gentran:Server® for UNIX Application Integration User Guide* for more information.

### Command format

This is the format of the command to convert audit archive records:

```
edicnvrt {<old_install_dir>} {<new_install_dir>} [-v version] [-o] [-no] [-s <filename>]
```

### Where

<old_install_dir>	The path to the directory folder containing your prior Sterling Gentran:Server installation and environment configuration file (envprim.cfg).
<new_install_dir>	The path to the directory folder that contains the Sterling Gentran:Server 6.2 installation and environment configuration file (envprim.cfg). This is the destination folder for your data.

-o	Overwrite duplicate records.
-no	Do not overwrite duplicate records. This is the default if you do not specify -o or -no.
-v <version>	The data version to convert from. The default value is 6.0.
-s <filename>	Moves the unloaded audit history file ( <i>edihist.unl</i> ) instead of the ISAM ( <i>edihist.dat/idx</i> ) history file. Enter the full path to the file. This parameter is optional.  <b>Reference</b> See the <i>edimv</i> command topic in the <i>Command Reference</i> chapter of the <i>IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide</i> for information about unloading the <i>edihist.dat/idx</i> ISAM file.

**Files converted**

The following table lists the file that **edicnvr** converts.

Data File	Data File Description
edihist.[dat idx]	Audit records

**Log file**

The **edicnvr** program writes results to the *edicnvr.log* file.

The log file is in the *temp* directory on a UNIX installation, or in the *rpt* folder on a Microsoft Windows installation.

### Preparing audit files for conversion

We recommend that you purge and compress any unneeded audit data before you convert it for use with Sterling Gentran:Server. By purging and compressing your audit data you will reduce the amount of time it takes to convert your data for use with Sterling Gentran:Server version 6.2.

### Workstation procedure

Use this procedure to run the **edicnvrt** command for your IBM® Sterling Gentran:Server® for UNIX - Workstation product.

Step	Action
1	Open a DOS window.
2	At the DOS prompt, change to the directory in which your Sterling Gentran:Server 6.2 product is installed.  <b>Example</b> c:\gentran61>
3	Type the <b>edicnvrt</b> command and the parameter values at the prompt.  <b>Example</b> edicnvrt c:\gentran60 c:\gentran62 -v 6.0
4	Press ENTER to start the conversion program.
5	When the program has finished, open the edicnvrt.log file in the rpt folder to check the results.

### UNIX procedure

Use this procedure to run the **edicnvrt** command for your Sterling Gentran:Server for UNIX product.

Step	Action
1	Go to the command line on your UNIX host machine.
2	Run the <b>edicnvrt</b> command from EDI_ROOT for your Sterling Gentran:Server for UNIX 6.2 installation.  <b>Example</b> edicnvrt /gentran60 /gentran62 -v 6.0-s /usr/gentran/data/edihist.unl

<b>(Contd) Step</b>	<b>Action</b>
3	Press ENTER to start the conversion program.
4	When the program has finished, open the edicnvr.log file in the temp folder to check the results.

---

# How to Convert Maps and Related Files with mapcnvrt

---

## Introduction

The **mapcnvrt** program moves your maps and related files to the 6.2 installation. The types of related files moved depend on the version from which you are converting.

### CAUTION

**Once you convert your files, you will not be able to use them with older versions of Sterling Gentran:Server.**

### Reference

If you want to convert only your synonym and thesaurus records, use the **syncnvrt** program to add your existing data to the new synonym and thesaurus files. See [How to Convert Synonym and Thesaurus Lists with syncnvrt](#) for instructions.

---

## No re-compiling

If your maps are compiled, you do not have to recompile them after you run the **mapcnvrt** program.

**Command format**

This is the format of the command to convert your maps, application descriptions, and implementation guides:

```
mapcnvrt <old_install_dir> <new_install_dir> [-v <version>] [-o] [-no]
```

**Where**

<old_install_dir>	The path to the directory folder containing your prior Sterling Gentran:Server installation and environment configuration file (envprim.cfg).
<new_install_dir>	The path to the directory folder that contains the Sterling Gentran:Server 6.2 installation and environment configuration file (envprim.cfg). This is the destination folder for your data.
-v <version>	The data version to convert from. The default value is 6.0.
-o	Overwrite duplicate files.
-no	Do not overwrite duplicate files. This is the default.

**Log file**

The **mapcnvrt** program writes results to the *mapcnvrt.log* file.

The log file is in the *temp* directory on a UNIX installation, or in the *rpt* folder on a Microsoft Windows installation.

**Workstation procedure**

Use this procedure to run the **mapcnvrt** command for your IBM® Sterling Gentran:Server® for UNIX - Workstation product.

Step	Action
1	Open a DOS window.
2	At the DOS prompt, change to the directory in which your Sterling Gentran:Server 6.2 product is installed.  <b>Example</b> c:\gentran61>
3	Type the <b>mapcnvrt</b> command and the parameter values at the prompt.  <b>Example</b> mapcnvrt c:\gentran60 c:\gentran62 -v 6.0

(Contd) Step	Action
4	Press ENTER to start the conversion program.
5	When the program has finished, open the mapcnvrt.log file in the rpt folder to check the results.

---

### UNIX procedure

Use this procedure to run the **mapcnvrt** command for your IBM® Sterling Gentran:Server® for UNIX product.

Step	Action
1	Go to the command line on your UNIX host machine.
2	Run the <b>mapcnvrt</b> command from EDI_ROOT for your Sterling Gentran:Server for UNIX 6.2 installation.  <b>Example</b> mapcnvrt /gentran60 /gentran62 -v 6.0 -s /usr/gentran/data/edihist.unl
3	Press ENTER to start the conversion program.
4	When the program has finished, open the mapcnvrt.log file in the temp folder to check the results.

---

# How to Convert Synonym and Thesaurus Lists with syncnvr

---

## Introduction

If you run the **mapcnvrt** program, it will convert your synonym and thesaurus records along with your maps, file definitions, application descriptions, and implementation guides.

If you want to convert only your synonym and thesaurus records, use the **syncnvr** program to add your existing data to the new synonym and thesaurus files.

---

## Identifying maps with synonyms

If you do not know if a map has specific synonyms:

- Make sure that the map is compiled
- Run a directory on the <mapname>.dat file. If the size of the <mapname>.dat file is greater than zero, specific synonyms exist.

---

## Command format

This is the format of the command to convert synonym and thesaurus records:

```
syncnvr {<old_install_dir>} {<new_install_dir>} {<syn_name>} [-o]
[-no]
[-v version]
```

**Where**

<old_install_dir>	The path to the directory folder containing your prior Sterling Gentran:Server installation and environment configuration file (envprim.cfg).
<new_install_dir>	The path to the directory folder that contains the Sterling Gentran:Server 6.2 installation and environment configuration file (envprim.cfg). This is the destination folder for your data.
<syn_name>	The name of the synonym or thesaurus list.
-o	Overwrite duplicate records.
-no	Do not overwrite duplicate records. This is the default.
-v <version>	The data version to convert from. The default value is 6.0.

**Log file**


---

This command writes the results of the conversion into the file *syncnvt.log*. This file is located in the *temp* directory on a UNIX installation, or in the *rpt* folder on a Microsoft Windows installation.

**Data conversion**


---

This table lists the files that **syncnvt** converts.

<b>Data File</b>	<b>Description</b>
<mapname>.dat idx	The Specific Synonym file for the map named "mapname"
generic.dat idx	The Generic Synonym file, which stores the generic synonym lists maintained with the Synonym Editor
thesaurs.dat idx	The Thesaurus file, which stores the thesaurus lists that the AutoMapper uses

**Workstation procedure**

Use this procedure to run the **syncnvrt** command for your IBM® Sterling Gentran:Server® for UNIX - Workstation product.

Step	Action
1	Open a DOS window.
2	At the DOS prompt, change to the directory in which your Sterling Gentran:Server 6.2 product is installed.  <b>Example</b> c:\gentran61>
3	Type the <b>syncnvrt</b> command and the parameter values at the prompt.  <b>Example</b> syncnvrt c:\gentran60 c:\gentran62 generic -v 6.0
4	Press ENTER to start the conversion program.
5	When the program has finished, open the syncnvrt.log file in the rpt folder to check the results.

**UNIX procedure**

Use this procedure to run the **syncnvrt** command for your IBM® Sterling Gentran:Server® for UNIX product.

Step	Action
1	Go to the command line on your UNIX host machine.
2	Run the <b>syncnvrt</b> command from EDI_ROOT for your Sterling Gentran:Server for UNIX 6.2 installation.  <b>Example</b> syncnvrt /gentran60 /gentran62 generic -v 6.0
3	Press ENTER to start the conversion program.
4	When the program has finished, open the syncnvrt.log file in the temp folder to check the results.

## How to Convert Data Flow Files with `maint_cnv`

### Introduction

The `maint_cnv` program converts Sterling Gentran:Server Data Flow Administration and Advanced Data Distribution files. The program also:

- Links data managers created when base was linked to another name
- Creates data manager work directories and queues
- Copies the `mb/ftpd/ftpaccess` file from the older installation.

### Command format

This is the format of the command to convert data flow maintenance (and Advanced Data Distribution files if you have the Advanced Data Distribution product):

```
maint_cnv {<old_install_dir>} {<new_install_dir>} [-o] [-no] [-v
version]
```

### Where

<code>&lt;old_install_dir&gt;</code>	The path to the directory folder containing your prior Sterling Gentran:Server installation and environment configuration file ( <code>envprim.cfg</code> ).
<code>&lt;new_install_dir&gt;</code>	The path to the directory folder that contains the Sterling Gentran:Server 6.2 installation and environment configuration file ( <code>envprim.cfg</code> ). This is the destination folder for your data.
<code>-v &lt;version&gt;</code>	The data version to convert from. The default value is 6.0.
<code>-o</code>	Overwrite duplicate files
<code>-no</code>	Do not overwrite duplicate files. This is the default.

### Log file

This command writes the results of the conversion into the file `maint_cnv.log`. This file is located in the `temp` directory on a UNIX installation.

**Data conversion**

The following table summarizes the files that **maint\_cnv** converts, including filename changes and descriptions.

Data File	Data File Description
.dmcfg.[dat   idx]	List of data managers
.q_cl	List of queues
.scrcfg.[dat   idx]	List of scripts
.tr_cl	List of transaction registers
conf.d/<agent>.init	Directory of initialization files
dm.[dat   idx]	Data manager configuration records
dm_arch.[dat   idx]	Data manager archive records
ds_map.[dat   idx]	Document specifier table for EDI data
ds_map_app.[dat   idx]	Document specifier table for application data
ds_name.[dat   idx]	List of document specifier tables
ds_tptbl.[dat   idx]	List of Trading Partners and document specifiers that you use.
ds_tptbl_app.[dat   idx]	List of Trading Partners and document specifiers by application that you use
pat.[dat   idx]	Pattern records
patlst.[dat   idx]	List of patterns
trn.[dat   idx]	Transaction register records
script/<.scrcfg content>.scr	Directory of scripts
mbox.[dat   idx]	Advanced Data Distribution mailbox file
dlname.[dat   idx]	Distribution list file
dstlst.[dat   idx]	Distribution mailbox list file
mboxfr.[dat   idx]	Mailbox file register

---

**Log file**    The **maint\_cnv** program writes results to the *maint\_cnv.log* file. The log file is in the *temp* directory on a UNIX installation.

---

**Utility limitations**    Although this conversion utility can completely convert Sterling Gentran:Server scripts and initialization files for most users, the utility cannot completely convert complex commands where information is piped into or out of our components.

**RECOMMENDATION**

**We recommend that you always examine the converted initialization files or script files for correctness. It is especially important to examine them if your initialization files or script files contain complex or piped commands.**

---

**UNIX procedure**    Use this procedure to run the **maint\_cnv** command for your IBM® Sterling Gentran:Server® for UNIX product.

Step	Action
1	Go to the command line on your UNIX host machine.
2	Make sure that all queued processes are finished.
3	Stop the data managers in flow routing sequence, beginning with the first data manager in the flow. Use the <b>stopserver</b> command to stop each data manager in turn.  <b>Reference</b> See the <i>Command Reference</i> chapter in the <i>IBM® Sterling Gentran:Server® for UNIX Technical Reference Guide</i> for <b>stopserver</b> instructions.
4	Stop all other Sterling Gentran:Server processes.
5	Run the <b>maint_cnv</b> command from EDI_ROOT for your Sterling Gentran:Server for UNIX 6.2 installation.  <b>Example</b> maint_cnv /gentran60 /gentran62 -v 6.0
6	Press ENTER to start the conversion program.
7	When the program has finished, open the mapcnvrt.log file in the temp folder to check the results.

---

# How to Convert Security Files with sec\_cnv

**Introduction**    The **sec\_cnv** program moves your Sterling Gentran:Server for UNIX user records and passwords to the 6.2 Security Administration installation.

**Before you begin**    Before running the **sec\_cnv** command, you must create your environments in the Sterling Gentran:Server Version 6.2 installation.

**Command format**    This is the format of the command to convert the path from your current Security Administration root directory to the Security Administration root directory for Sterling Gentran:Server version 6.2.

```
sec_cnv <old_sadmin_root> <new_sadmin_root> [-o] [-no] [-v <version>]
```

**Where**

<old_sadmin_root>	Path to the old security administration root directory (\$SADMIN_ROOT/admin)
<new_sadmin_root>	Path to the new security administration root directory (\$SADMIN_ROOT/admin)
-o	Overwrite duplicate errors
-no	Do not overwrite duplicate records. This is the default.
-v <version>	The version number you are converting from. The valid version numbers are: <ul style="list-style-type: none"> <li>▶ 6.0</li> <li>▶ 6.1</li> </ul>

**Data conversion**    This table shows the file that **sec\_cnv** converts.

Data File	Data File Description
db/.usermast.[dat   idx]	User list

**Log file**    The **sec\_cnv** program writes results to the *sec\_cnv.log* file. The log file is in the \$SADMIN\_ROOT/*temp* directory on a UNIX installation.

---

**UNIX procedure**    Use this procedure to run the **sec\_cnv** command for your Sterling Gentran:Server product.

Step	Action
1	If you have not already done so, create your environments in the Sterling Gentran:Server Version 6.2 installation.
2	At the command line, run the <b>sec_cnv</b> command from EDI_ROOT for your Sterling Gentran:Server for UNIX 6.2 installation.  <b>Example</b> sec_cnv /gentran60 /gentran62 -v 6.0
3	Press ENTER to start the conversion program.
4	When the program has finished, open the sec_cnv.log file in the temp folder to check the results.

---

---

# Notices

---

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing

IBM Corporation

North Castle Drive

Armonk, NY 10504-1785

U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing

Legal and Intellectual Property Law

IBM Japan Ltd.

1623-14, Shimotsuruma, Yamato-shi

Kanagawa 242-8502 Japan

**The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:**

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation

J46A/G4

555 Bailey Avenue

San Jose, CA\_\_95141-1003

U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may

vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information is for planning purposes only. The information herein is subject to change before the products described become available. This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

#### COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© IBM 2011. Portions of this code are derived from IBM Corp. Sample Programs.

© Copyright IBM Corp. 2011.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

---

#### Trademarks

IBM, the IBM logo, and [ibm.com](http://ibm.com) are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions

worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "[Copyright and trademark information](http://www.ibm.com/legal/copytrade.shtml)" at [www.ibm.com/legal/copytrade.shtml](http://www.ibm.com/legal/copytrade.shtml).

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency which is now part of the Office of Government Commerce.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.

Linear Tape-Open, LTO, the LTO Logo, Ultrium and the Ultrium Logo are trademarks of HP, IBM Corp. and Quantum in the U.S. and other countries.

Connect Control Center®, Connect:Direct®, Connect:Enterprise, Gentran®, Gentran:Basic®, Gentran:Control®, Gentran:Director®, Gentran:Plus®, Gentran:Realtime®, Gentran:Server®, Gentran:Viewpoint®, Sterling Commerce™, Sterling Information Broker®, and Sterling Integrator® are trademarks or registered trademarks of Sterling Commerce, Inc., an IBM Company.

Other company, product, and service names may be trademarks or service marks of others.