

EN Clean-Trace™ Hygiene Monitoring and Management System

This document is a supplement to the [Clean-Trace™ Hygiene Management Software User Manual](#) and the [Clean-Trace™ Luminometer User Manual](#). This supplement contains instructions for installing or upgrading both the Clean-Trace Hygiene Management Software desktop application to version 1.8.5 and the Clean-Trace LM1 Luminometer Software to version 2.0.31.

The upgrade provides the following improvements:

Reporting capabilities enhanced.

- New and improved widgets, for more insights
- Additional filtering options
- Report column selection and re-order
- Organization logo on PDF reports
- Reporting option: edit, save, search, sort, schedule, email, download and print.

Additional Improvements in the Clean-Trace Desktop software

Additional Improvements in the Clean-Trace LM1 software

Clean-Trace™ Hygiene Management Software navigation

The screenshot shows the main dashboard with several key components highlighted by blue boxes and labels:

- Navigation Tabs:** A vertical sidebar on the left containing icons for Performance, Reports, Testing, and Cleaning.
- Performance Display:** A central dashboard area showing a 'First-test summary' with a circular gauge for '241 points tested', '214 passes (93.9%)', '11 cautions (4.8%)', and '3 fails (1.3%)'.
- Filter Selection:** A horizontal bar above the performance display with dropdown menus for 'TODAY', 'ALL PLANS', 'ALL TEST TYPES', and 'ALL USERS'.
- Global Filters Site/Selection:** A dropdown menu at the top right showing 'LOCATION: Basel, CH (+2)'.
- Organization Configurations:** A 'Manage' dropdown menu next to the location filter.
- Help and About:** A help icon and a user profile icon labeled 'DT'.
- User Profile:** A label pointing to the 'DT' user profile icon.
- Top Failures:** A table on the right side of the dashboard listing failed test points.

Test point	Fails/tests	Fail rate
Filler Head 1	12/30	40%
Huller Pastry Table	3/10	30%
Suction Cylinder	6/25	24%

Sample plan	Total tests	Results graph	Passes	Cautions	Fails	Next run (mm/dd/yyyy)
Asa's Test Plan Rochester, NY	36		32	4	0	09/14/2022
B224 Manufacturing Tests Minneapolis, MN	37		34	3	0	04/01/2022
B225 Morning Run Minneapolis, MN	31		29	1	1	03/08/2022
Building 780 Afternoon Check Basel, CH	50		48	0	2	04/11/2022
Cooling Tanks Test List Basel, CH	5		5	0	0	03/24/2022
Ilian's Sample Plan Minneapolis, MN	45		43	2	0	03/21/2022
FOP Zone Testing Basel, CH	24		23	1	0	03/08/2022
Unplanned tests Minneapolis, MN	16		0	0	0	-

Location and facilities hierarchy: The Clean-Trace Hygiene Management Software enables users to define an organizational structure with up to five hierarchy levels, where Test Points and Sample Plans will be assigned.

The first level of this hierarchy is referred to as “Location” by default. Throughout this document, level 1 will refer to Location or Site.

All hierarchy levels can be renamed if needed to align with your operation, including the first level.

The screenshot shows the 'Locations and facilities' configuration page. At the top, the location is set to 'Dallas-TX (+1)'. Below this, a dropdown menu is set to 'All facilities'. A horizontal bar highlights the hierarchy levels: 'Location', 'Level 2', 'Level 3', 'Level 4', and 'Level 5'. A label 'Location Hierarchy Levels' points to this bar.

```

    graph LR
      Dallas-TX --> Irving
      Dallas-TX --> Plano
      Irving --> Dough Mix
      Irving --> Dough Toss
      Plano --> Sauce Blending
      Plano --> Toppings Department
      Saint-Paul-MN --> Maplewood
      Saint-Paul-MN --> Oakdale
      Maplewood --> B220-South
      Maplewood --> B260-North
      B220-South --> Dough Mix
      B220-South --> Dough Toss
      B260-North --> Sauce Blending
      B260-North --> Toppings Department
    
```

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Preparing for the Clean-Trace™ System Installation

This section provides general system requirements, system components and installation configuration options.

Installation Requirements	
<p>User conducting installation</p>	<ul style="list-style-type: none"> • Ensure the user conducting the installation has administrative privileges on the Host or Client computer. • Ensure the installation user has Full/Modify permission on the C: drive or installation folder. • Ensure Group Policies do not prohibit user or computer from performing this action.
<p>Confirm the Host* computer meets the following minimum requirements.</p> <p><small>*The Host is the Computer where the Clean-Trace Hygiene Management Software will be installed.</small></p>	<p>Operating System</p> <ul style="list-style-type: none"> • Microsoft® Windows® 10, Windows® 11 (Ultimate, Professional and Enterprise editions) • Microsoft® Windows® Server 2016, or Microsoft® Windows® Server 2019 <p>Applications</p> <ul style="list-style-type: none"> • Microsoft® SQL Server: 2014, 2016, or 2019 Edition • IIS or Web Publishing Service is enabled or can be enabled on the Host computer. • At least one of the following Web Browsers: <ul style="list-style-type: none"> ❖ Microsoft® Edge, version 114.0 or higher ❖ Google Chrome™, version 45 or higher ❖ Mozilla® Firefox®, version 41.0.1 or higher <p>Development Tools</p> <ul style="list-style-type: none"> • Microsoft .Net Framework, 4.0 or higher <p>Hardware</p> <ul style="list-style-type: none"> • 2.0 GHz Intel Pentium 4 or similar/faster processor • 1 GB Available RAM (4 GB recommended) • 50 GB free disk space (100GB recommended) • USB 2.0 or higher (Optional if server installation)
<p>Confirm Client* computer meets the following minimum requirements.</p> <p><small>*The Client Computer is the Computer where only the Synchronization Manager will be installed.</small></p>	<p>Operating System</p> <ul style="list-style-type: none"> • Microsoft® Windows®10, or Windows®11 <p>Applications</p> <ul style="list-style-type: none"> • At least one of the following Web Browsers: <ul style="list-style-type: none"> ❖ Microsoft® Edge, version 114.0 or higher ❖ Google Chrome™, version 45 or higher ❖ Mozilla® Firefox®, 41.0.1 or higher <p>Development Tools</p> <ul style="list-style-type: none"> • Microsoft .Net Framework, version 4.0 or higher <p>Hardware</p> <ul style="list-style-type: none"> • USB 2.0 or higher
<p>Recommended applications and settings.</p>	<ul style="list-style-type: none"> • Microsoft® SQL Server Management Studio, will help with: <ul style="list-style-type: none"> - Backing up or restoring database (Frequent database backup is strongly recommended) - Troubleshooting database issues - Database management - Requesting support from • Microsoft® Excel will help with importing or exporting data from or to .CSV or .XLS files. • A PDF Viewer to view reports generated in PDF • The Clean-Trace System is optimized to display best on screens between 1024pixels (standard tablet landscape mode) up to 1680pixels (15.4-inch display)
<p>Ensure anti-virus or firewall does not prevent installation or execution of any feature of:</p> <ul style="list-style-type: none"> ▪ Clean-Trace Hygiene Software ▪ Microsoft SQL ▪ Microsoft IIS. 	<p>Engage your IT group to:</p> <ul style="list-style-type: none"> ▪ Confirm TCP ports 9002-9005 are open inbound and outbound on the computer/network. ▪ Confirm UDP ports 1433-1434 are open inbound and outbound on the computer/network. ▪ Clean-Trace Hygiene Software is not blacklisted in security applications (if necessary)
<p>SMTP Server information if intend to enable email notifications.</p>	<p>Ask your IT group for this information:</p> <ol style="list-style-type: none"> 1. SMTP Server name _____ 2. Port number _____ 3. Domain name _____ 4. Secure Email server (Y/N) _____ 5. Email and Password if secure email server _____

System Components

Web Application



SQL Database



Sync Manager



Luminometer



Installation Configuration Options

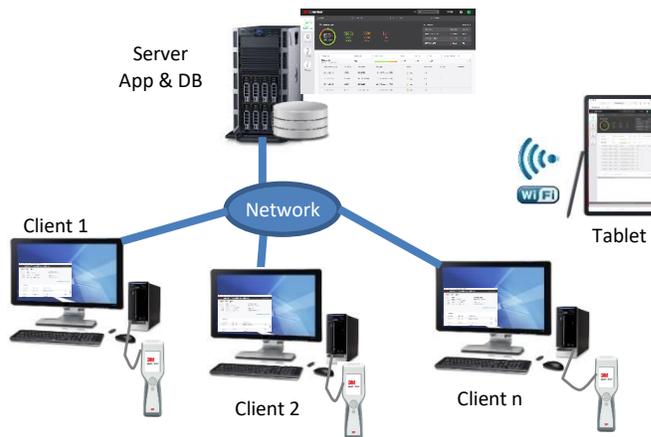
Single Computer



In this configuration:

- All three software components of the system will reside on the workstation.
- Follow instructions for How to Install™ Clean-Trace™ Software on a Server or Single Computer.

Server/Network Installation



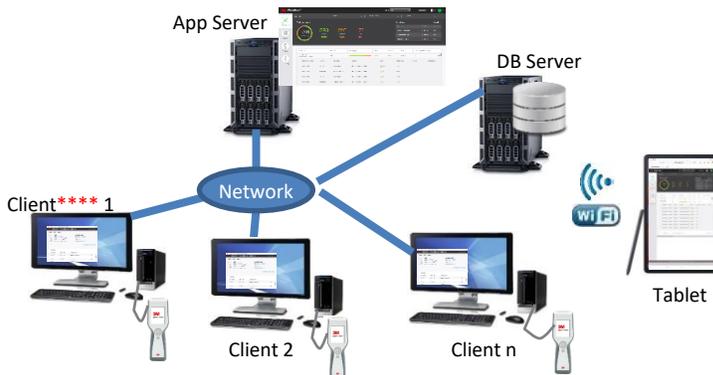
In this configuration:

- The Clean-Trace Software and the SQL database are installed on a server or a centralized computer.
- This centralized computer can be a virtual server, assuming it will not be used for synchronization.
- A Client computer must be a physical workstation, with USB ports.

Server Installation: Follow instructions for How to Install Clean-Trace Software on a Server or Single Computer.

Client Installation: Follow instructions for How to Download, Install and Upgrade Sync Manager on Client Computer.

Server Install with Remote Database Server



In this configuration:

- The Clean-Trace Software is installed on a server or a centralized computer.
- The SQL database resides on a different computer/server.
- The computer hosting the Clean-Trace Software or hosting the SQL database can be virtual server(s). This assumes they will not be used for USB or Bluetooth synchronization.
- Client Computer must be a physical workstation, with USB ports.

Server Installation: Follow instructions for How to Install Clean-Trace Software on a Server or Single Computer, then select the SQL Server to host the database.

Note: Installing user must have administrative rights on the remote SQL server and SQL Instance.

Client Installation: Follow instructions for How to Download, Install and Upgrade Sync Manager on Client Computer.

*APP refers to the Clean-Trace Hygiene Management Software, also known as web application

**DB refers to SQL Server and Clean-Trace SQL database

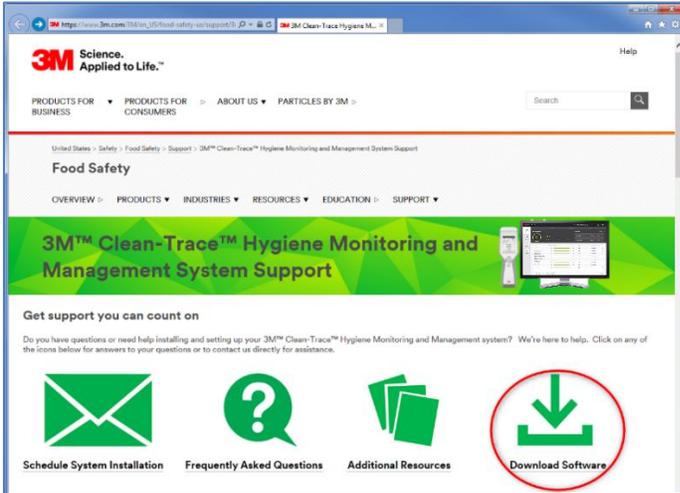
***SM refers to Sync Manager

****Client here refers to workstation with Sync Manager installed

How to Download the Latest Version of the Software

Upgrades to the Clean-Trace™ Hygiene Monitoring and Management System Software are available through the [/Food Safety/Clean-Trace Support](#) website. You can also visit this site with any questions or require support.

1. To download the Clean-Trace Hygiene Monitoring and Management Software, click **“Download Software.”**



2. The **Software Download Registration** screen will open, fill out the registration form, select the instrument type and indicate whether you would like to receive electronic messages from Food Safety. Then click **[Submit]** at the bottom of the page.

Fill the Software Download Registration Form:

- Provide the email address where the download link will be sent to
- Provide general information about you and your company.

Check this box to receive Download link for the Clean-Trace Software installation package.

Click here to submit your registration and software download request.

The screenshot shows the 'Software Download Registration' form. It includes fields for Business Email Address, First Name, Last Name, Company, Country, State/Province, Zip or Postal Code, and Business Phone. Under 'Instrument type (please select one or more)', the '3M™ Clean-Trace™ Systems (LM1)' option is selected. There is a checkbox for 'I would like to receive electronic messages from 3M Food Safety.' At the bottom, there is a 'SUBMIT' button. Callouts from the text blocks on the left point to the email field, the message checkbox, and the submit button.

3. A confirmation screen will be displayed upon successful registration. The system will send an email to the email address used for the registration. The email will come from [3M Food Safety <3m@engage.3m.com>](mailto:3m@engage.3m.com). If an email is not received after a few minutes, check your Spam or Junk email folders.
4. From the email received, click **Download Now** to begin downloading.
5. Before installing or upgrading from a previous version of the Clean-Trace™ Hygiene Monitoring and Management System Software, check the compatibility section in the User Manual Supplement.

3M Science. Applied to Life.™



Thank you for updating your 3M™ Clean-Trace™ Hygiene Monitoring and Management System

Download Instructions:

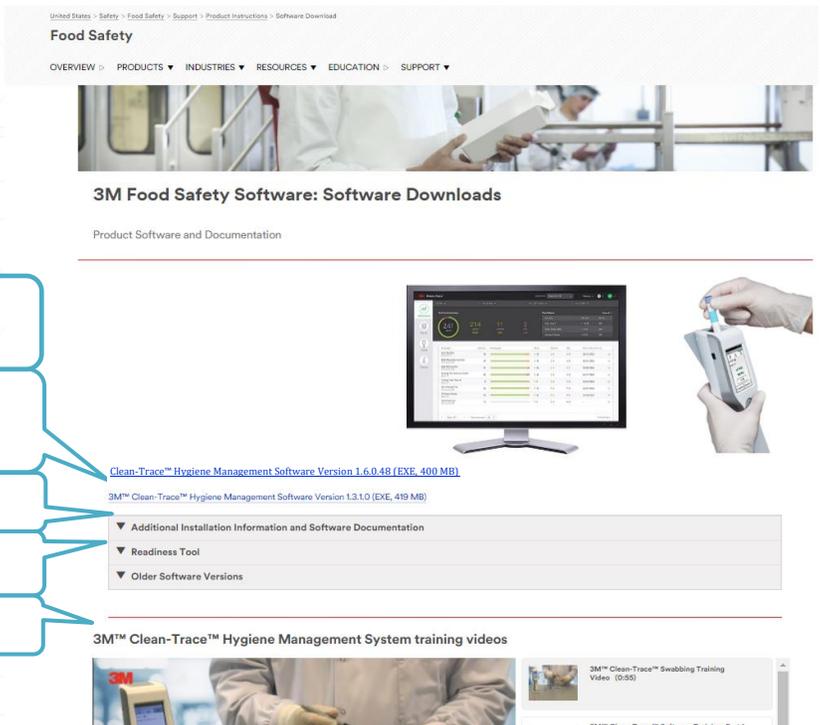
1. Click on "Download Now" to begin download
2. Select "Save As" and save file to PC desktop or server
3. Right click on file from PC desktop or server and Select "Run as administrator" or "Run with Elevated Privileges"
4. Before installing or upgrading from a previous version of the 3M Clean-Trace Hygiene Monitoring and Management System Software, check the compatibility section in the [User Manual Supplement](#)

DOWNLOAD NOW

Need additional info?

Our [software download and support page](#) may help answer any additional questions you might have.

The [software download and support page](#) will take you to the screen below.



Click on ▼ to expand each section to access:

- The Software Installation File
- The User Manual
- The User Manual Supplement

Readiness Tool

Older Software Versions

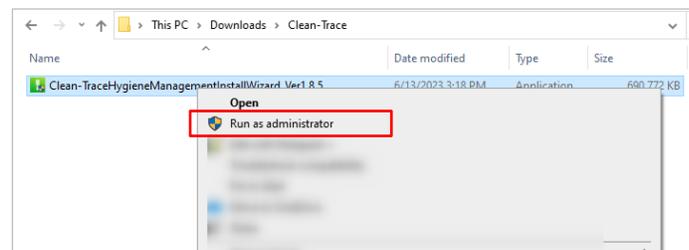
Training Videos

How to install Clean-Trace™ Software on a server or single computer

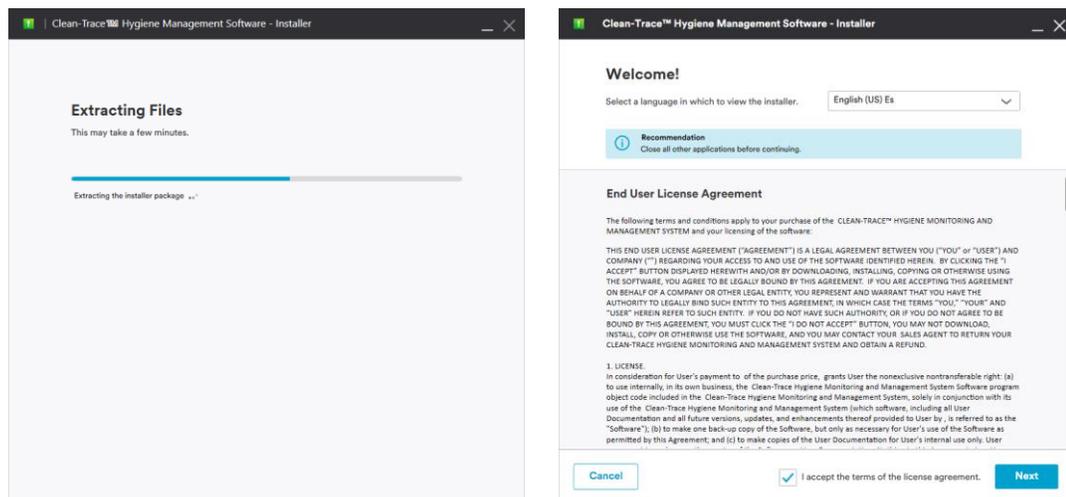
The Clean-Trace Hygiene Management Install Wizard will:

- Enable Internet Information Services (IIS) on the host computer if not already running. IIS is a web server from Microsoft® and available on Microsoft® Windows systems.
- Install the Clean-Trace Hygiene Management Software, which includes the installation of Microsoft® SQL Server® 2016 Express. If a compatible Microsoft® SQL Server is already installed, an option to use an existing Microsoft® SQL Server will be provided during the Clean-Trace Hygiene Management Software installation. Microsoft® SQL database is essential in enabling the storage, retrieval and management of data captured during hygiene and environmental monitoring processes.

1. Close all open applications before starting the installation or upgrade of Clean-Trace Hygiene Management Software.
2. Locate the Clean-Trace Hygiene Management Install Wizard .exe file.
 - a. Right-click
 - b. Select **Run with Elevated Privileges or Run as Administrator**.



3. Accept or Allow prompts for User Account Control, if displayed.
4. After the **Extracting Files** screen, a **Welcome** screen will be presented.
5. Read the End User License Agreement.
 - a. Check the checkbox to accept the terms of the License Agreement.
 - b. Click **“Next”** to continue with the installation process.



The installer will now check the local computer/server for compatibility with the Clean-Trace™ Hygiene Management Software. The check confirms the system capability to run the Clean-Trace Hygiene Management Software.

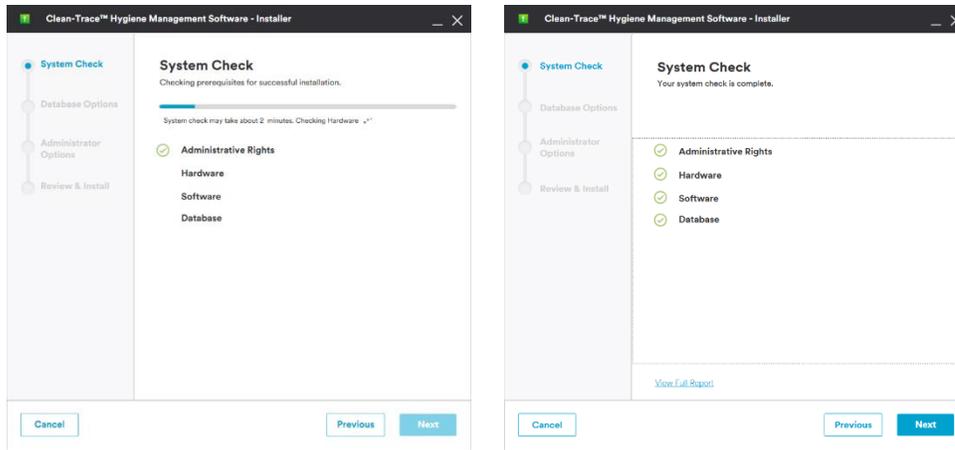
Each checked category will be marked with:

- A green check  if compatible with the software.
- A red  will appear if any issue affecting compatibility is found; suggestions to address the issue will be provided.

- When installing on a virtual machine/server, a warning such as “**USB port not available on computer**” will be displayed. Disregard this warning if this host will not be used for USB synchronization.
- Other warnings may also be displayed for Microsoft Excel, available memory, or others. Warnings will not prevent the installation from proceeding but it will point out areas that may need your attention.

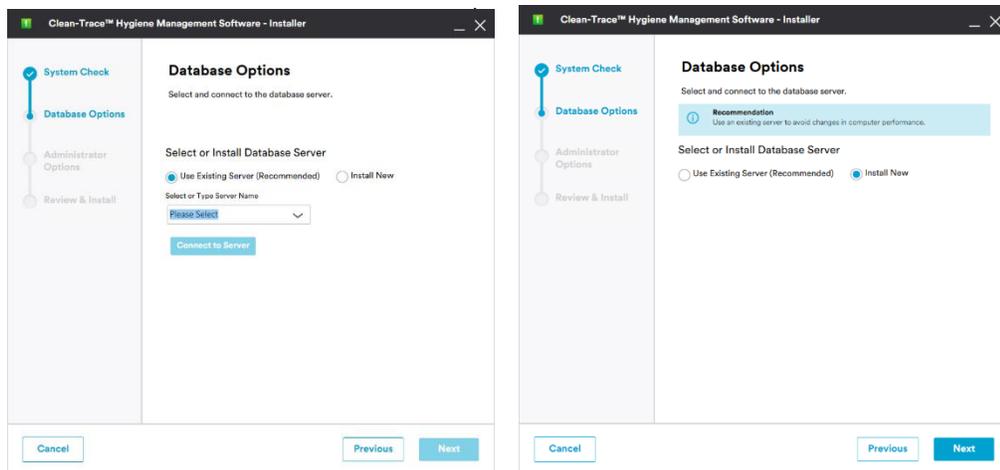
A full report on the system check is available by clicking on the link at the bottom of **System Check** screen.

6. Click “**Next**” to continue.

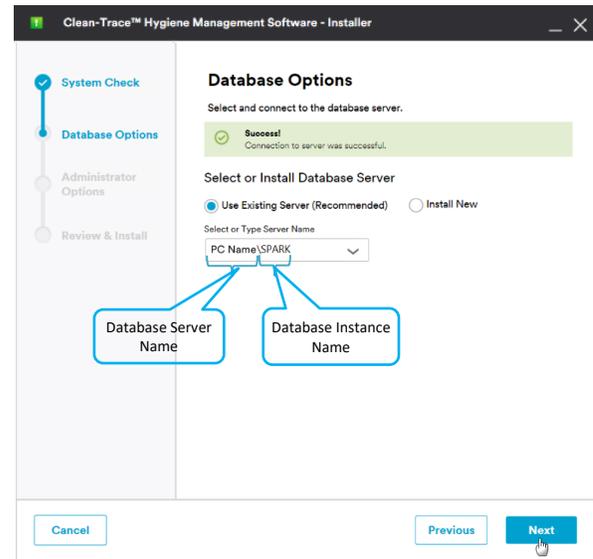
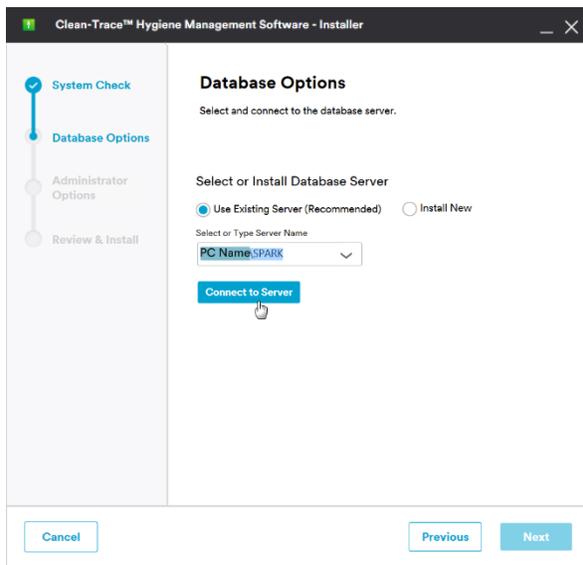


7. On the **Database Options** screen, the user is presented with two database installation options:

- Use Existing Server.** Select if planning on using an existing compatible SQL server database.
- Install New.** Select if a compatible SQL Server database is not present or if a new SQL Server installation is desired for this application. This option will install Microsoft® SQL Server® 2016 Express. Click “**Next**” to continue (from Step 10).



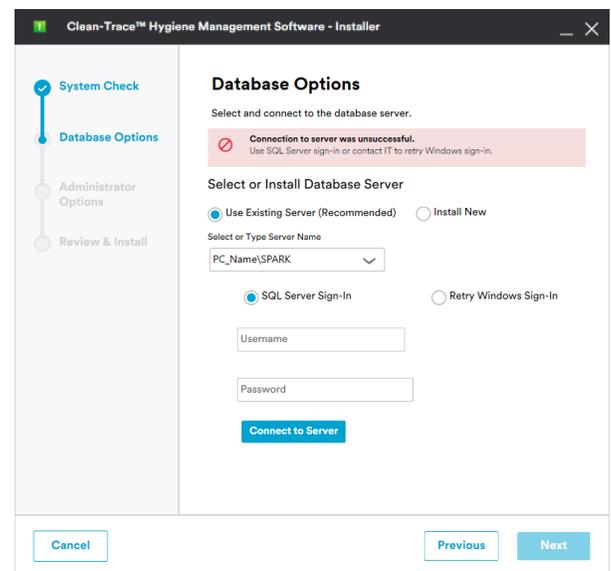
8. If “**Use Existing Server**” option is selected, then select the database server from the Server Name drop-down or type the database server and instance name as shown below. Then click “**Connect to Server**” to verify connectivity to the selected database server.



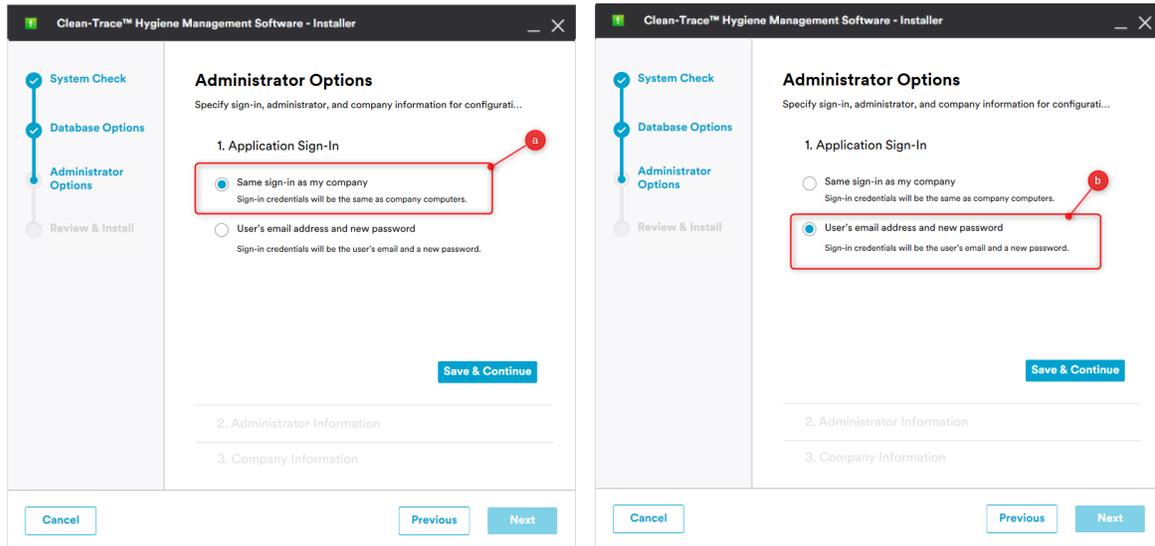
9. The **Next** button is enabled if the connection to the SQL database server was successful. Click “**Next**” to continue with the installation and go to Step 10.

If a message displays, showing that the connection to the SQL database server was not successful, follow the steps below.

- Ensure that the SQL Server Instance name is correct.
- Ensure that the SQL Server Instance is running.
- Select to connect to the server using an alternate database specific login.

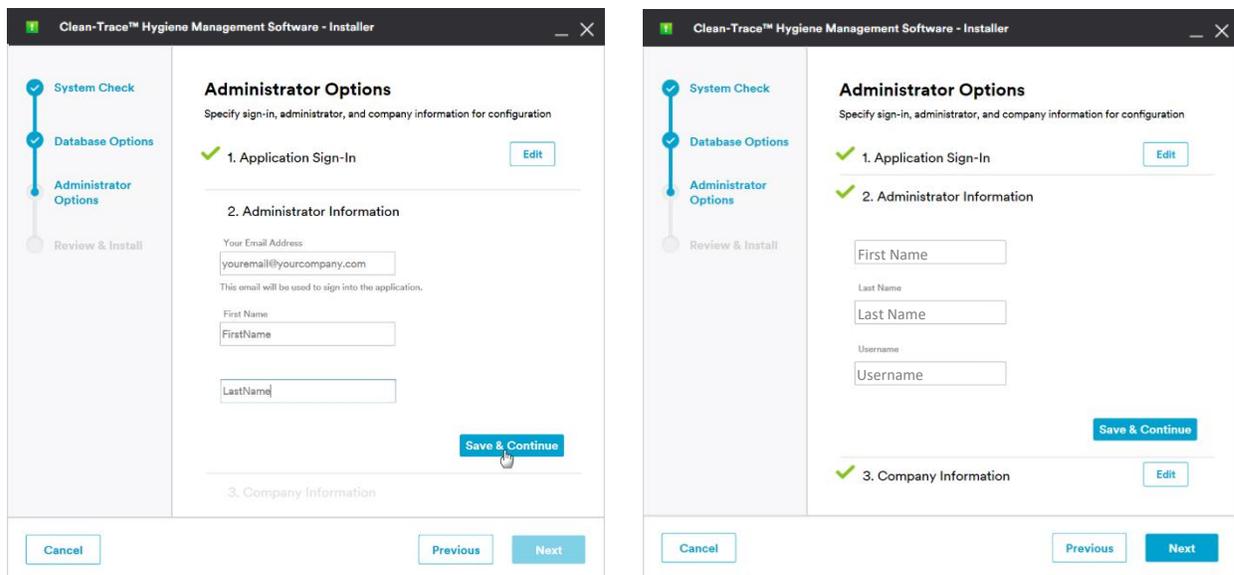


10. The **Administrator Options** screen allows users to choose the desktop software sign-in option. Two authentication methods are supported:
- Same sign-in as my company:** This login is typically the same username and password that is being used to login on your company’s computers/network.
 - User’s email address and new password:** Use an email address and a new password that is specific for the Clean-Trace Hygiene Management Software.

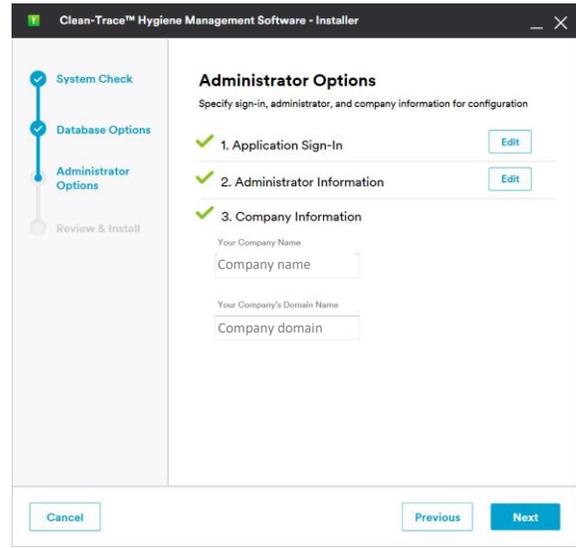
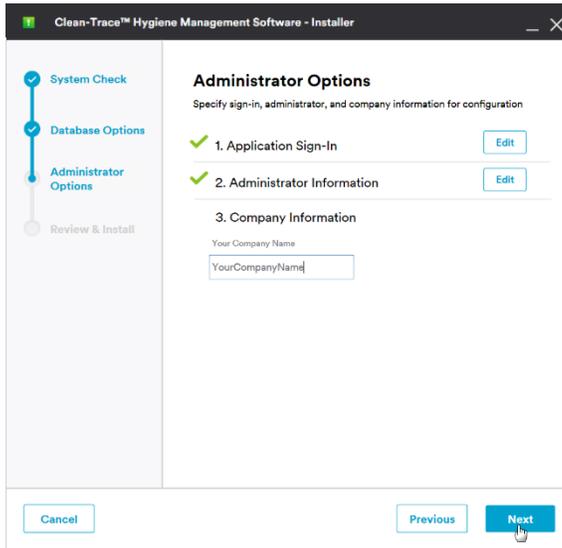


11. Click **“Save & Continue”** to proceed.

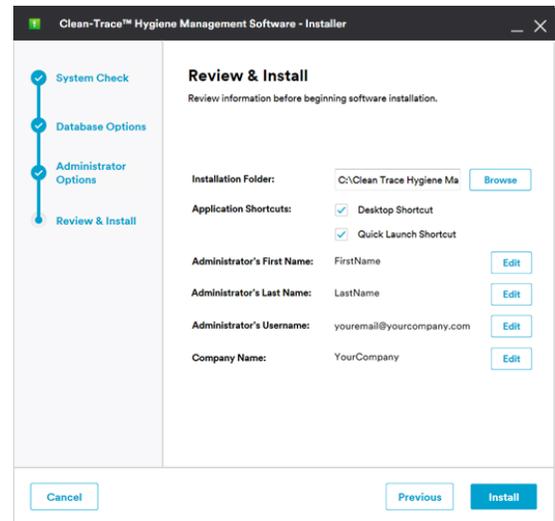
12. On the **Administrator Options > Administrator Information** screen, enter information for the software administrator, then click **“Save & Continue”** to proceed.



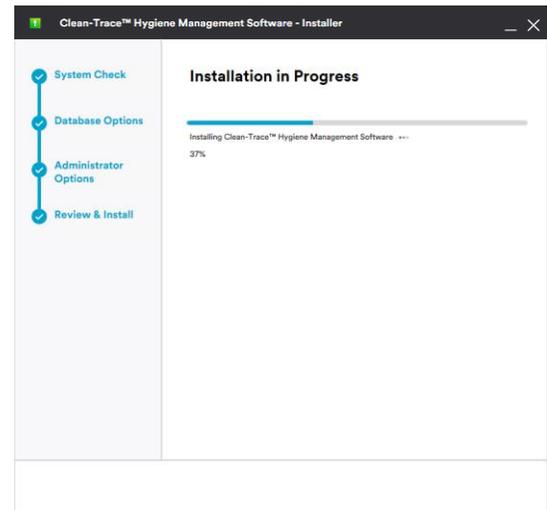
13. On the **Administrator Options > Company Information** screen, enter the company name, then click **“Next”** to proceed.



14. On the **Review & Install** screen, review the information and click **“Install”** to continue.

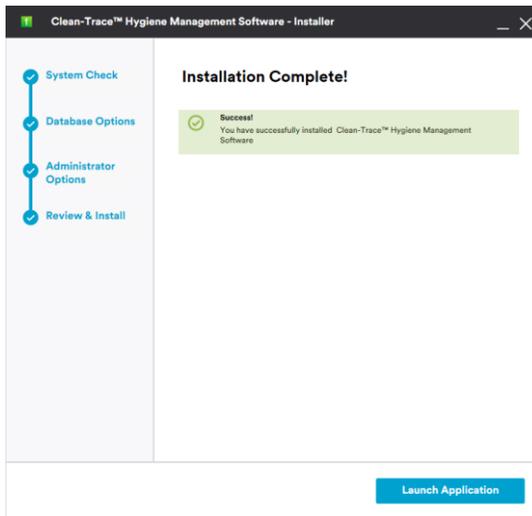


15. The **Installation in Progress** screen will open, and installation will begin.



16. During the installation process, several pop-up windows may be displayed. Select **“Allow”** or **“Install”** in each instance to continue through the install process.

17. The **Installation Complete** screen is displayed when the software is successfully installed. Click on **“Launch Application”** to launch the web application. The web application will open using your default web browser.



Complete the steps below to create another administrator account, for example, a Quality Assurance (QA) account that can be used for setting up the **™ Clean-Trace™ Hygiene Management Software**.

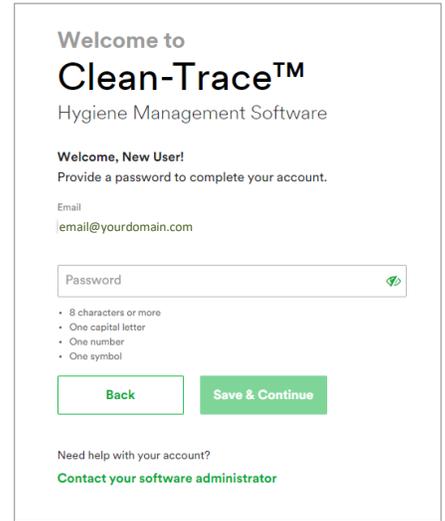
18. Log-in using the administrator information provided in step 12. If, in step 10, you opted to log-in with **“User’s email address and new password,”** you will be prompted to set your new personalized password. If you selected **“Same sign-in as my company,”** you will need to provide your Windows password to log in.
- Enter the Administrator email or username provided during installation and click **“Continue.”**

- If the email or username is wrong or does not match any user’s credential present in the software, you will not be able to proceed.

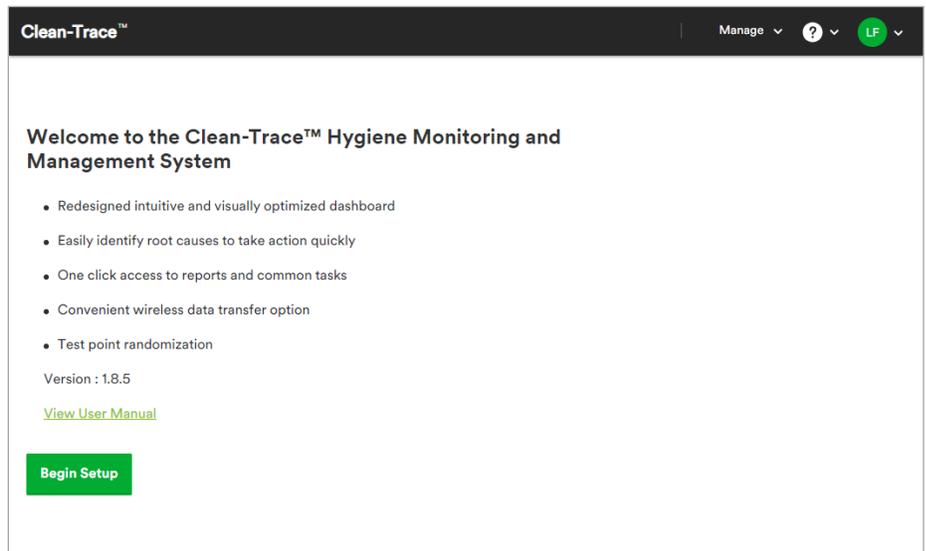
- c. When the email or username matches the one provided during installation, the password field will display and prompt the user to set a new password for this account.

Set the password, then click **“Save & Continue.”**
 The new password must meet minimum password requirements:

- At least 8 characters long
- At least one capital letter
- At least one number
- At least one symbol

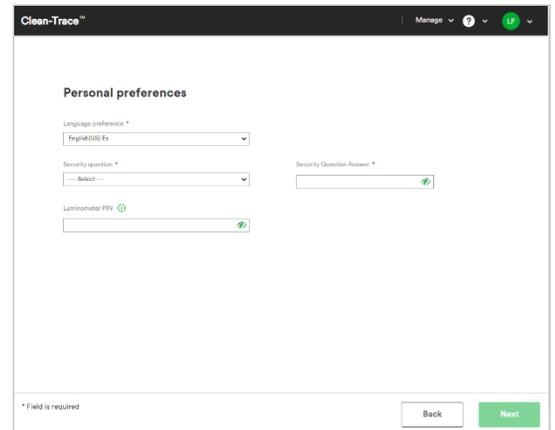


- 19. Click **“Begin Setup”** on the welcome screen.



- 20. In the **Personal preferences** screen, verify language preference and set a secret question for password reset. Then enter the answer to the secret question.
- 21. Luminometer Pin Code set up can be skipped at this step.

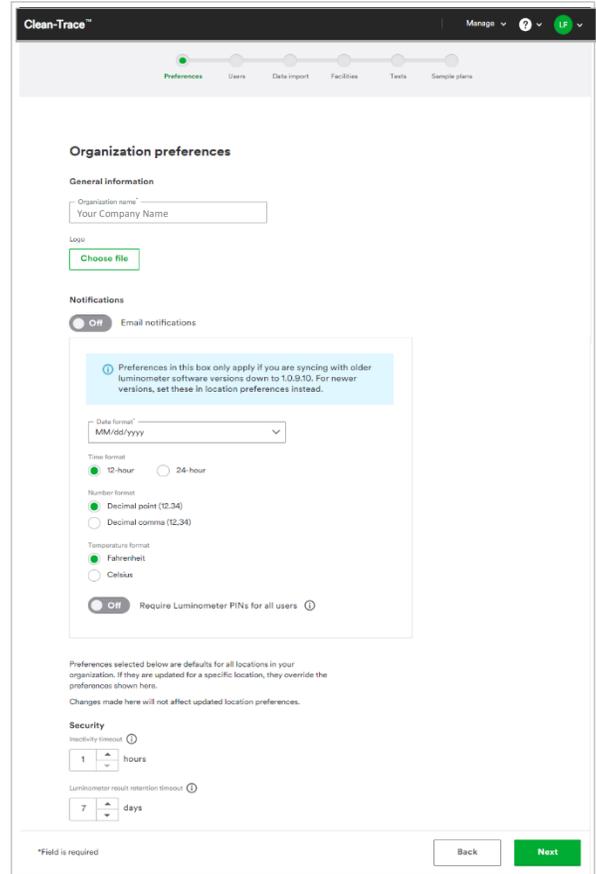
Activation of the Pin Code for the entire organization or a specific location will be done in the **Organization Preferences** screen or the **Locations and facilities** screen.



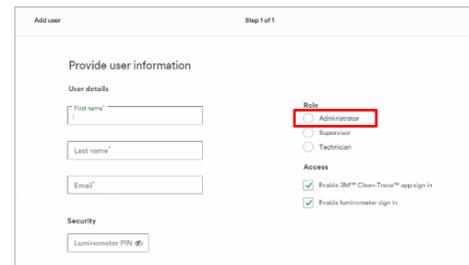
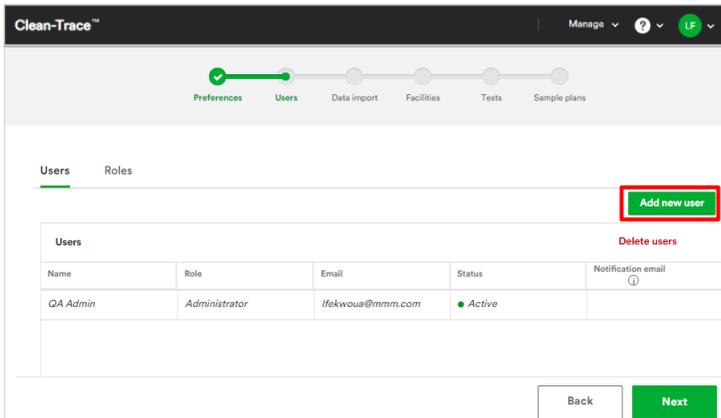
22. In the Organization Preferences screen, users have the option to customize settings to align with organizational needs:

- a. Email notification can be enabled
- b. Temperature, date, and number format
- c. Pin code can be enabled for extra security on LM1 Luminometers
- d. Inactivity timeout
- e. Retention policy for Test results on the LM1 Luminometer

Click **“Next”** and all entries will be saved. A green banner will appear at top, to confirm settings have been saved.

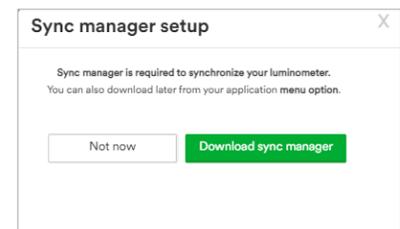


23. Create additional **Administrator** user(s) e.g., QA Manager by clicking on **“Add User.”**



Note: After the initial setup of the Clean-Trace™ Hygiene Management Software each new user will see the **“Sync manager setup”** screen with a link to download the Sync Manager. Please ignore and close this screen by clicking on **“X”** at the top right corner of the screen if:

- You just installed the Clean-Trace Hygiene Management Software on this computer.
- You have the Sync Manager already installed on this computer.
- You are not ready to install the Sync Manager on this computer.



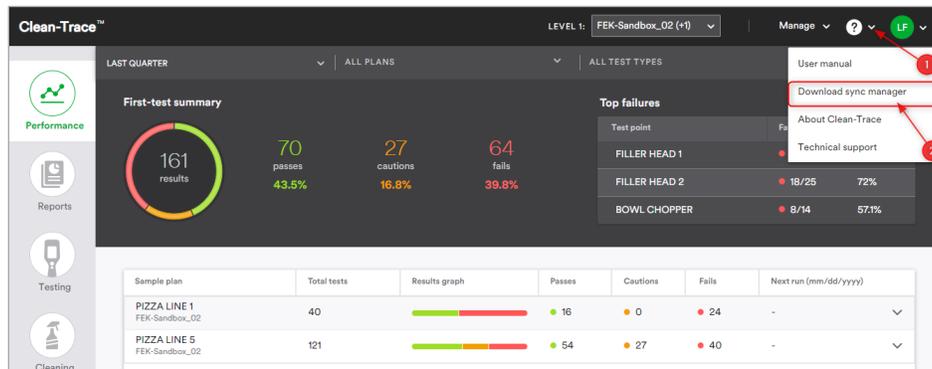
Download, install and upgrade sync manager on client computer

This section is applicable to Server/Network installations only.

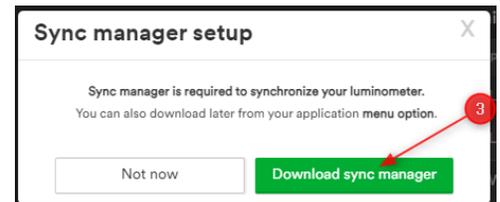
The Sync Manager is automatically installed/upgraded on the Host computer (Desktop/Workstation) as part of initial software installation/upgrade.

Download sync manager

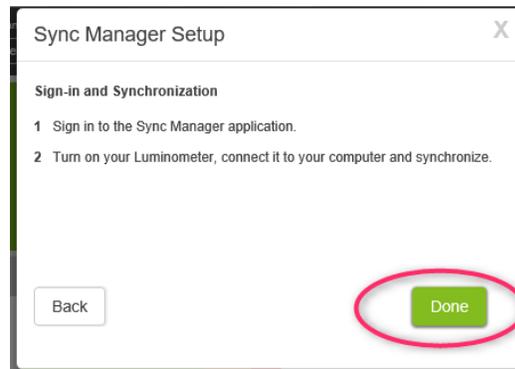
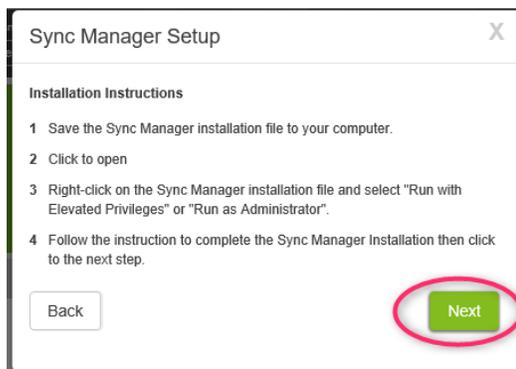
Upon first time login, users will be presented with a Sync Manager Setup notification screen that provides the rationale for installing Sync Manager. The Sync Manager can also be downloaded from the Clean-Trace™ Hygiene Management Software under the **Help (?)** menu as shown below.



- a. Select **Download Sync manager**. A window will open with **Sync manager setup** instructions. At the same time a **Save as** window will open. **Note that the file name contains your server's name**. Select **"Save as"** and specify the save Location.



- b. On the **Sync manager setup** screen, click **"Next"** and **"Done"** in the following window.



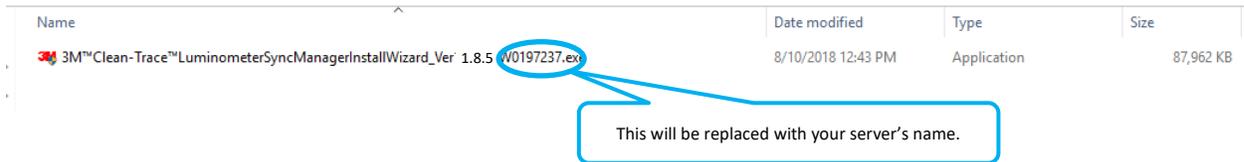
- c. When the Sync manager installer download is complete, the window below will be displayed. Select **Open folder** to access the download location.



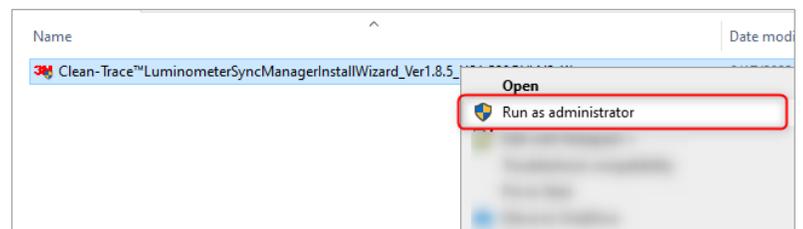
Install Sync manager

Follow the steps below to install the Sync manager.

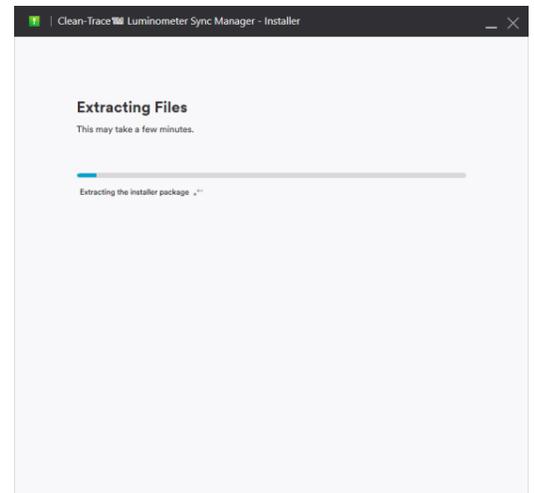
- a. Navigate to the Sync manager installer download location. Locate the Sync manager installer.



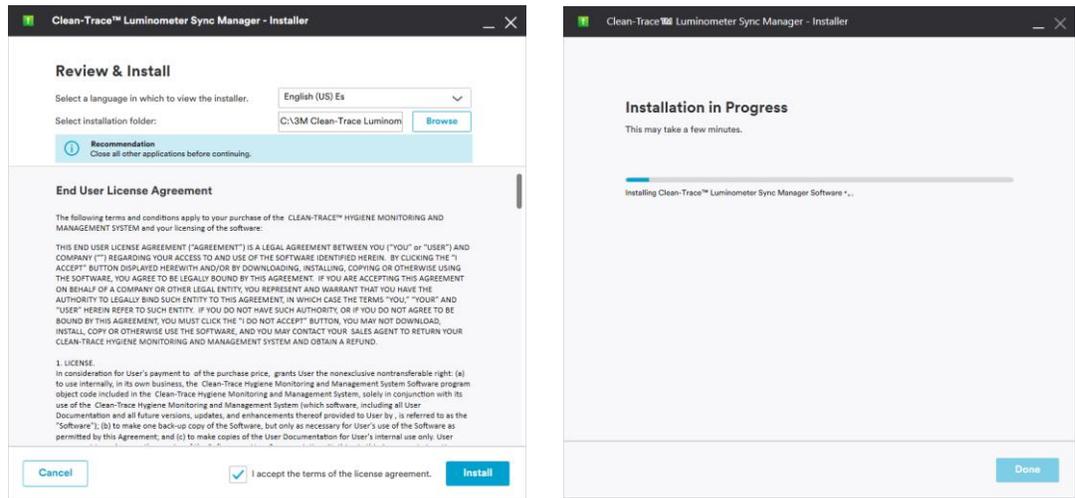
- b. Right click on the Sync manager installer and select **Run with Elevated Privileges** or **Run as Administrator**.



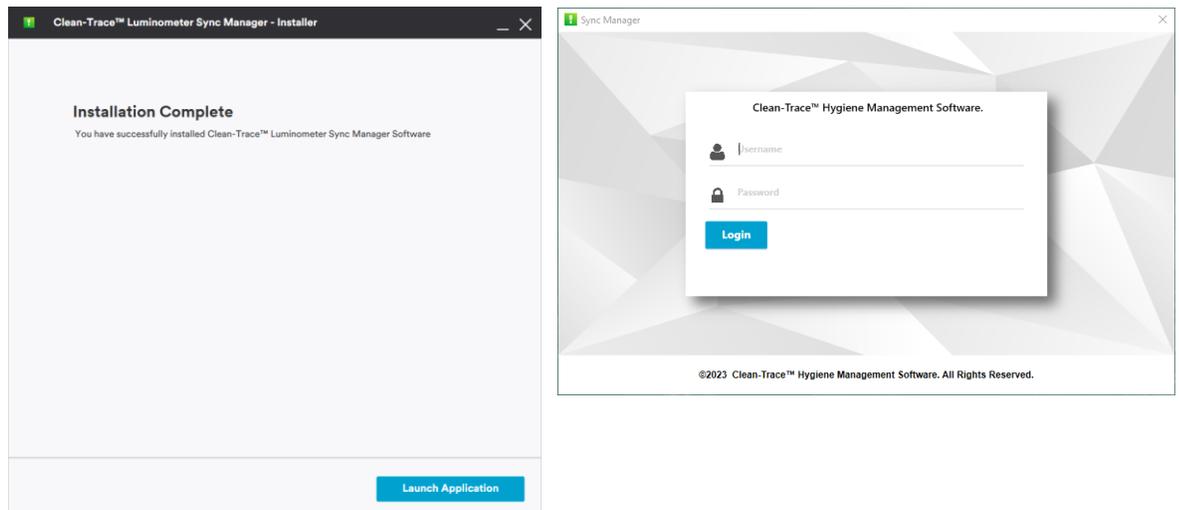
- c. If you see the “**Confirm Elevation**” window, click “**Allow**,” file extraction will start.



- d. The **Review & Install** screen will display after completion of file extraction. The user will have the option to select the language and installation location. Accept the License Agreement (1) and click “**Install**” (2) to continue the installation.



- e. The **Installation Complete** screen will be displayed to indicate completion of the Sync manager installation. Click **“Launch Application”** to finish and start the Sync manager.



Upgrade Sync manager

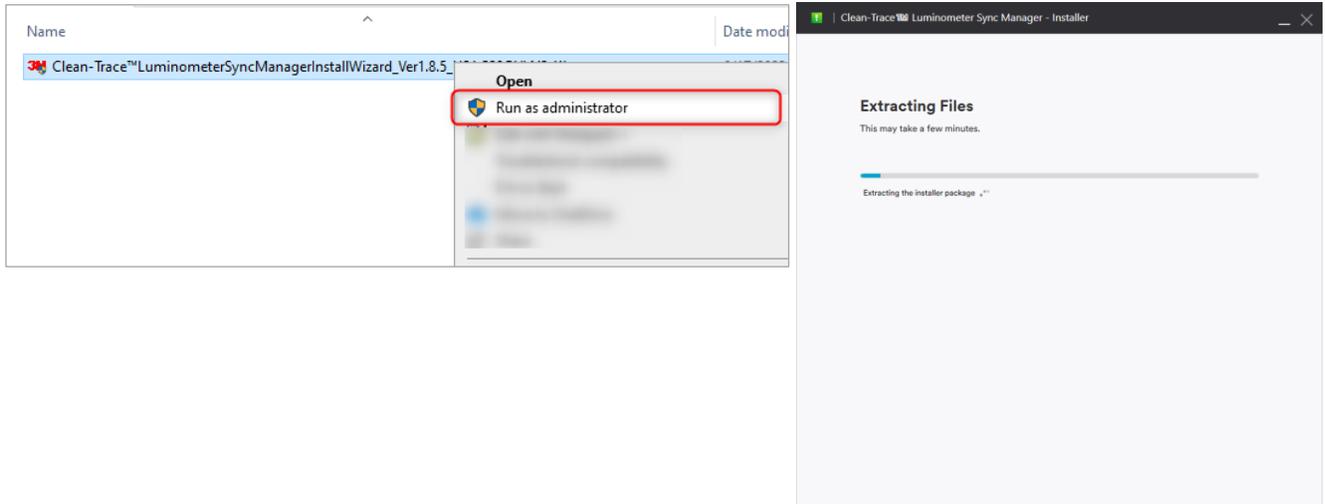
Follow the steps below to upgrade the Sync manager.

- a. Navigate to the location the Sync manager installer was saved and locate the Sync manager installer.



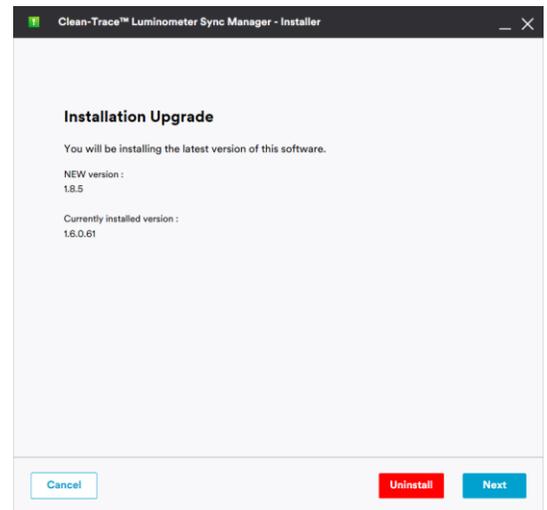
- b. Right click on the Sync Manager installer and select **Run with Elevated Privileges** or **Run as Administrator**.

- c. If you see the **Confirm Elevation** window, click **“Allow”** and the file’s extraction will start.

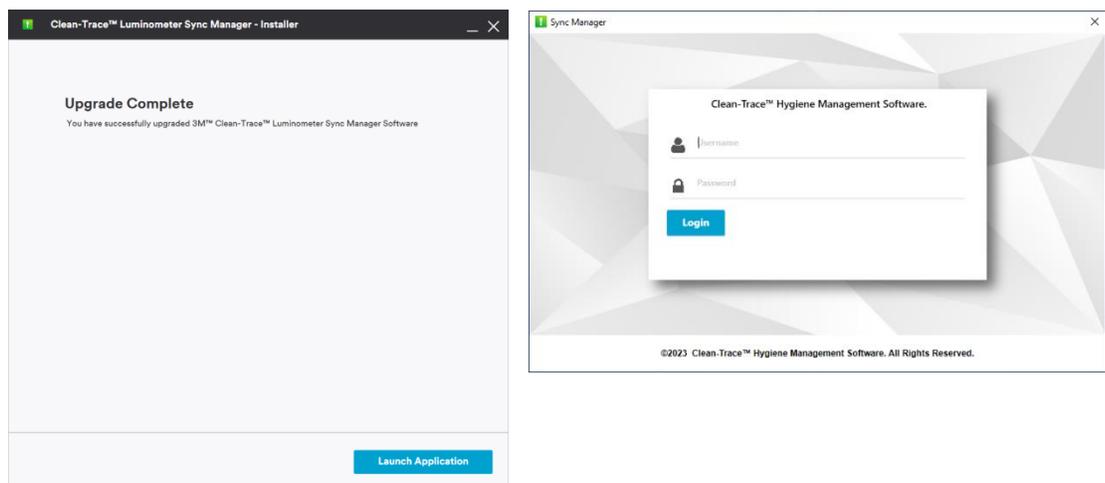


- d. The **Sync manager installer** screen has two options:
- Uninstall the current Sync Manager installation
 - Continue with the upgrade

Click **“Next”** to continue with the upgrade.



- e. The **Upgrade Complete** screen will be displayed to indicate completion of the Sync manager upgrade. Click **“Launch Application”** to finish the upgrade and start the Sync manager.



After the Sync Manager upgrade is complete, follow instructions in section below for [Upgrade LM1 Luminometer](#) to the APK version 1.4.0.26 or to the Linux version 2.0.31.

Upgrade the Clean-Trace™ Hygiene Management Software from a previous version

Backward Compatibility



Software upgrade backward compatibility

Before upgrading the Clean-Trace Hygiene Management Software verify that your current Clean-Trace Hygiene Management Software is one of the following versions:

▪ Version 1.6.0.48	▪ Version 1.4.0.2
▪ Version 1.5.0.28	▪ Version 1.3.1.2
▪ Version 1.5.0.22	▪ Version 1.3.1.0

If upgrading from a version different from those above, request assistance by clicking on the link below, or by contacting your Neogen representative.

[Get installation help](#)

For detailed instructions on how to check your Clean-Trace Desktop Software version, and your LM1 Luminometer Software version, refers to the section below titled "[Information for Users](#)".



Synchronization backward compatibility

LM1 Luminometers running any of the APK versions listed below, will be able to successfully synchronize test results with the Clean-Trace desktop software version 1.6.0.48.

▪ Version 2.0.31	▪ Version 1.3.0.10
▪ Version 2.0.22	▪ Version 1.2.0.5
▪ Version 2.0.14	▪ Version 1.1.1.1
▪ Version 1.4.0.26	▪ Version 1.1.1.0

During USB synchronization, the user will be prompted to upgrade the Clean-Trace software running on the connected LM1 Luminometer. Follow steps on LM1 screen to accept and install the latest application on the connected LM1 Luminometer.

The upgrade process

The Upgrade Wizard will preserve user data when a successful software upgrade is performed.



Before initiating the upgrade of the Clean-Trace Hygiene Management Software:

1. Synchronize all your Luminometers.
2. Perform a Clean-Trace SQL database backup.
3. Update the Clean-Trace Software on the LM1 Luminometers after successfully upgrading the desktop software, and Sync Manager(s).

Compatible LM1 Luminometer application to this Clean-Trace desktop software v1.8.5 include:

- **LM1 Software version 2.0.31**
- **LM1 Software version 1.4.0.26**

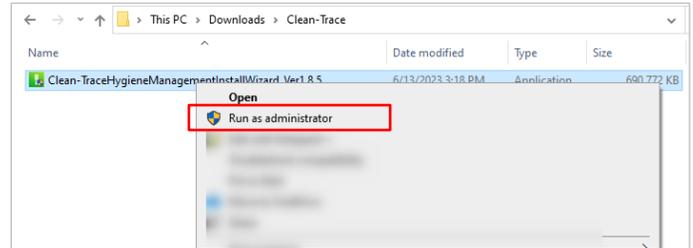
To back up your Clean-Trace database, use the instructions starting on Page 26 of the [Clean-Trace Hygiene Management Software User Manual](#) in the section titled "Backing up the Database."

For desktop or standalone installation

Follow the steps below to upgrade the Clean-Trace Hygiene Management Software:

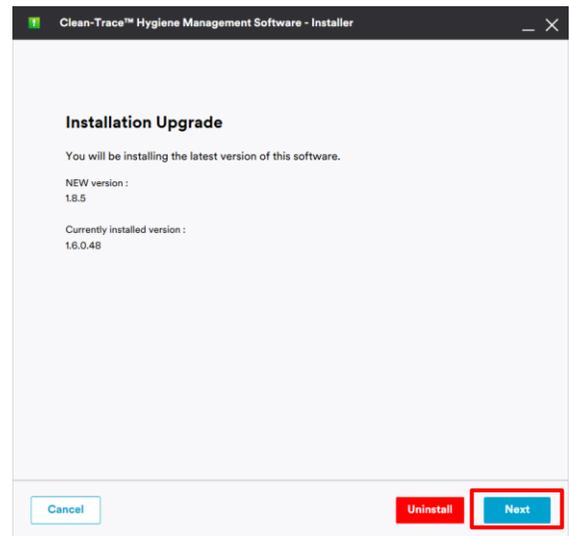
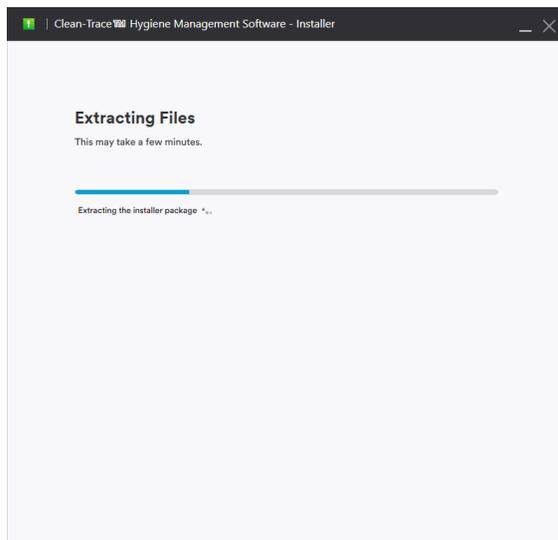
- Run the software installation file from the PC desktop or server computer - refer to [How to Download the Latest Version of the Software](#).

Note: Be sure to run with elevated privileges or run as administrator. Accept prompts for User Account Control, if displayed.

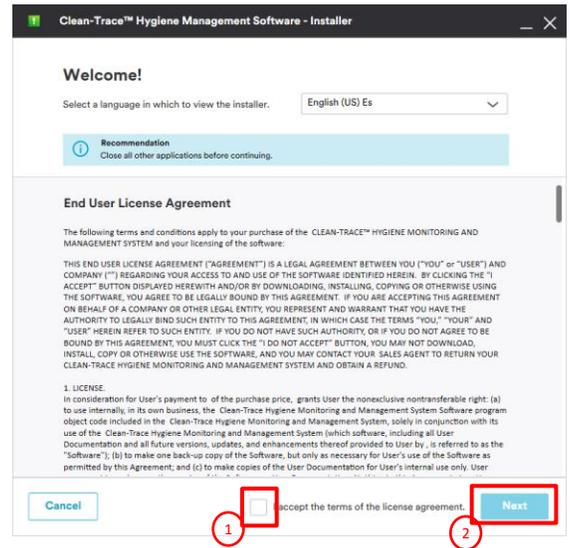


- The upgrade wizard will start **Extracting Files**, then the **Installation Upgrade** screen will display. This screen will display your current Clean-Trace software version, and the new software version you are about to upgrade to.

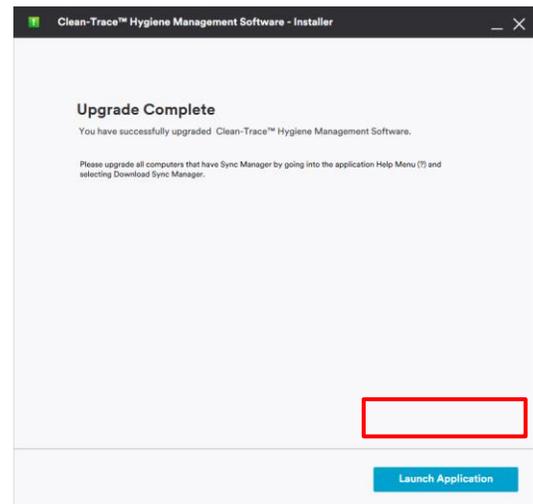
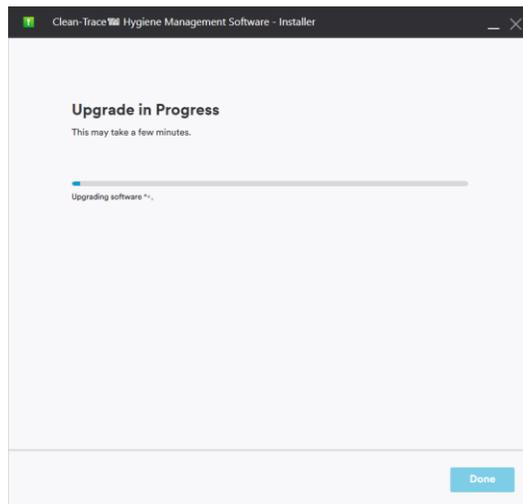
Click **“Next”** to continue with the upgrade process.



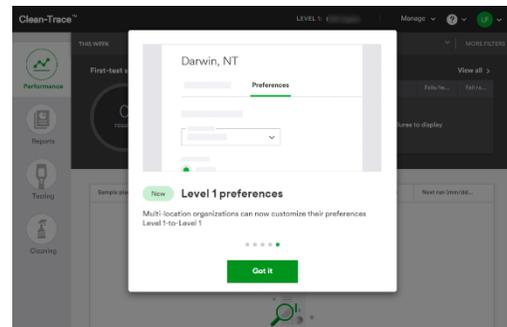
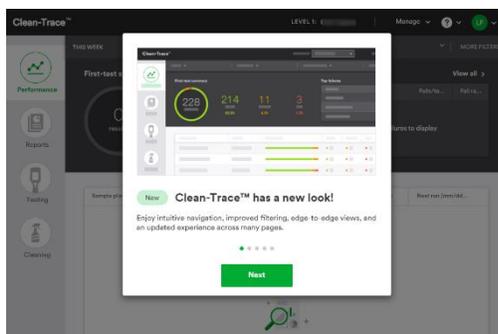
- c. The **Welcome** screen will display; read the End User License Agreement, check the checkbox to accept the terms of the License Agreement and click **“Next”** to continue with the installation process.



- d. The **Upgrade in Progress** screen will display.
- e. Several pop-up windows may be displayed throughout the upgrade process depending on your computer system. Select **“Allow”** or **“Install”** if necessary, to continue through the upgrade process.
- f. The **Upgrade Complete** screen will be displayed when the software is successfully upgraded. Click **“Launch Application”** to launch the web application. The web application will open using your default web browser.



- g. On first login following the Clean-Trace software upgrade, the user will be presented with a screen containing some of the major improvements in this release. Click **“Next”**, then **“Got it”** to continue.





Clean-Trace™ software upgrade notes

- This software upgrade will not alter any existing content or configuration(s). However, due to improvements in this release, additional information or adjustments may be required.
- Test type was improved in the previous Clean-Trace™ Software version 1.4.0.2. Numeric (0/1) Pass/Fail is no longer accepted.
- Starting with Clean-Trace software version 1.5.0.22
 - Users, Test types, cleaning variables and Sample plans are specific to Location - Level 1
 - Location (Level 1) requires country, state/province, city, and time zone.
- If upgrading from Clean-Trace software version 1.3.1.0, 1.3.1.2 or 1.4.0.2, the user could be directed into the data reconciliation process. Refer to the section on data [reconciliation process](#) for additional information.
- Review existing settings after upgrading your Clean-Trace Software.

For server or network installations

- a. Clean-Trace Software must be upgraded on the Host computer. Follow the steps to [upgrade the Clean-Trace installation on your Clean-Trace application server or Host](#).
- b. The Sync Manager must be upgraded on all Client computers. Follow the steps to [upgrade the Sync Manager on each Client computer](#).
- c. Synchronize all LM1 Luminometers via USB and accept to upgrade the Clean-Trace software on each LM1 Luminometer when prompted during the synchronization.

Updates to this version of Clean-Trace™ Hygiene Management Software (v1.8.5)

Reports capabilities enhanced

- New and improved widgets, for more insights
 - Test summary
 - Results overview
 - Top failures
 - Calendar view previously referred to as MSS
- Additional filtering options
- Report column selection and re-order
- Organization logo on PDF reports
- Reports options: edit, save, search, sort, schedule, email, download

Improvements to the Clean-Trace Desktop software

- Renewed desktop icon
- Custom entries for Location details (city, state)
- Data archive
- Data export
- Test type order in Test points
- Test point order in Sample plan
- Test results order in Sample plan results details
- Facilities deletion option
- Synchronization manager

Improvements in the Clean-Trace LM1 software

- Wi-Fi authentication includes Extensible Authentication Protocol (EAP)
- Non-Latin language fonts referred to as special characters

Reports capabilities enhanced

New and improved widgets, for more insights

The Clean-Trace™ Hygiene Management Software version 1.8.5 includes updated reports features. Functionality has been re-designed to provide easier access to insights for end-users.

- **The Reports landing page**

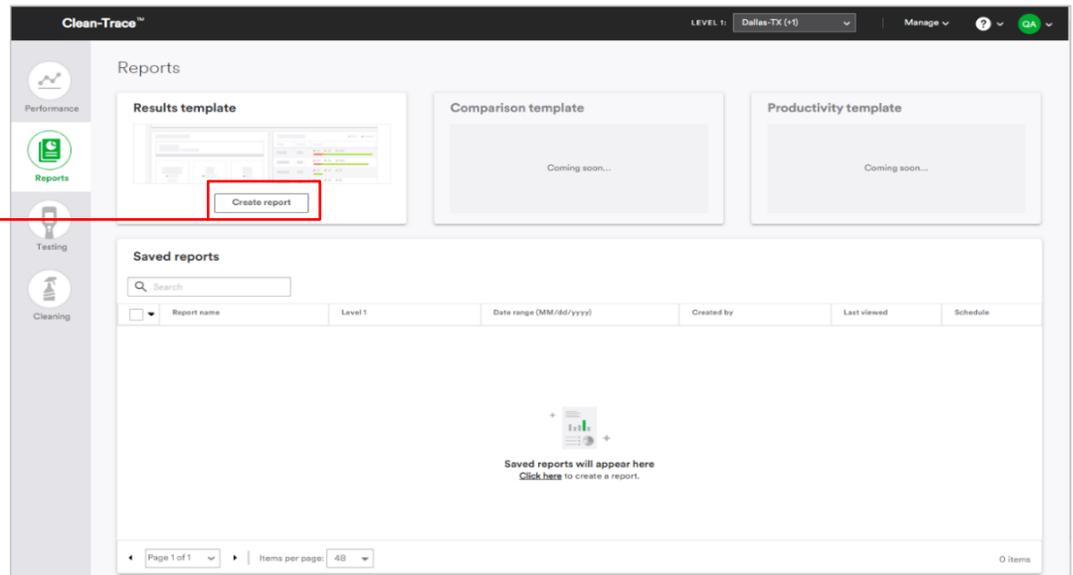
The first time a user navigates to the reports section, the saved reports section will be empty, and will remain empty until the user saves a report.

To create a new report, click on **[Create report]** in the **Results template** section.

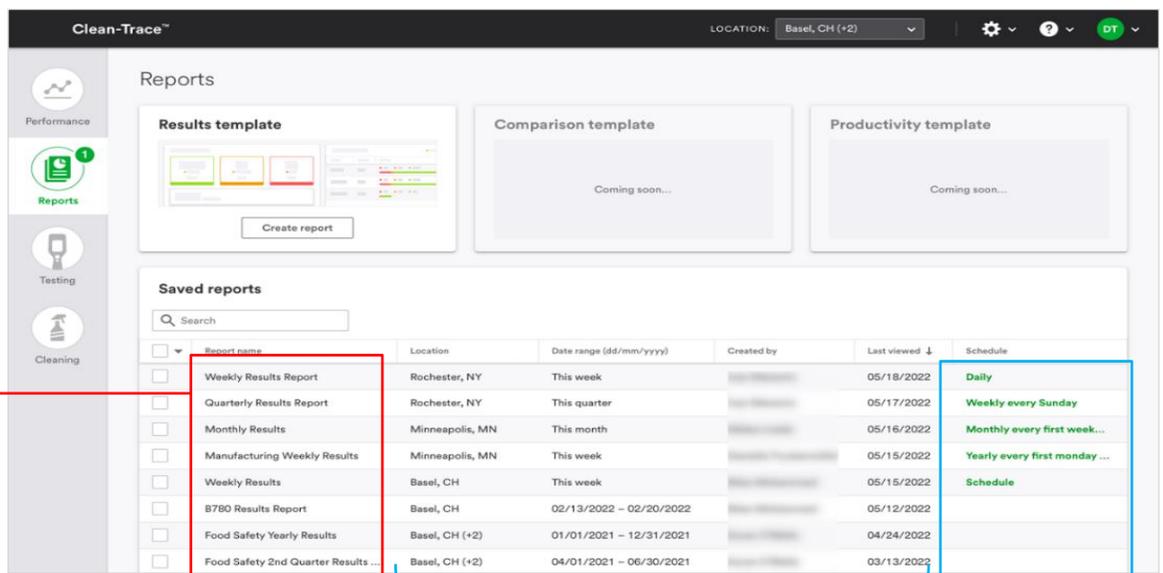
Initial filter for new reports will be defaulted to the **Performance** view filter selection.

To open previously saved reports, locate and click the Report name in the **Saved reports** section, scroll or use the search functionality as necessary.

Click to create a report



Saved reports, Click to open

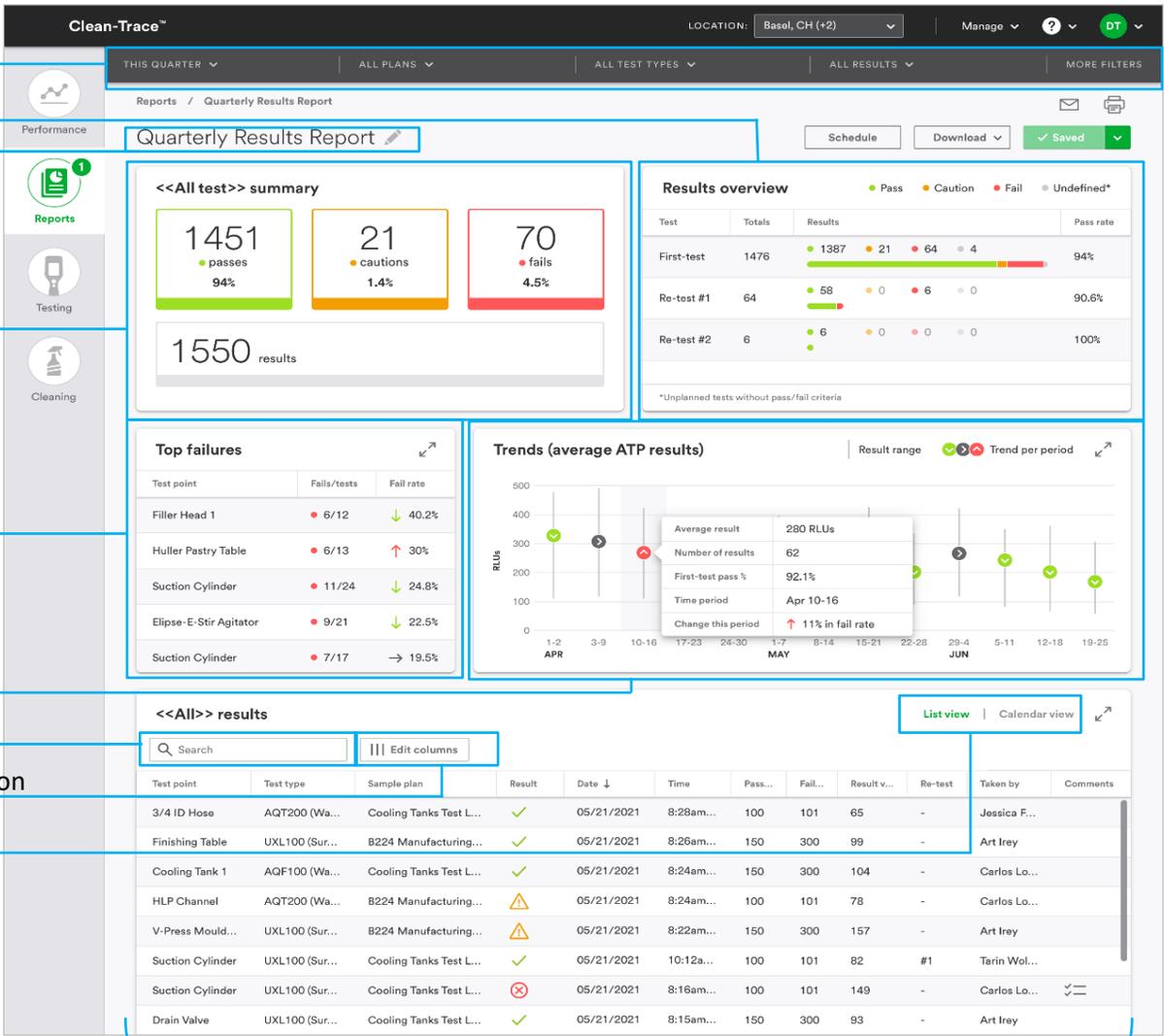


Other report details

Report scheduling status

▪ **Report view and widgets overview**

The widgets are built with option to expand to full screen, by clicking on  at top right.



Report filters

Result overview

Report name Quarterly Results Report

Test summary

Test summary widget

Top failures

Test point	Fails/tests	Fail rate
Filler Head 1	6/12	40.2%
Huller Pastry Table	6/13	30%
Suction Cylinder	11/24	24.8%
Ellipse-E-Stir Agitator	9/21	22.5%
Suction Cylinder	7/17	19.5%

Trends chart

Trends (average ATP results)

Test point search

Column selection

List/Calendar

All result details

Test point	Test type	Sample plan	Result	Date	Time	Pass...	Fail...	Result v...	Re-test	Taken by	Comments
3/4 ID Hose	AQT200 (Wa...	Cooling Tanks Test L...	✓	05/21/2021	8:28am...	100	101	65	-	Jessica F...	
Finishing Table	UXL100 (Sur...	B224 Manufacturing...	✓	05/21/2021	8:26am...	150	300	99	-	Art Ire...	
Cooling Tank 1	AGF100 (Wa...	Cooling Tanks Test L...	✓	05/21/2021	8:24am...	150	300	104	-	Carlos Lo...	
HLP Channel	AQT200 (Wa...	B224 Manufacturing...	⚠	05/21/2021	8:24am...	100	101	78	-	Carlos Lo...	
V-Press Mould...	UXL100 (Sur...	B224 Manufacturing...	⚠	05/21/2021	8:22am...	150	300	157	-	Art Ire...	
Suction Cylinder	UXL100 (Sur...	Cooling Tanks Test L...	✓	05/21/2021	10:12a...	100	101	82	#1	Tarin Wol...	
Suction Cylinder	UXL100 (Sur...	Cooling Tanks Test L...	✗	05/21/2021	8:16am...	100	101	149	-	Carlos Lo...	
Drain Valve	UXL100 (Sur...	Cooling Tanks Test L...	✓	05/21/2021	8:15am...	150	300	93	-	Art Ire...	

Test summary widget

Test summary widget previously **First test summary**, now offers other summary option, selectable from Report **“More filters”**

- First tests
- Re-tests
- Final tests
- Any combination of the 3 options, including all tests.

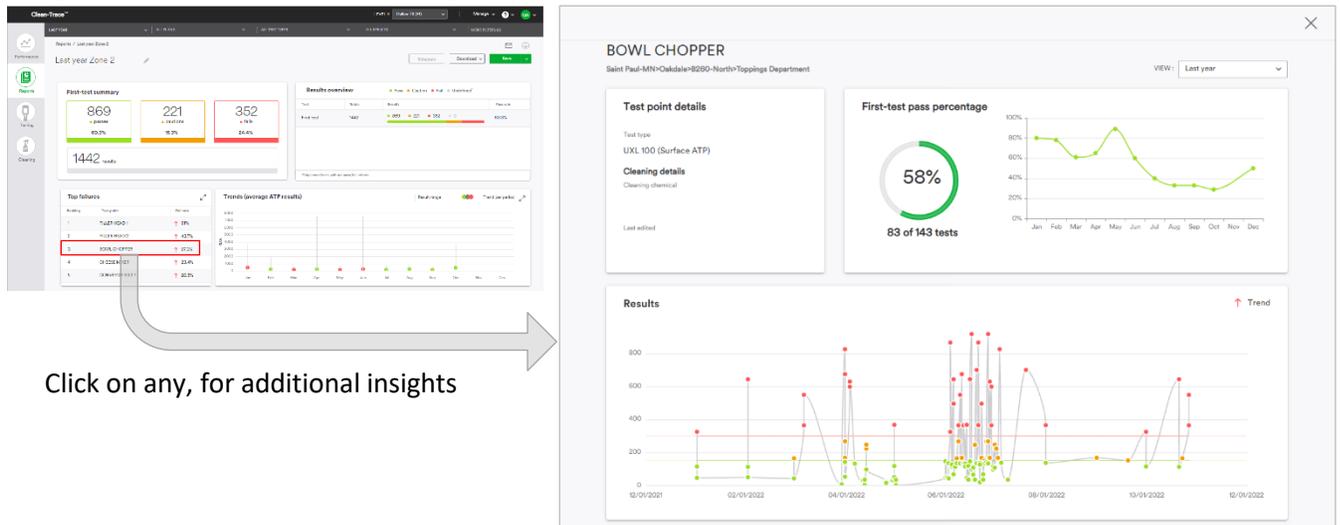
Results overview widget

The result overview widget provides additional insights on test results summary.

Test summaries are presented by test runs; First Test, and all retests performed.

Top failures

Report now features a widget to list most failing Test points in the selection criteria (Report filter). For additional insights, expand the Top failures widget to full screen.



Click on any, for additional insights

Trends

The Trend chart provides a quick view on how test points are performing over a specific time frame defined in the Report filter selection.

All results

The All results section provides a more detailed list of test results per Report filter selection and per columns selection.

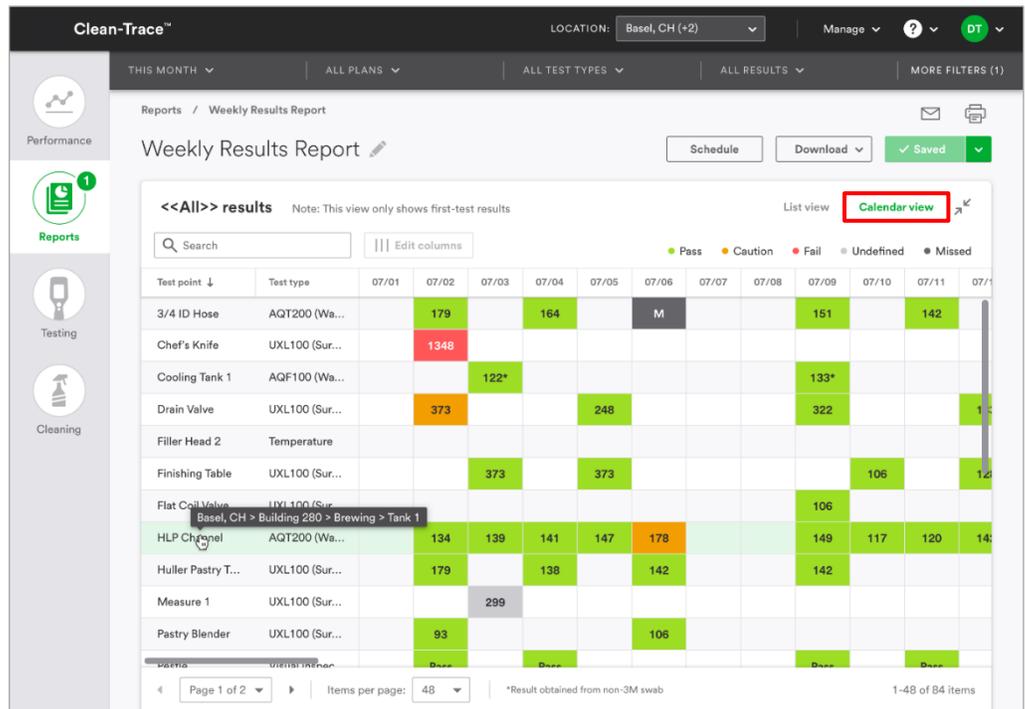
This section also enables the user to narrow down to a specific Test point by searching for the specific Test point.

Calendar View previously referred to as MSS

The All-results view features a list view and a Calendar view.

This Calendar view is optimized to display up to 31 Days of Test results.

If the report filter expands beyond 31days, the user will be notified on screen to update report filters.



Additional filtering options

The reports feature in the Clean-Trace software version 1.8.5 includes all the filters available in the Performance view (also referred to as Dashboard) with additional filtering options.

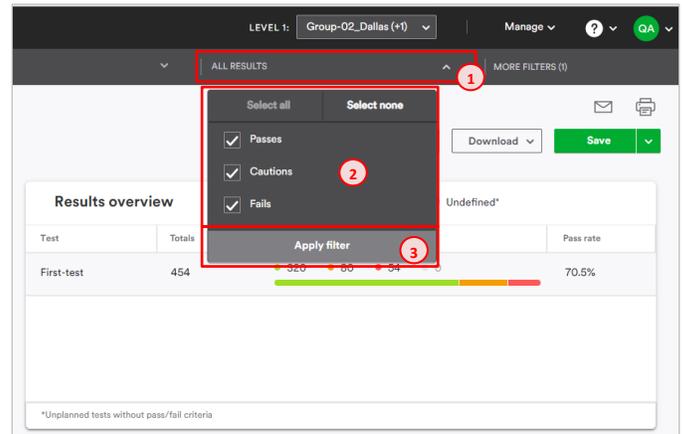
The filters are located at top of the Report page, it now includes option to select the type of results, and **More filters**.

All results

This filter option enables the user to select to view by test results categorized as “Pass”, “Caution”, “Fail” or any combination.

By default, all results will be included in reports.

To adjust selection, click on the dropdown by “**All results**” tab, check the category of results to display, then click **[Apply filter]**.



More Filters

Enables five additional filtering capabilities.

Any custom filter or selection will only apply to the current report when user selects **Apply filter**.

All new Reports will reset to default selection

Location and facilities

By default, all Locations and facilities will be selected, per global filter configuration.

To change selection, expand Locations, then select the facilities to include in Report.

Tests

By default, all Tests will be selected including First tests and any Re-test.

To change selection, select the box for the Tests to include in Report.

Users

By default, all Users will be selected, per global filter configuration.

To adjust selection, select specific Users from the available User list.

Result range

By default, all ranges of results will be included in the Report.

To adjust selection, type the minimum and the maximum range of Test results to include in report.

Note: This filter will only apply to numeric ATP results.

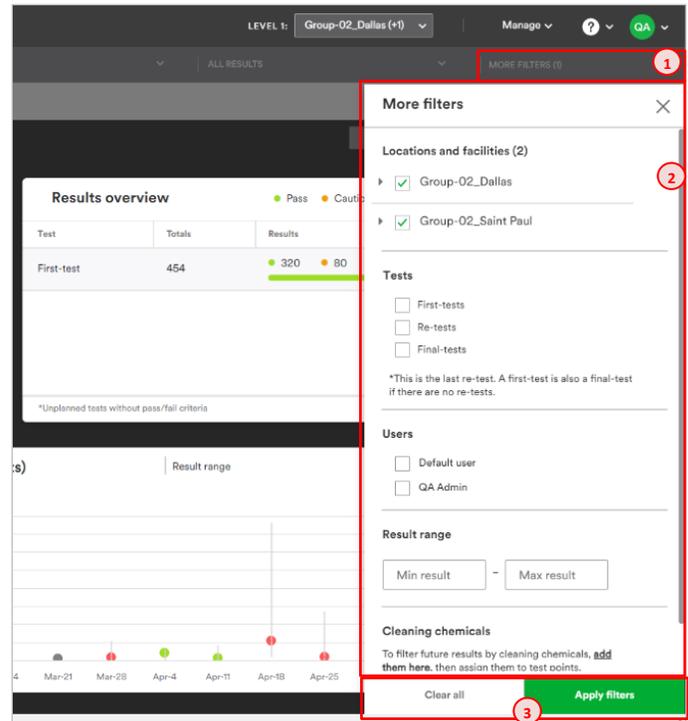
Cleaning chemical

The Clean-Trace software version 1.8.5 also enables users to view Test results from Test points associated to specific cleaning and sanitizer chemicals.

By default, all Test results will be included in the Report.

To adjust selection, select the specific cleaning chemicals from the available list.

The Cleaning chemicals list will be empty If cleaning chemicals have not been entered and a link to instructions to use this feature will appear.



Report Column selection and Re-order

In the Reports screen, user may choose to view or hide certain columns. However, there are columns that must be present on every report, therefore cannot be hidden.

Available Report columns that are visible by default, and ability to hide.

Column Label	On by default	Can be hidden
Custom test point ID	No	Yes
Test point	Yes	No
Test point description	No	Yes
Test point location	No	Yes
Sample plan	Yes	Yes
Test type	Yes	No
Result	Yes	No
Date	Yes	No
Time	Yes	Yes
Pass value	Yes	Yes
Fail value	Yes	Yes
Result value	Yes	No
Re-test	Yes	Yes
Taken by	Yes	Yes
Comment	Yes	Yes

To edit viewable columns in a report,

- Select **[Edit columns]**. This will open a side view list of available columns
- In the list of available columns, locate the column(s) to view or hide from report
- Select the column(s) to display in the report
- Select to un-check column(s) to hide in the report

Select to adjust columns to display or position

select and drag to change column position

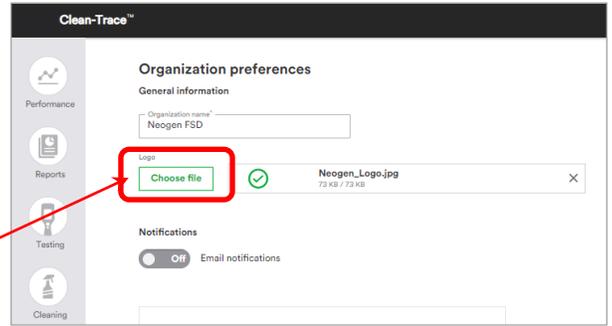
select to hide column in report

select to display column in report

Organization Logo on PDF Reports

Company logos can be added in the organization settings screen and will be visible on PDF and printed reports at top left.

Select here to Add or Edit organization logos



Organization logos visible on PDF and printed Reports

Weekly Zone 1 Report

Report details

Locations and Facilities: Dallas-TX | Irving | Irving | Dough Mix | Dough Toss | Plano | Plano | Sauce Blending | Toppings Department | Saint Paul-MN | Maplewood | B220-South | Dough Mix | Dough Toss | Oakdale | B260-North | Sauce Blending | Toppings Department

Date created: 03/14/2023

Created by: QA Admin

Date range: 01/01/2023 - 03/14/2023

Sample Plans: PIZZA LINE 1, Pizza Line 10, PIZZA LINE 2, PIZZA LINE 3, Pizza Line 4, PIZZA LINE 5, PIZZA LINE 6, PIZZA LINE 7, PIZZA LINE 8, PIZZA LINE 9, Unplanned tests

Test type: AQF 100 (Water free ATP), AQT 200 (Water total ATP), JXL 100 (Surface ATP), Visual inspection

Users: All users

Cleaning chemicals: None

Results: All results

Result range: All results

Test: All tests

All test summary

57 Passes 43.5%	15 Cautions 11.5%	50 Fails 38.2%	131 Results
-----------------------	-------------------------	----------------------	----------------

Results overview

Test	Totals	Results	Pass rate
First-test	127	55 Pass, 15 Caution, 50 Fail, 7 Undefined*	43%
Re-test #1	4	2 Pass, 2 Undefined*	50%

*Unplanned tests without pass/fail criteria

Report options

After creating a report, many options are offered to Clean-Trace users and include **Save, Edit, email, Schedule, Download and Print.**

Save

Allows user to capture current report filter selection for future use.

Saving a report is not recording a snapshot of current results values but recording current filters.

Opening a saved report later may display different numbers, based on recently uploaded Test results.

Edit

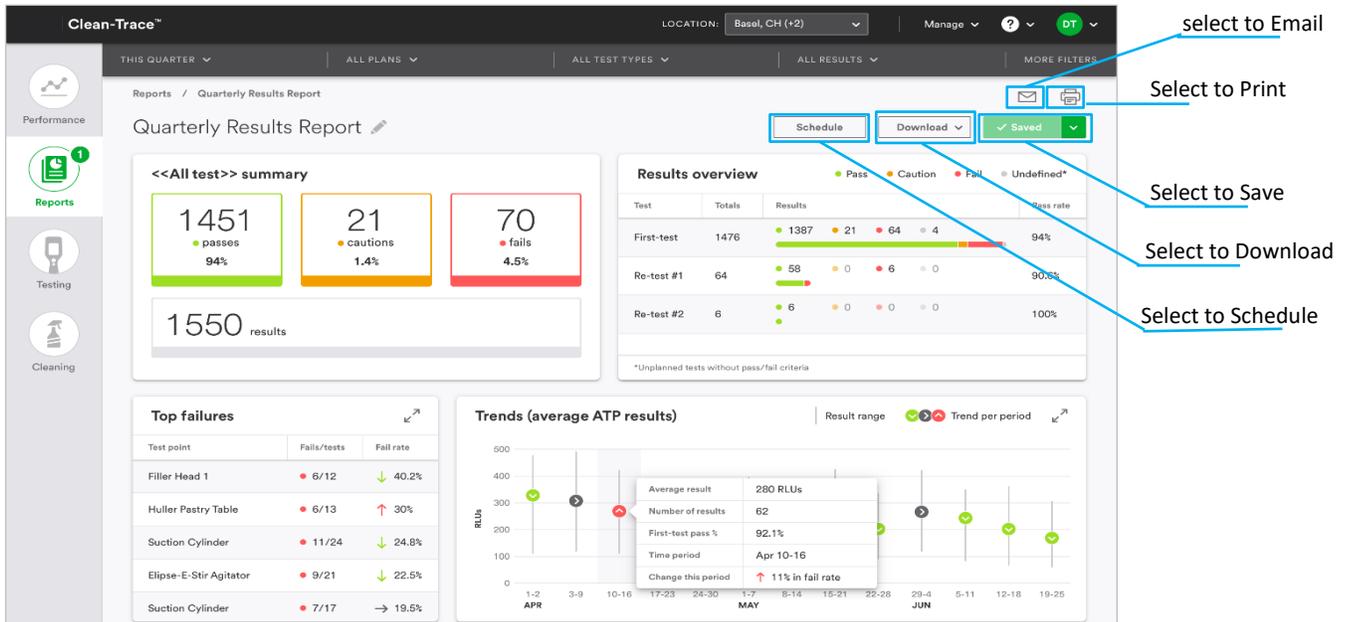
This functionality enables the Clean-Trace user to adjust results details of a previously saved report. Adjustments may include the report name, filter selection or the schedule.

Email

This feature enables the user to email current reports to self.

To email a report to other user(s) use the report schedule functionality.

Note: email notification must be enabled in Organization preferences



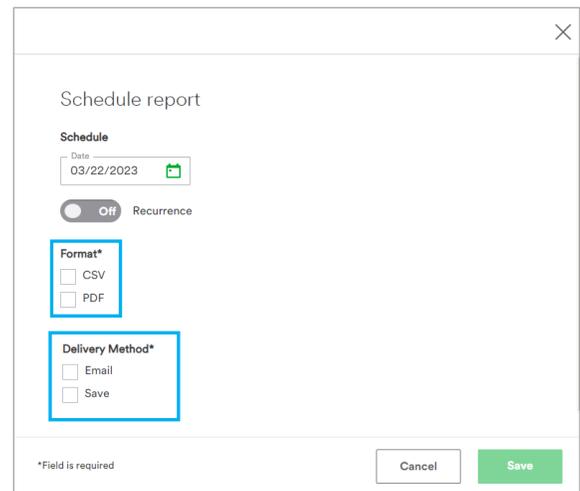
Report scheduling

Reports can be scheduled and generated on a one-time or recurring basis.

- Reports can be scheduled and delivered in PDF or CSV file format
- Reports can be scheduled for download or emailed to current users
- Schedule report is not allowed for unsaved reports.

Schedule a saved report

- Locate the **“Schedule”** toggle in the Report screen.
- In the Schedule report screen, select the date on which the report needs to be generated.
- Switch **Recurrence** from **“Off”** to **“On”** to repeat report generation.
- Below are the options available for recurrence of scheduled Report.
 - Daily



- Weekly, weekdays are displayed, user can select multiple days.
- Monthly
- Yearly

Starts/Ends appears when Recurrence is selected and is an option to create a start and End date for the scheduled report.

By default, it will start as soon as possible, and will never end.

The screenshot shows the 'Schedule report' configuration window with the following settings and callouts:

- Schedule Date:** Points to the 'Date' field set to 03/22/2023.
- Recurrence On/Off:** Points to the 'On' toggle for 'Recurrence'.
- Recurrence details:** Points to the 'Repeats' dropdown set to 'Daily' and the 'Starts' field set to 03/22/2023.
- Output Format:** Points to the 'Format*' section where both 'CSV' and 'PDF' are checked.
- Output details for PDF Reports:** Points to the 'Include these items in the PDF:*' section where 'Summaries and overview', 'Failures - full page details', 'Trends - full page details', and 'All test Results: list view' are all checked.
- Report delivered to email recipients:** Points to the 'Delivery Method*' section where 'Email' is checked.
- Report Saved to this location:** Points to the 'Save' checkbox and the file path 'C:\3M Clean-Trace Hygiene Management\Download'.

Additional elements in the form include a search field for recipients, a 'Change' button for the save location, and 'Cancel' and 'Save' buttons at the bottom right.

Report file formats:

PDF format has the option to customize the output

- **Summary and overview**, included by default
- **All test result list view**, included by default
- Failure full page details, not included by default
- Trend full page details, not included by default

CSV format delivers a CSV file containing results for the selected filters.

Report delivery method:

Email

Available only if email notification is enabled in the Organization preference settings.

At least one valid recipient must be specified within the current active user pool.

Use the search function to locate and add recipient(s).

Save

When this delivery method is selected, the default save location is presented, with options to change as needed.

To change default save location, ensure that **IIS_iusers** user group on the Clean-Trace host computer, has read and write access to the newly selected path.

Note

*Report default save location is on the Clean-Trace host computer. **C:\ Clean-Trace Hygiene Management\Download.***

After setting up all the Report schedule details, click **[Save]** to confirm and exit.

The Reports page will display the saved reports with Report name, Date range, Last view and Schedule recurrence.

Click anywhere on the line to view or edit a report.

The screenshot shows the Clean-Trace Reports page. The top navigation bar includes 'LEVEL 1: Dallas-TX (+1)', 'Manage', and 'QA'. The left sidebar has icons for Performance, Reports, Testing, and Cleaning. The main content area is titled 'Reports' and contains three template cards: 'Results template', 'Comparison template', and 'Productivity template'. Below these is a 'Saved reports' section with a search bar and a table. The table has columns for Report name, Level 1, Date range (mm/dd/yyyy), Created by, Last viewed, and Schedule. The 'Last year Zone 2' report is highlighted in green. Two callout boxes with arrows point to the 'Schedule' column: 'Click recurrence to view/edit schedule' points to the 'Weekly every Thurs...' schedule, and 'Click here to Schedule' points to the 'Schedule' schedule.

<input type="checkbox"/>	Report name	Level 1	Date range (mm/dd/yyyy)	Created by	Last viewed	Schedule
<input type="checkbox"/>	Weekly Depot	Dallas-TX(+1)	01/01/2023 - 03/14/2023	QA Admin	03/22/2023	Weekly every Thurs...
<input type="checkbox"/>	Weekly Zone 1 Report	Dallas-TX(+1)	01/01/2023 - 03/14/2023	QA Admin	03/22/2023	One-Time
<input type="checkbox"/>	Last year Zone 2	Dallas-TX(+1)	This month	QA Admin	03/22/2023	Schedule
<input type="checkbox"/>	Untitled report	Dallas-TX(+1)	Last year	QA Admin	03/20/2023	

Download reports

Reports can be downloaded in either a PDF or CSV file format.

CSV reports

Select **[Download]** then **[CSV]** and report will begin to download immediately.

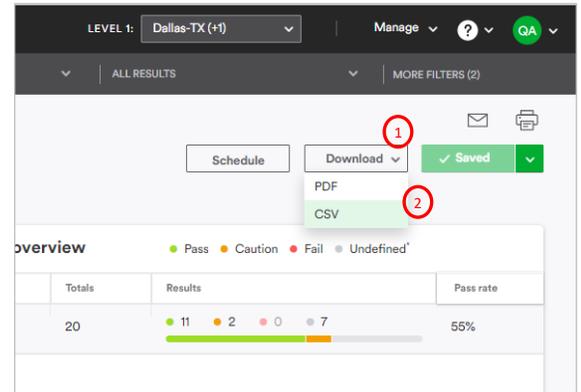
CSV file will download to the browser default download location on your workstation.

PDF reports

Select **[Download]** then **[PDF]**

Select the options from the Download report screen to customize the Report output file:

- **Summary and overview**, included by default
- Failure full page details, not included by default
- Trend full page details, not included by default
- **All test result list view**, included by default



Select **[Download]** to begin the download to the browser default download location on your workstation.

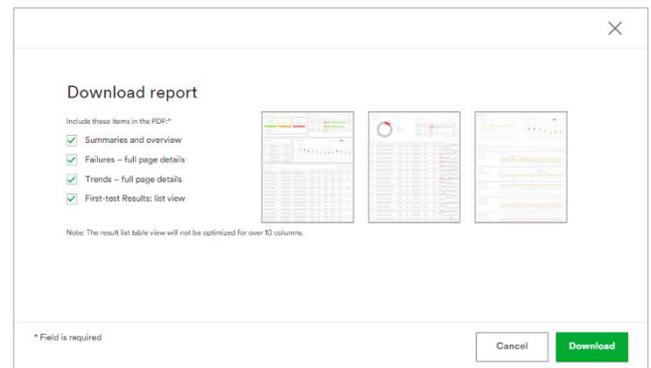
Print

Generate printed copies of reports

Locate the printer icon at the top right in the report page.

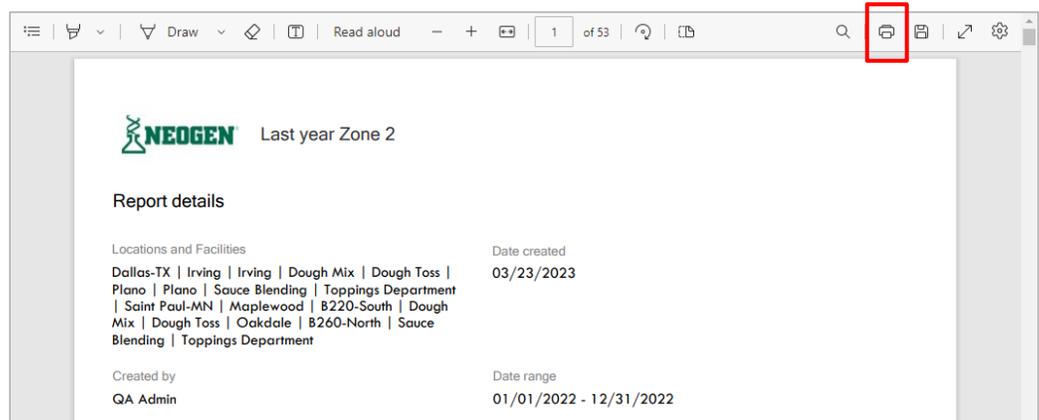
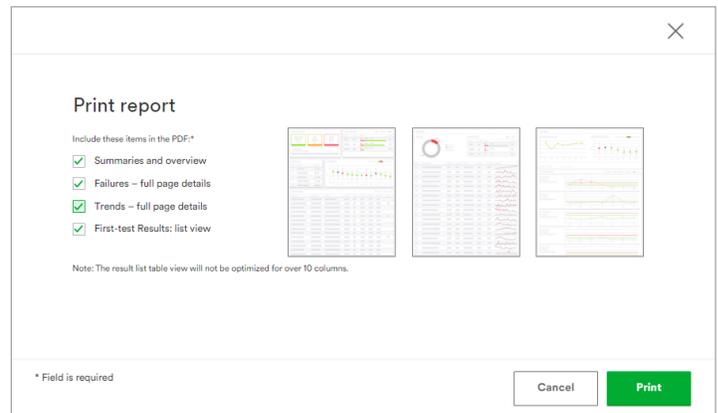
Select **Print report** screen options to customize a printed report:

- **Summary and overview**, included by default
- Failure full page details, not included by default
- Trend full page details, not included by default
- **All test result list view**, included by default



Select **[Print]** and a printable report will generate and open in the browser. Will look similar to PDF.

Select Print in the browser controls to send the report to the Printer.



Additional Improvements in the Clean-Trace™ Desktop Software

New desktop icon

Neogen and 3M Food safety merged in 2022 and the 3M logo will be updated across all Clean-Trace systems.

Look for the new Clean Trace Desktop Software and Sync Manager icons on your desktop. They have been redesigned as shown.



Custom entries for Location details (City, State)

Custom entries are now available for City and State, also referred to as Region or Province.

During new Location (Level1) creation or editing the field allows for free typing if the correct state does not pre-populate.

Time zones will be dependent on the country selection.

Data archive

Customers can retire or archive old Test results.

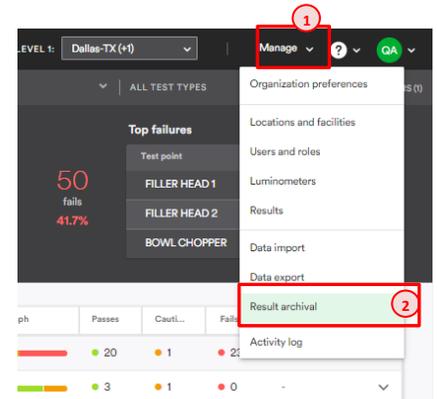
Data archive was enhanced to separate operational data from archived data.

Archiving data can help improve software performance, specifically the Performance view and Reports. Archived data will not display in Performance view or Reports.

Access to archived data will be through data export, available through the **Manage** software menu.

To initiate archival, click **[Manage]** to open the drop-down menu.

Select **[Result archival]** in the Manage drop-down menu.



In the data archival screen, specify:

Start Date and End Date

All Test results collected in this period will be archived.

Sample Plan

All Test results from selected sample plans that meet date selection archive.

If no selection, all Sample plans will be included.

Scheduled On

Date Data archive to be executed and may not happen at the exact time scheduled.

Select **[Save]** to confirm the data archive schedule, and the saved schedule will display in the archival history with the current **Status**.

Start Date	End Date	Sample Plan(s)	Triggered By	Scheduled On	Status
01/01/2020	12/31/2022	Unplanned tests,PIZZA LINE 1,PIZZA Line 1 0,PIZZA LINE 2,PIZZA LINE 3,PIZZA Line 4, PIZZA LINE 5,PIZZA LINE 6,PIZZA LINE 7, PIZZA LINE 8,PIZZA LINE 9	QA Admin	03/23/2023 2:32PM	Yet to start

Data export

Retrieval of all Test points, Sample plans and Test Results in Microsoft Excel Comma Separated Values (CSV) files.

The Data export process generates individual data files for Test points, Sample plans or Test results.

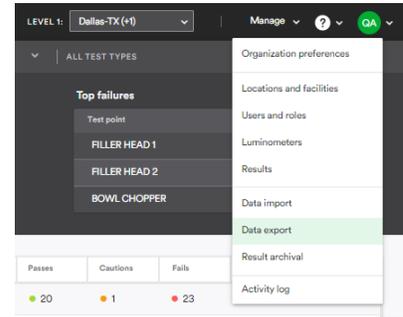
Files that exceed 100 Megabytes will generate files lesser than 100 Megabytes.

The results can be retrieved individually from the Main and Archived databases.

Initiate Data export

Click **[Manage]** to open the drop-down menu.

Select **[Data export]** in the Manage drop-down menu.



In the data export screen

- Specify the database to retrieve the data from.
 - **Main database** contains all current operational data viewable from the Performance view, and Report.
 - **Archive database** contains all retired Test results, that are no longer accessible from the Performance view or Report.

Note

The process to retire data and move it from the main database to the archive database is only initiated by the user through the Data archive process described above.

- Specify the type of data needed, **Sample plans**, **Test points**, or **Test results**.

Note

if only Archive database is selected, the only data type possible will be Test Results.

- Confirm the drive location the exported data will be saved in.

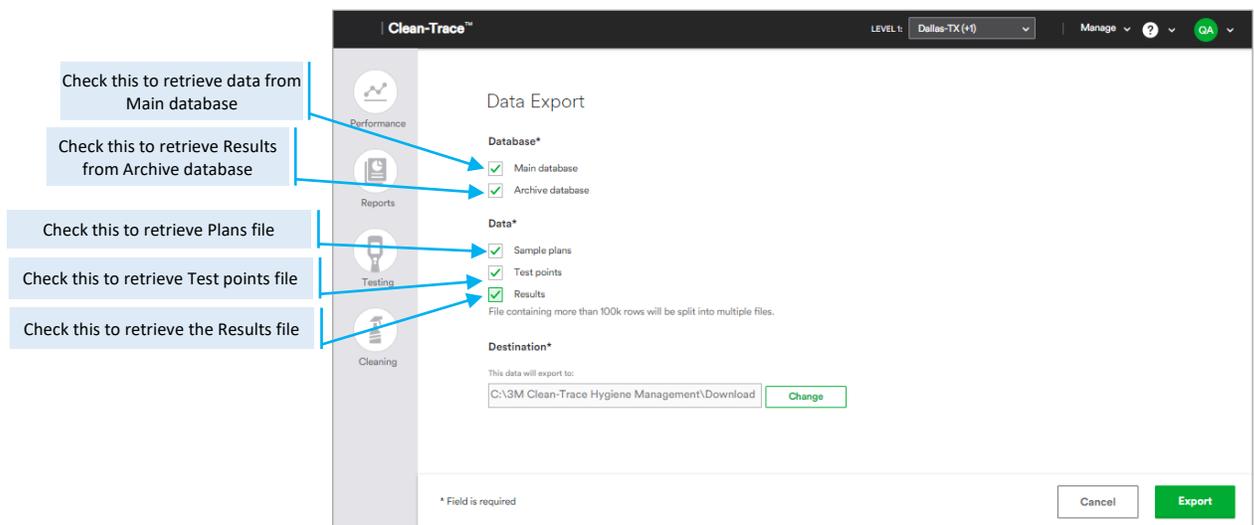
By default, it will be saved on the Clean-Trace host computer/server at this location:

C:\ Clean-Trace Hygiene Management\Download.

If chose to change, ensure that **IIS_iusers** user group on the Clean-Trace host computer, has read and write access to the newly selected path.

- Select **[Save]** to confirm Data export and exit.

The exported data files will be available at the location specified.

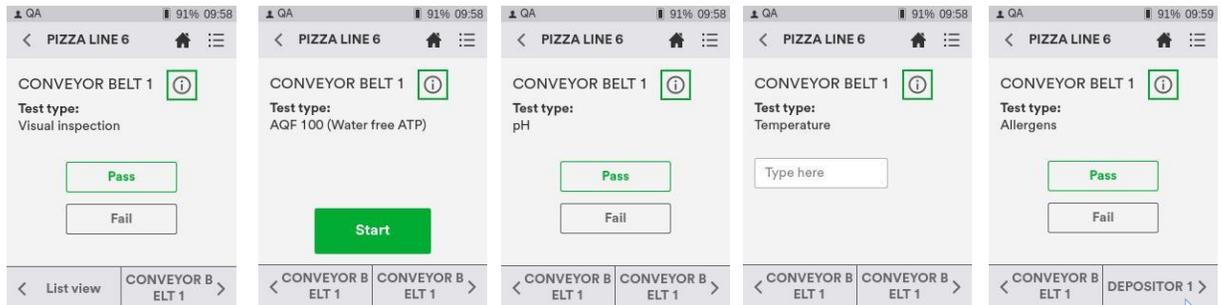


Test types order in Test points

The order of Test types within a Test point has been improved.

Test points with multiple Test types, default testing order.

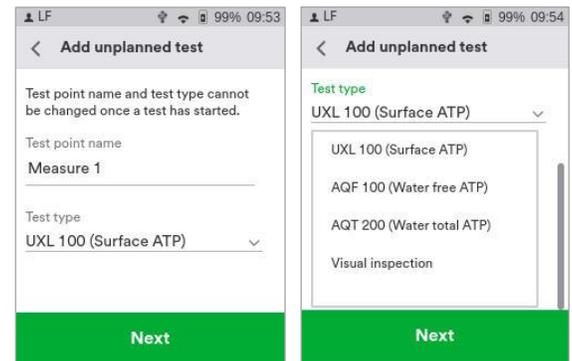
- **Visual Inspection** (VI) will be presented first on the Luminometer when enabled.
- **ATP** Test types will be after any potential VI Test type
- **pH** Test types will be after any potential ATP or VI Test type
- **Temperature** Test types will be user after any potential Test type above
- **Allergens** Test types will be after any potential Test type above
- **Custom** Test types will be after any potential Test type above



Test type Order of showing on the Luminometer if assigned to the Test point.

Note

For Unplanned Test, Visual Inspection will not be first option



Test point order in Sample plan

Test points order within a Sample plan can be modified.

When performing test run on the Luminometer, Test point will be suggested/presented for testing following the order listed in the Clean-Trace Desktop Software Sample plan screen.

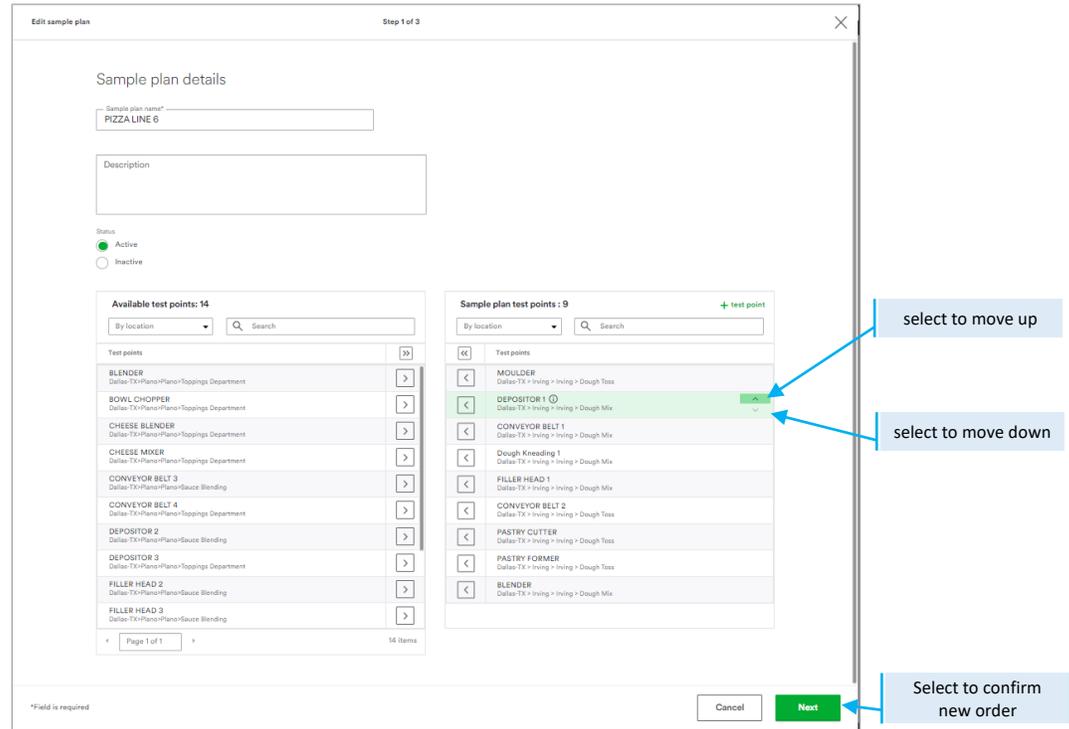
Adjust Test point testing order.

- Open Sample plan in the Clean-Trace Desktop Software.
 - Test points will be presented for testing on the luminometer in the top-down sequence.
- Adjust the position of a specific Test point
 - Hover over the Test point row
 - On the right of the row, there will be up and down arrows
 - Select up to move this Test point up
 - Select down to move the Test point down

- Select [Next] at the bottom right of the page

Note

Luminometer(s) must be synchronized to reflect the change.



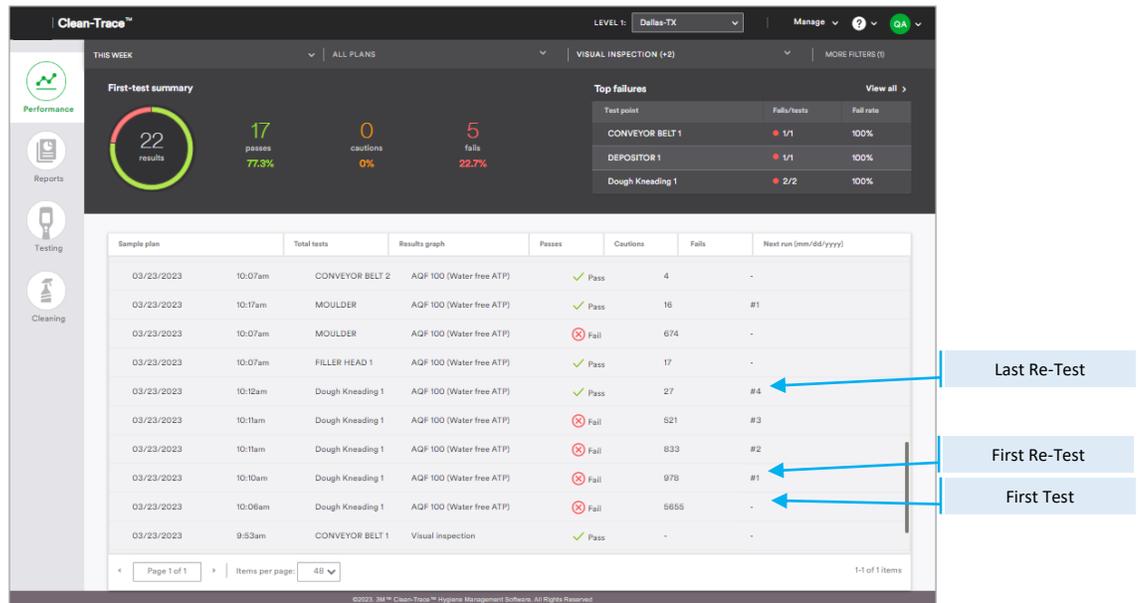
The screenshot shows the 'Edit sample plan' window. On the left, 'Sample plan details' includes a name field with 'PIZZA LINE 6', a description field, and status options for 'Active' (selected) and 'Inactive'. Below this are two lists of test points: 'Available test points: 14' and 'Sample plan test points: 9'. The 'Sample plan test points' list has a 'DEPOSITOR 1' entry highlighted in green. Blue callout boxes point to the up and down arrows on the right of this entry, labeled 'select to move up' and 'select to move down'. At the bottom right, a 'Next' button is highlighted with a callout labeled 'Select to confirm new order'. A 'Cancel' button is also visible.

Test results order in Sample plan Results details

Initial Test result, also referred to as First Test, is displayed with any related Re-test.

Previously First test results and Re-tests were organized and displayed by the Date/Time tested.

Re-tests and First test will not be detached. If a re-test is performed a few hours later, it will be displayed side by side with First test.



The screenshot shows the Clean-Trace dashboard. The 'First-test summary' shows 22 results, 17 passes (77.3%), 0 cautions (0%), and 5 fails (22.7%). The 'Top failures' table lists 'CONVEYOR BELT 1', 'DEPOSITOR 1', and 'Dough Kneading 1'. The main table shows test results for various equipment. Blue callout boxes point to specific rows: 'Last Re-Test' points to the 'Dough Kneading 1' row at 10:12am; 'First Re-Test' points to the 'Dough Kneading 1' row at 10:11am; and 'First Test' points to the 'Dough Kneading 1' row at 10:10am.

Sample plan	Total tests	Results graph	Passes	Cautions	Fails	Next run (mm/dd/yyyy)
03/23/2023	10:07am	CONVEYOR BELT 2	AGF 100 (Water free ATP)	Pass	4	-
03/23/2023	10:17am	MOULDER	AGF 100 (Water free ATP)	Pass	16	#1
03/23/2023	10:07am	MOULDER	AGF 100 (Water free ATP)	Fail	674	-
03/23/2023	10:07am	FILLER HEAD 1	AGF 100 (Water free ATP)	Pass	17	-
03/23/2023	10:12am	Dough Kneading 1	AGF 100 (Water free ATP)	Pass	27	#4
03/23/2023	10:11am	Dough Kneading 1	AGF 100 (Water free ATP)	Fail	521	#3
03/23/2023	10:11am	Dough Kneading 1	AGF 100 (Water free ATP)	Fail	833	#2
03/23/2023	10:10am	Dough Kneading 1	AGF 100 (Water free ATP)	Fail	978	#1
03/23/2023	10:06am	Dough Kneading 1	AGF 100 (Water free ATP)	Fail	8655	-
03/23/2023	9:53am	CONVEYOR BELT 1	Visual inspection	Pass	-	-

Facilities Deletion

Allows for the deletion of lower levels of the location hierarchy - Level2, 3, 4, or Level5.

Navigate to Locations and facilities screen

Select the **[Manage]** menu at top right of the page

Select **[Locations & Facilities]**

Select **[Edit]** mode.

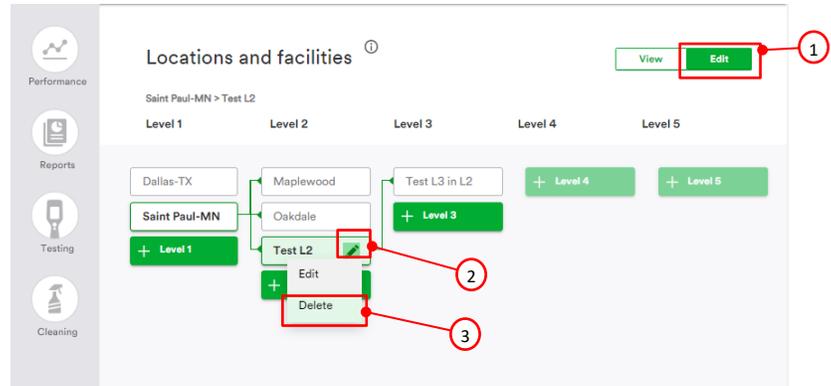
Delete a Facility

Locate the facility and select, a pencil icon will display on the right of the box.

Click the pencil icon to reveal available options, then select **[Delete]**.

A warning message will be displayed, with possible consequences to this action.

Select **[Cancel]** to skip and go back, or **[Delete]** to confirm Facility deletion.



The Synchronization Manager

The Clean-Trace Hygiene Management Software version 1.8.5 is bundled with the Clean-Trace Synchronization Manager.

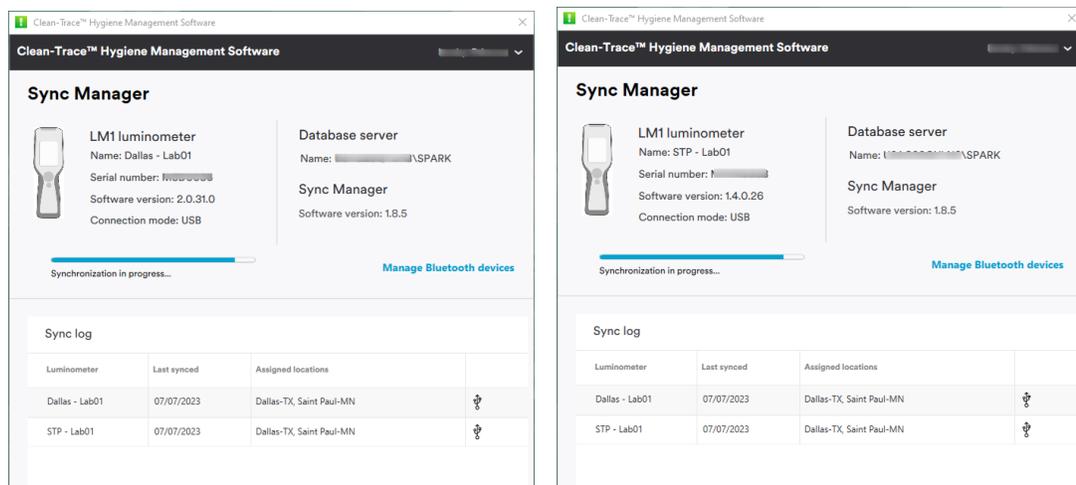
For Single computer installation, the Synchronization manager will install or update as part of the Clean-Trace desktop software installation or upgrade.

For distributed or Server installation, follow instructions [download and install/upgrade Sync Manager on Client computer\(s\)](#).

Note

The Synchronization Manager version 1.8.5 will successfully communicate and Synchronize LM1 Luminometer running older version of operating system, and newer version of operating system as specified in the [compatibility section](#).

As applicable, a software upgrade will be offered to ensure the Luminometer is running latest applicable software or firmware version.



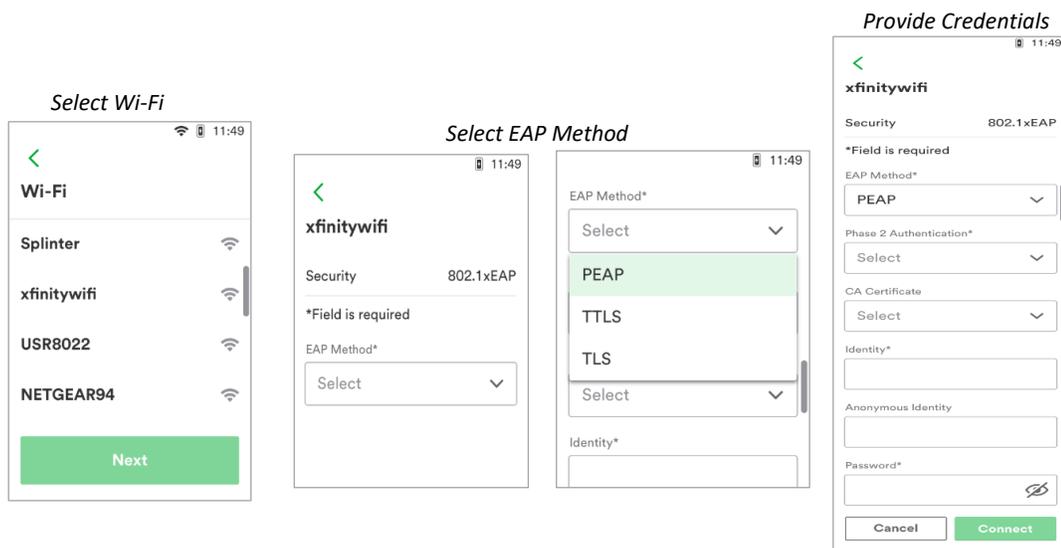
Additional improvements in the Clean-Trace™ LM1 Luminometer Software

The Clean-Trace Hygiene Management Software version 1.8.5 is bundled with the Clean-Trace LM1 Luminometer Application version 2.0.31.

Wi-Fi authentication enhanced on new operating system to accept EAP authentication

Follow steps below to connect to an EAP enabled Wi-Fi:

- On the LM1 navigate to the Wi-Fi network screen, **select** the wireless network you wish to connect to.
- Select the appropriate **EAP method** from the drop down menu
- Provide the required authentication details, then select **[Connect]**.
- If all the details provided are correct. The LM1 device will establish wireless connection with the selected network.

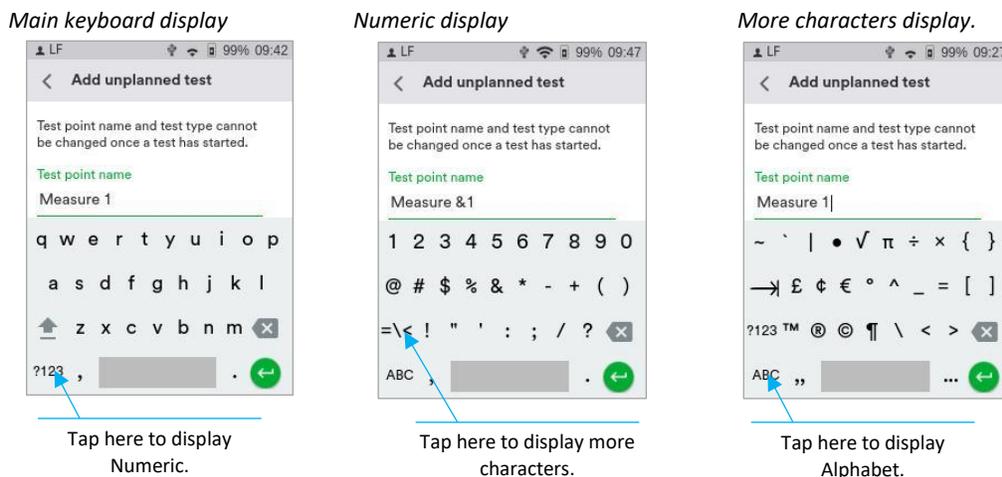


Non-Latin script language fonts also referred to as special characters

The Luminometer software version included in this release supports non-Latin script also referred to as special characters.

Displaying data received from the Desktop software – Locations, Users, Sample plans, Test points, etc..

Entering data from the device user interface – entering Wi-Fi password, editing Unplanned test name, etc..



Information for Users

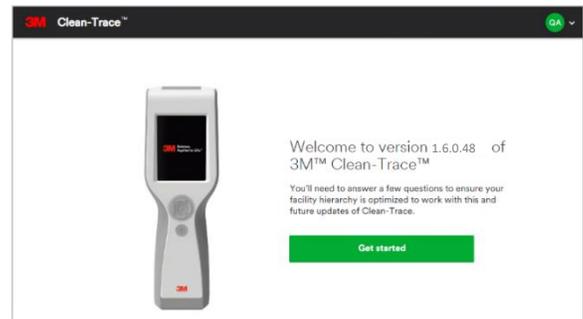
Data and location alignment

Data and location alignment starts with a welcome screen, and an invitation to get started. This will ensure that the data collected aligns with the facility it is collected from.

Note

If data and location alignment is suggested, it must be completed.

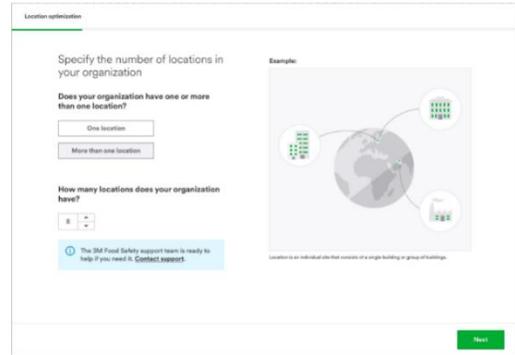
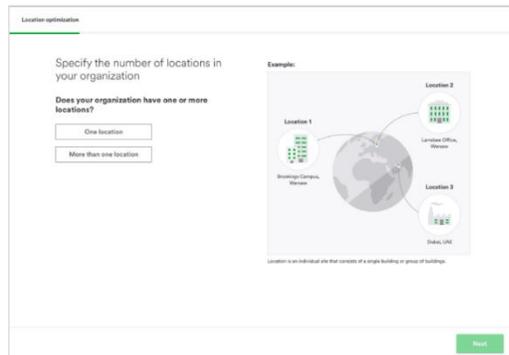
The data and location alignment process must be completed by any software user with administrative privileges, before any non-admin user will be allowed to log back into the Clean-Trace software.



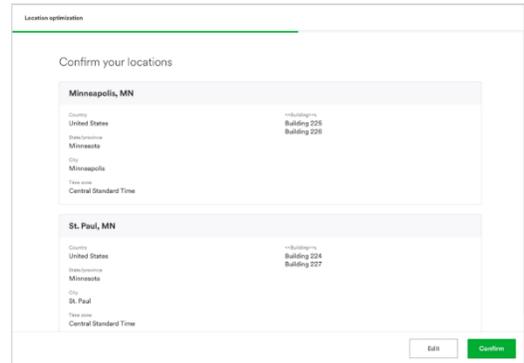
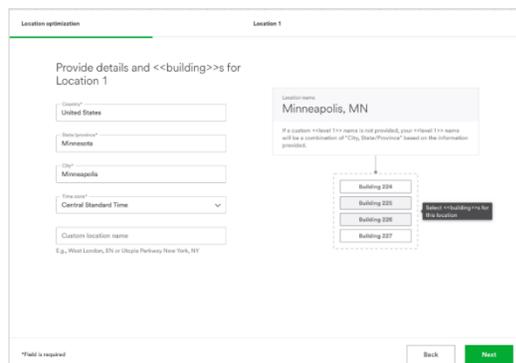
Upon starting data and location alignment, the user must specify the number of actual physical Location(s) or site(s) for their organization.

If the number of actual Location(s) is one and the user clicks on **“One location”**, the system will prompt entry of the details of the Location or site (Country, State, City, Time zone). Your pre-existing plants, department or lines will be linked to this new Location.

If the user selects **“More than one location”** they will be prompted to specify the count. If the Location count exceeds 8, contact the Clean-Trace™ support team to help improve the setup. The user may stop at this point and connect with the Clean-Trace support team or select **“Next”** to continue.

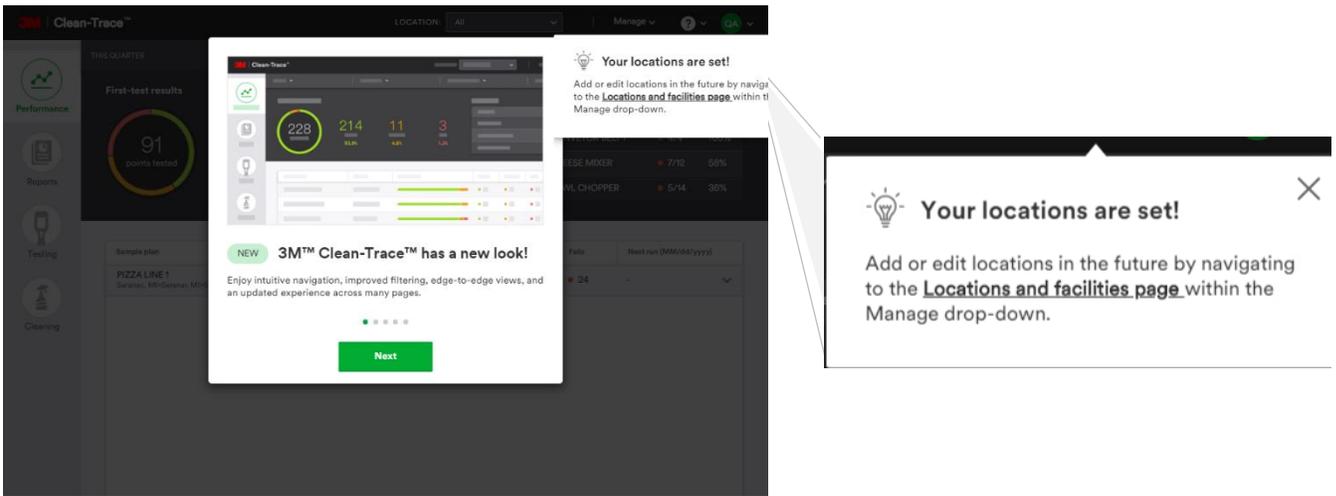


If continuing the data and location alignment with more than one Location, the prompt will ask the user to provide Location details and select subsequent areas to associate to each of these Locations. The list of available areas will be populated from the Level1 in the previous setup. When all Locations are set with all details, a summary page will be presented for confirmation before final submission. Click **“Continue”** to submit.



The alignment of previous location hierarchies has been completed by adding a hierarchy level above the previous configuration. A Pop-up message will confirm Locations are set.

Because this process is also completing the first successful login following the software upgrade, a screen with some of the major improvements in this release will be displayed. Click **Next**, then **Got it** to continue.



Using your Clean-Trace™ LM1 Luminometer



Users are advised to check the date, time, and time zone on the LM1 Luminometer:

- Prior to the first use
- Every time the unit returns from the Service Center
- After an extended period of storage (when the unit has been unused)

All test results are time-stamped with Luminometer date and time, which could not be changed after data collection.

Time zone

If the LM1 Luminometer has never been synchronized and therefore not assigned to any Location, the time zone needs to be set manually.

If the LM1 Luminometer has been synchronized and assigned to a Location, the time zone will be set automatically based on the Location of log-in.

How to adjust the date/time on the Clean-Trace LM1 Luminometer

Swipe down from the top of the LM1 display. This will extend the black screen as shown below.

Tap on the Time to open the **Date & time settings** screen.

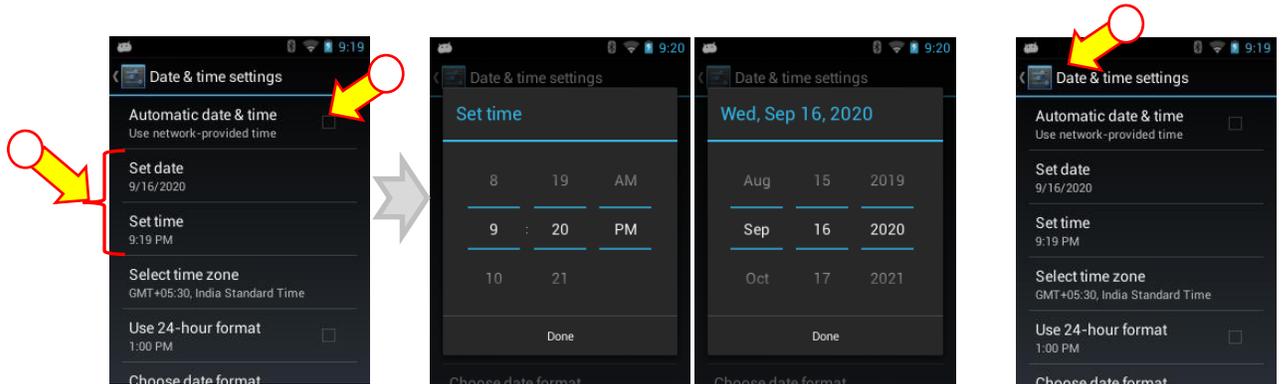


Confirm the Automatic date & time is unchecked.

Select **Set date** to adjust and set the date, select **Done** at the bottom.

Select **Set time** to adjust and set the time, select **Done** at the bottom.

Select **Date & time settings** to go back to the Clean-Trace application screen.



Launching the Clean-Trace™ Hygiene Management Desktop Software

The Clean-Trace Hygiene Management Desktop Software can be launched by:

- Selecting on the Clean-Trace icon on the desktop or from the desktop Start menu.
- Using the link received in an email. When the email notification is enabled, every new user added to the system will receive an email with a username and link to the desktop application. This link can be used to create a shortcut to the desktop if necessary.
- Typing the URL of the desktop application on a web browser. The URL of the application is the name of the computer or server where the application is installed, followed with the port number. e.g., http://Computer_Name:9005



Launching the Sync Manager

The Sync Manager can be launched by:

- Clicking on the Sync Manager icon on the desktop or from the Start menu.

Note

If the Sync Manager is already open, it may hide in the system tray



Account Lockout

- A user will be locked out if the password is entered incorrectly five consecutive times.
- It is highly recommended to use the **Forgot your password?** feature to reset the password after three unsuccessful login attempts.

This will help prevent locking the account. This feature is only available for Clean-Trace installations with email Login authentication and not available for Company Login authentication.

- Contact your Clean-Trace Software administrator if your account is locked or connect with your Neogen representative using the support line: [Get help from.](#)

Troubleshooting Synchronization

If you receive an error message when synchronizing the Clean-Trace™ LM1 Luminometer, follow the steps below.

If attempting to synchronize over Wi-Fi, confirm:

- Luminometer is registered to your Clean-Trace installation
- Luminometer is connected to the appropriate Wi-Fi
- Wi-Fi Sync Configuration is set appropriately – Host IP address is preferred over hostname
- Preferred connection is set to Wi-Fi

If attempting to Synchronize over USB:

- Confirm the Sync Manager is running - If this is the first time synchronizing, it is required to login in the synchronization manager.
- If the synchronization manager is not visible, it may be hidden in the desktop system tray.
- In rare occasion it will help to unplug the USB cable from the Luminometer and re-plug after few seconds.

Troubleshooting display

Upon login, if the new Clean-Trace Desktop Software does not look or seem to work right after upgrade or new installation:

Confirm configuration if it appears data is missing, Location, Sample plan or Users.

- Users are assigned to Locations.
- Luminometers are assigned to Locations.
- Sample plans are in Active state and assigned to appropriate user(s)
- Location details are filled in.

Clear the cache on the web browser If desktop display is distorted,

- [Click here](#) for how to clear/delete browser cache on Chrome
- [Click here](#) for how to clear/delete browser cache on Firefox.
- [Click here](#) for how to clear/delete browser cache on Edge.

Internet connection is required to reach Chrome, Firefox, or Microsoft support pages.

Troubleshooting LM1 Assign to Location

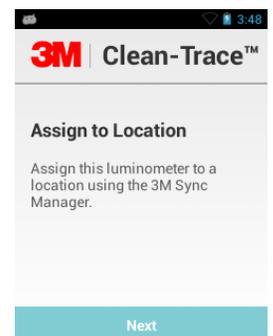
If the Clean-Trace LM1 Luminometer displays the Assign to Location message, the Luminometer is not registered to a Clean-Trace desktop software.

Potential causes include:

- The LM1 Luminometer had no prior communication with the Clean-Trace desktop software.
- LM1 Luminometer was deleted from the Clean-Trace desktop software.
- The Luminometer's assigned Location(s) or Level1 was deleted.

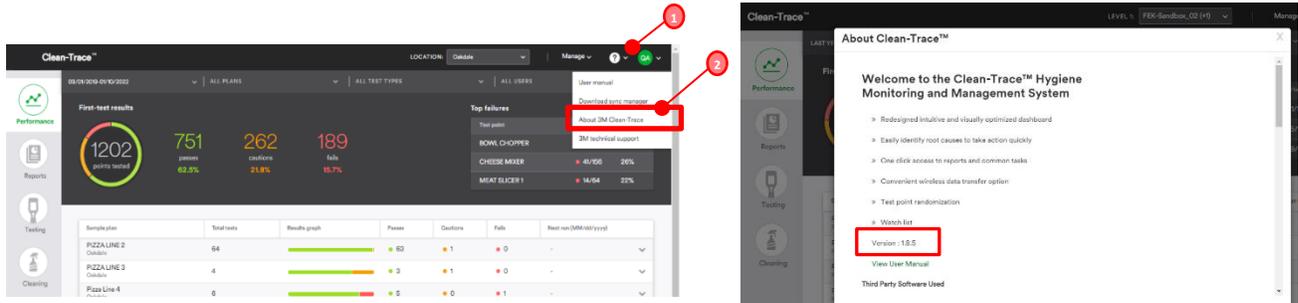
Resolution:

- Restart the LM1 Luminometer – Press and hold the On/Off button for 10-15 seconds.
- Synchronize the Luminometer over USB.
During this synchronization, the user will be prompted to select Location(s) for the LM1 Luminometer.



How to check Clean-Trace™ Hygiene Management Desktop Software version

- Login to the Clean-Trace Hygiene Management Web Application.
- In the top right corner of the Clean-Trace Hygiene Management Web Application screen, click the arrow  to reveal the drop-down menu, then Select **About Clean-Trace™**.
- The version number of your installed Clean-Trace Hygiene Management Software will be displayed in the about screen.



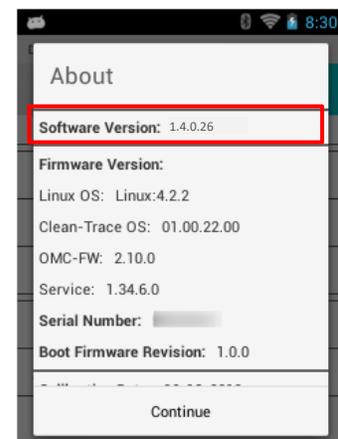
How to check Clean-Trace Luminometer Software version

To check the version of the Software running on the LM1 Luminometer:

- Login on the Clean-Trace LM1 Luminometer, in the home screen, then tap  open the Settings screen.
- In the Settings screen, scroll down and select **“About”**.
In the About screen, the Software Version is listed at the top of the page.



Latest Linux Application



Latest Android Application

How to Update the Clean-Trace™ LM1 Luminometer



Before proceeding with the Clean-Trace LM1 Luminometer update, ensure that the Clean-Trace software on your computer have been updated.

Follow the steps to [download and install/update the Clean-Trace Hygiene Management Software version 1.8.5](#) *The Luminometer Update file is made available on the computer as part of the software installation/update.*

- Launch the Sync Manager
- Connect the Clean-Trace LM1 Luminometer using the USB cord
- Initiate the Synchronization of the Clean-Trace LM1 Luminometer

All the necessary files will transfer to the Luminometer. When the synchronization is complete, a prompt will be displayed on the screen, indicating an update is available.

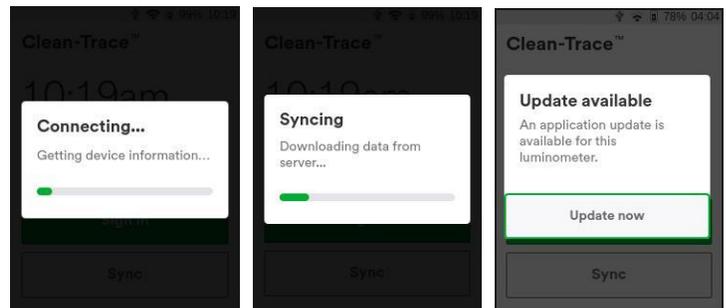
LM1 Luminometer Running Linux OS

If a connected LM1 luminometer is running an older version of Linux OS Application, the device will be updated to the Linux Application version 2.0.31.

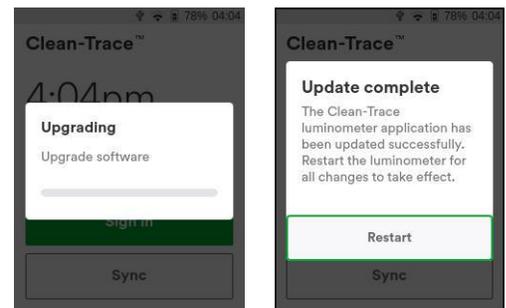
- Select [**Update now**] to initiate the update process, starting with file transfer from the computer to the LM1 device –

Note

Do not disconnect the USB cord at this point, until the upgrade is completed.



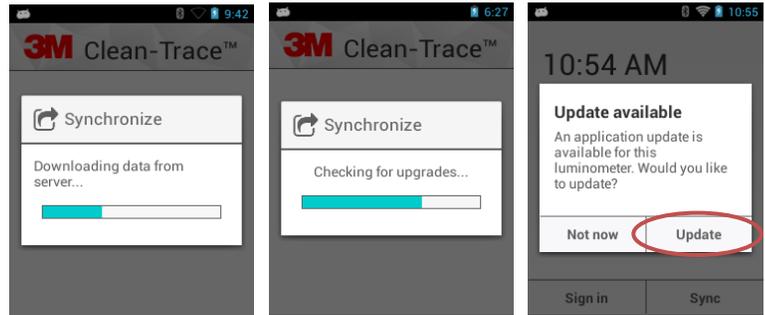
- When complete, LM1 Luminometer restart will be required, select [**Restart**].
- The LM1 will restart to complete the update process.



LM1 Luminometer Running Android OS

If the connected LM1 luminometer is running an older version of Android OS Application, the device will be updated to the LM1 Luminometer Application version 1.4.0.26.

- Select **[Update]** to initiate the update process.



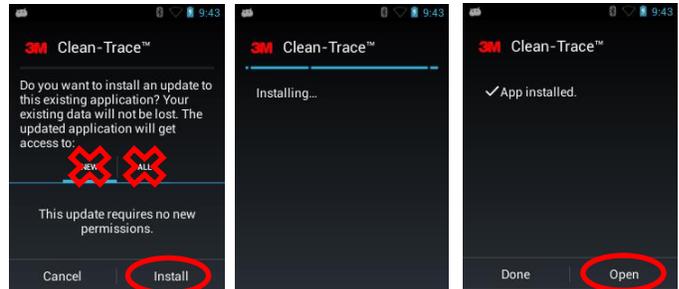
- A black screen appears asking if the user wants to install the update. Select **[Install]** at the bottom right of the screen to initiate the installation.

 Do not tap **[NEW]** or **[ALL]** as shown

After approximately one minute, the screen will confirm a successful installation.

- Select **[Open]** to close the upgrade screen and return to the Clean-Trace Application on the device.

 Do not tap **[Done]**



- Select **[Restart]** if prompted. This will reboot the Clean-Trace LM1 Luminometer.

