



L5 Connect User Manual

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System Setup

Creating the L5 Connect™ Database

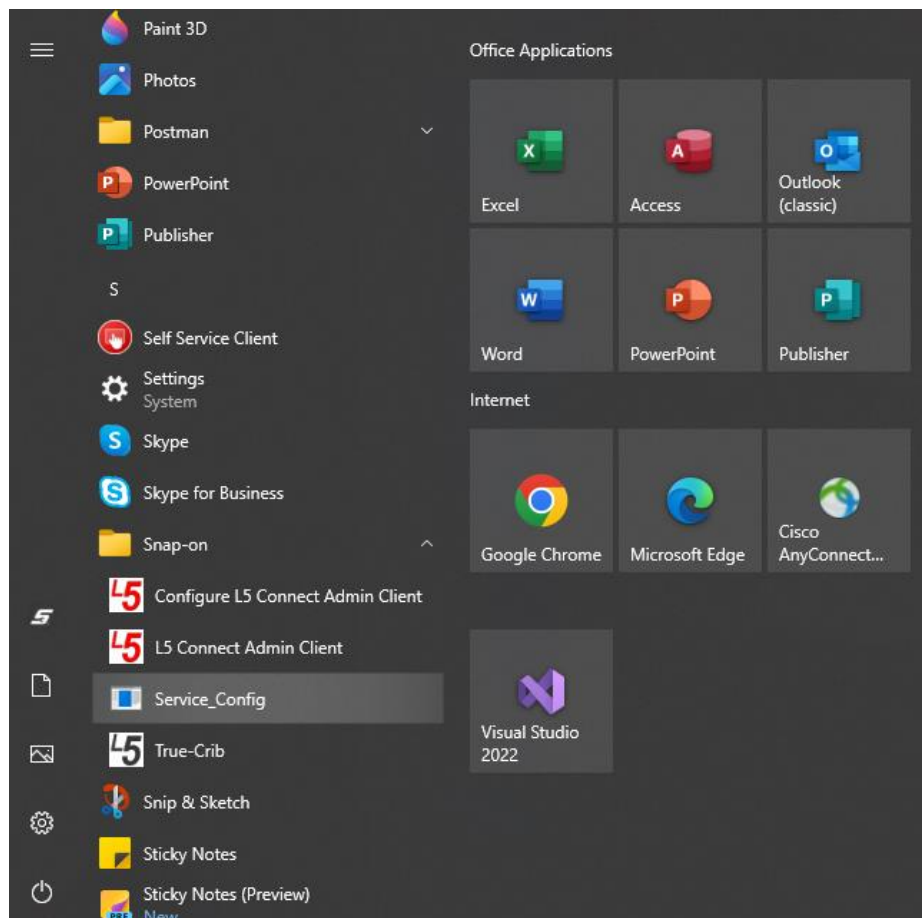
After you have installed the L5 Connect™ service, you need to create the default database that the system will use. This document will cover the process of creating and configuring this database.

Database Server

The L5 Connect™ Service requires an instance of a SQL Server or SQL Server Express available to host the system database. This can be located on the same computer hosting the L5 Connect™ Service or it can be located on another computer such as a dedicated SQL server. For most installations, SQL Server Express works well for systems that don't have pre-existing database servers available. This document assumes that you have a database server available to host your L5 Connect™ database. The L5 Connect™ Bundle installer does provide SQL Server Express.

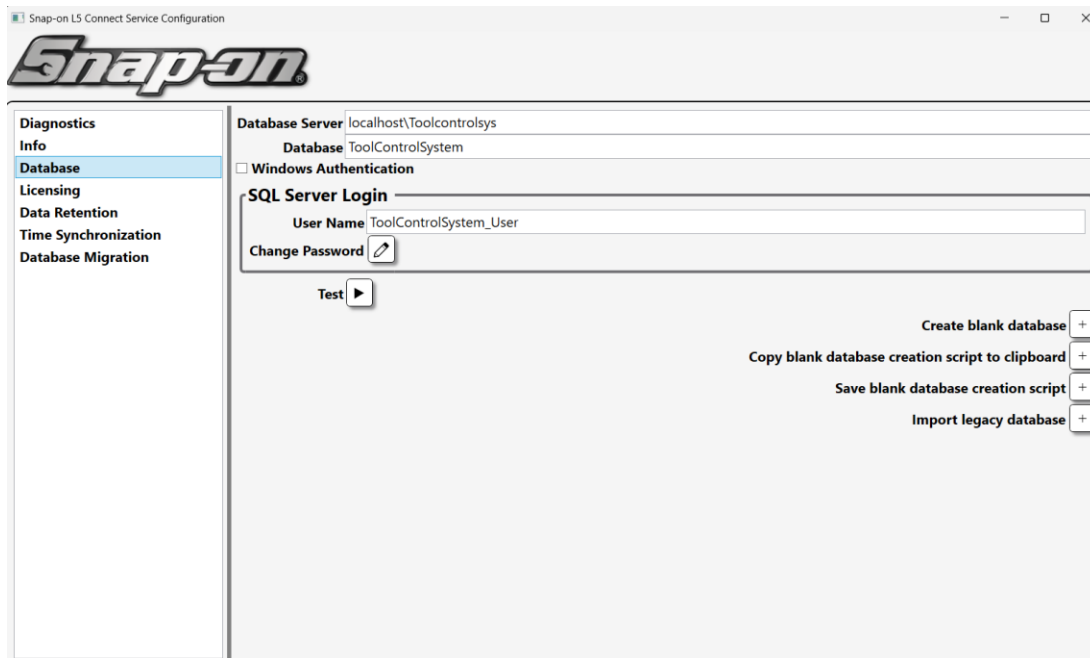
Creating the Database

To begin, go to the Windows start menu, open the Snap-on folder, and launch the **Service_Config** application.





Select the **Database** list item on the left-hand side of the screen.



The database info screen will display the default database values.

- **Database Server** - This is the URL of the database server that will be hosting the L5 Connect database
- **Database** - This is the name of the L5 Connect database that will be created



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- **Windows Authentication** - Check this to use Windows authentication instead of SQL Server login credentials. The Windows user the service is running as must have the proper permissions for the SQL database.
- **User Name** - This is the name of the database user that will be created for use by the L5 Connect service when performing database tasks
NOTE: The User Name is only used when you are using SQL Server Authentication instead of Windows Authentication.

First verify the **Database Server** and **Database** are correct.

Then you will need to decide whether to use Windows or SQL database authentication. For this example, you will use SQL authentication so leave the **Windows Authentication** checkbox unchecked. You will then need to provide the database **User Name** and **Password** for SQL Server Authentication.



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NOTE: The following SQL naming rules apply to the Database name and the User Name values. (1 - 128 chars, 1st must be letter or underscore, subsequent can be letter, number, @\$#_)

Diagnosics
Info
Database
Licensing
Data Retention
Time Synchronization
Database Migration

Database Server: localhost\Toolcontrols
Database: ToolControlSystem

☐ Windows Authentication

SQL Server Login

User Name: ToolControlSystem_User

Change Password (pencil icon)

Test

Create blank database +
Copy blank database creation script to clipboard +
Save blank database creation script +
Import legacy database +

Then click the **Change** button, that looks like a pencil, next to **Change Password** to set the password the SQL user account will use to access the L5 Connect™ database (example: F0urth@ndInch3\$). **NOTE: This is only used when you are using SQL Authentication.**

Diagnosics
Info
Database
Licensing
Data Retention
Time Synchronization
Database Migration

Database Server: localhost\Toolcontrols
Database: ToolControlSystem

☐ Windows Authentication

SQL Server Login

User Name: ToolControlSystem_User

Change Password (pencil icon)

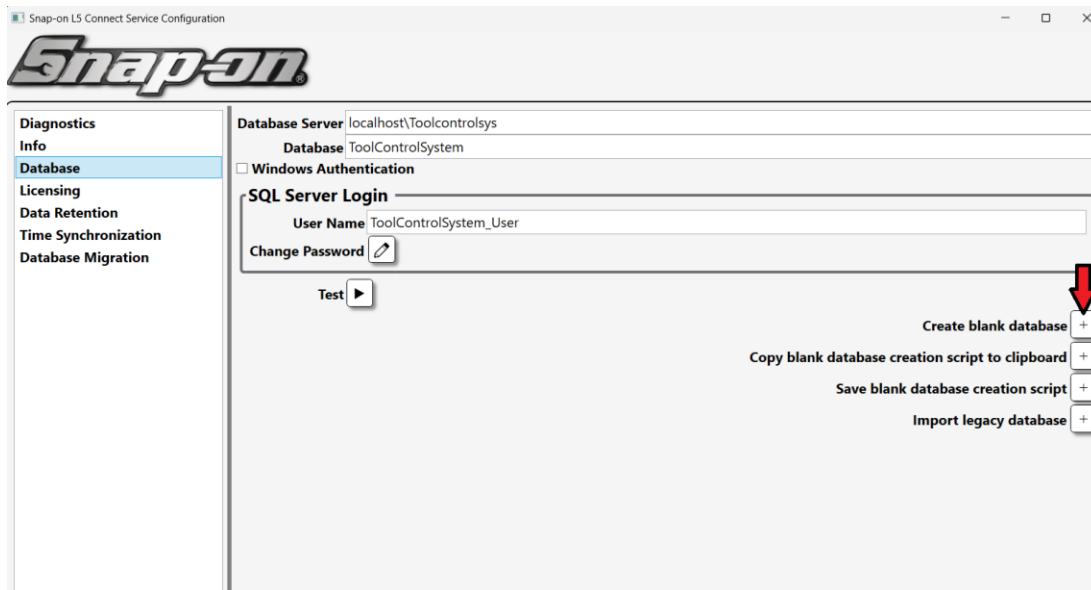
Test

Create blank database +
Copy blank database creation script to clipboard +
Save blank database creation script +
Import legacy database +

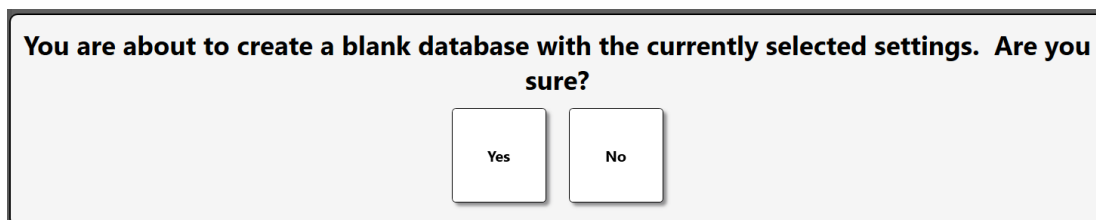


Click the **OK** button. Then click the Blue **Save** button at the top right of the screen.

Next you will click on the + button next to **Create blank database**.



Click **Yes** to continue.



Click the **SQL Server Login** button. You could instead click the **Windows Authentication** button if you prefer to use Windows based authentication.

Select the login method to use for the db admin account for this operation.

SQL Server Login

Windows Authentication

Input the SQL **sa** account information for SQL Server to authenticate your request. For example:

User Name – sa

Password – F0urth@ndInch3\$

Enter database admin credentials for this operation

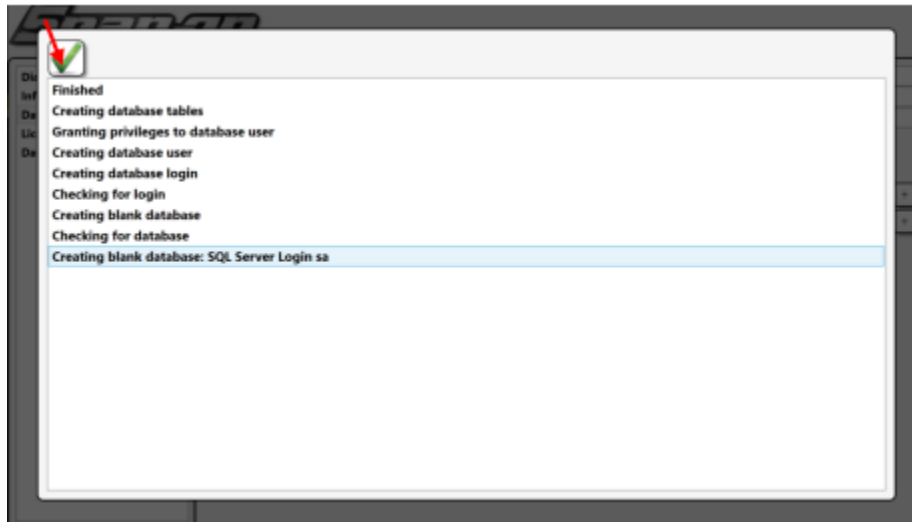
User Name

Password

OK

Cancel

Then click the **OK** button. The system will then create the database, tables, and SQL user for the L5 Connect™ Service to use to communicate and store data. When completed click the ✓ button in the top left of the screen.



You can test the database connections by clicking on the ► button by Test.

(0-41) Success means everything is good to go.

Test



(0-41) Success

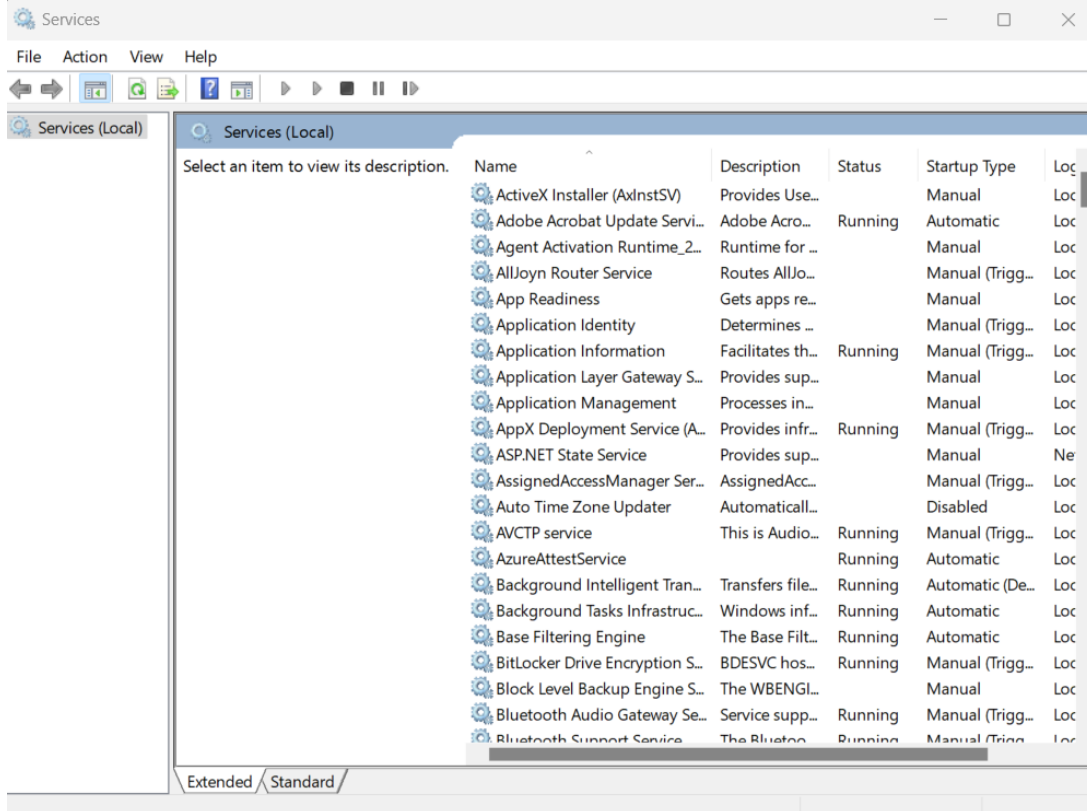


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Windows Authentication Mode

The L5 Connect system supports using Windows Authentication, however, it will require some manual configuration. The system will create the ToolControlSystem database automatically with the **Create blank database** button, but you will need to manually make sure that the desired Windows user the service is running under has been properly assigned to the database and given the proper permissions.

To determine what Windows user the service is running under, open the **Services** application in Windows. You can find this by typing services into the Windows search. You will need administrator privileges to run this application.





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Scroll down to the **Tool Control System Service**, then right-click it and select **Properties**.

The screenshot shows the 'Tool Control System Service Properties (Local Computer)' dialog box with the 'General' tab selected. The 'Service name' is 'ToolControlSystem' and the 'Display name' is 'Tool Control System Service'. The 'Description' is 'Enable Tool Control System Functions'. The 'Path to executable' is 'C:\Program Files (x86)\Tool Control System\Service\Service.exe'. The 'Startup type' is 'Automatic (Delayed Start)'. The 'Service status' is 'Running'. There are buttons for 'Start', 'Stop', 'Pause', and 'Resume'. Below these, there is a text box for 'Start parameters' and a note: 'You can specify the start parameters that apply when you start the service from here.' At the bottom are 'OK', 'Cancel', and 'Apply' buttons.

Then select the **Log On** sub-tab to show the Windows user the service is running as.

The screenshot shows the 'Tool Control System Service Properties (Local Computer)' dialog box with the 'Log On' tab selected. The 'Log on as:' section has two options: 'Local System account' (selected) and 'This account:'. Under 'Local System account', there is a checkbox for 'Allow service to interact with desktop'. Under 'This account:', there are text boxes for 'Username', 'Password', and 'Confirm password', and a 'Browse...' button. At the bottom are 'OK', 'Cancel', and 'Apply' buttons.



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The permissions the L5 Connect service requires are shown here.

Login Properties - NT AUTHORITY\SYSTEM

Select a page: General, Server Roles, User Mapping, Securables, Status

Script Help

Users mapped to this login:

Map	Database	User	Default Schema
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input type="checkbox"/>	TCS_updateTest		
<input type="checkbox"/>	tempdb		
<input checked="" type="checkbox"/>	ToolControlSystem	NT AUTHORITY\SYSTEM	dbo

☐ Guest account enabled for: ToolControlSystem

Database role membership for: ToolControlSystem

<input type="checkbox"/>	db_accessadmin
<input checked="" type="checkbox"/>	db_backupoperator
<input checked="" type="checkbox"/>	db_datareader
<input checked="" type="checkbox"/>	db_datawriter
<input checked="" type="checkbox"/>	db_ddladmin
<input type="checkbox"/>	db_denydatareader
<input type="checkbox"/>	db_denydatawriter
<input type="checkbox"/>	db_owner
<input type="checkbox"/>	db_securityadmin
<input checked="" type="checkbox"/>	public

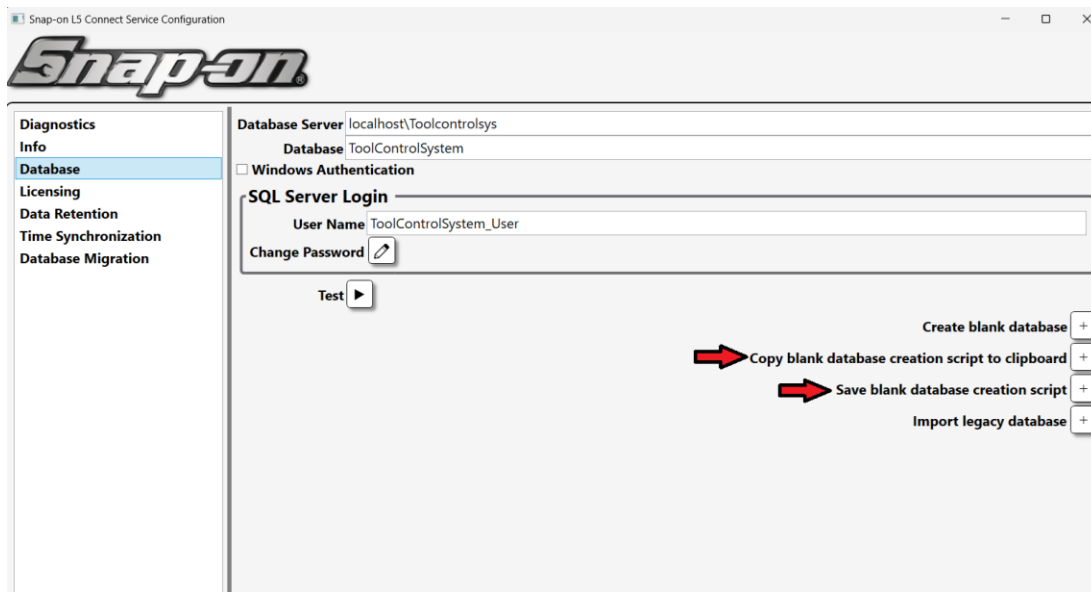
Connection: Server: CONWW11PHILLIPS\TOOLCONT Connection: SNAPONGLOBAL\ss5952 View connection properties

Progress: Ready

OK Cancel

Inspecting the Database Creation Script

In some uncommon cases, you might wish to view the default database creation script that the L5 Connect system uses to create the database and database user or execute it manually. This is very uncommon and should only be done by experienced database administrators. The system provides a way to get this database script so that it can be viewed or manually executed. With the **Database** list item selected on the left hand of the screen you will see a **Copy blank database creation script to clipboard** button. This button will copy the SQL code of the database creation script to the clipboard so that it can be pasted into SSMS. Alternatively, there is also a **Save blank database creation script** button, which will prompt the user to provide a filename and location where the database script will be saved.





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System Date and Time Settings



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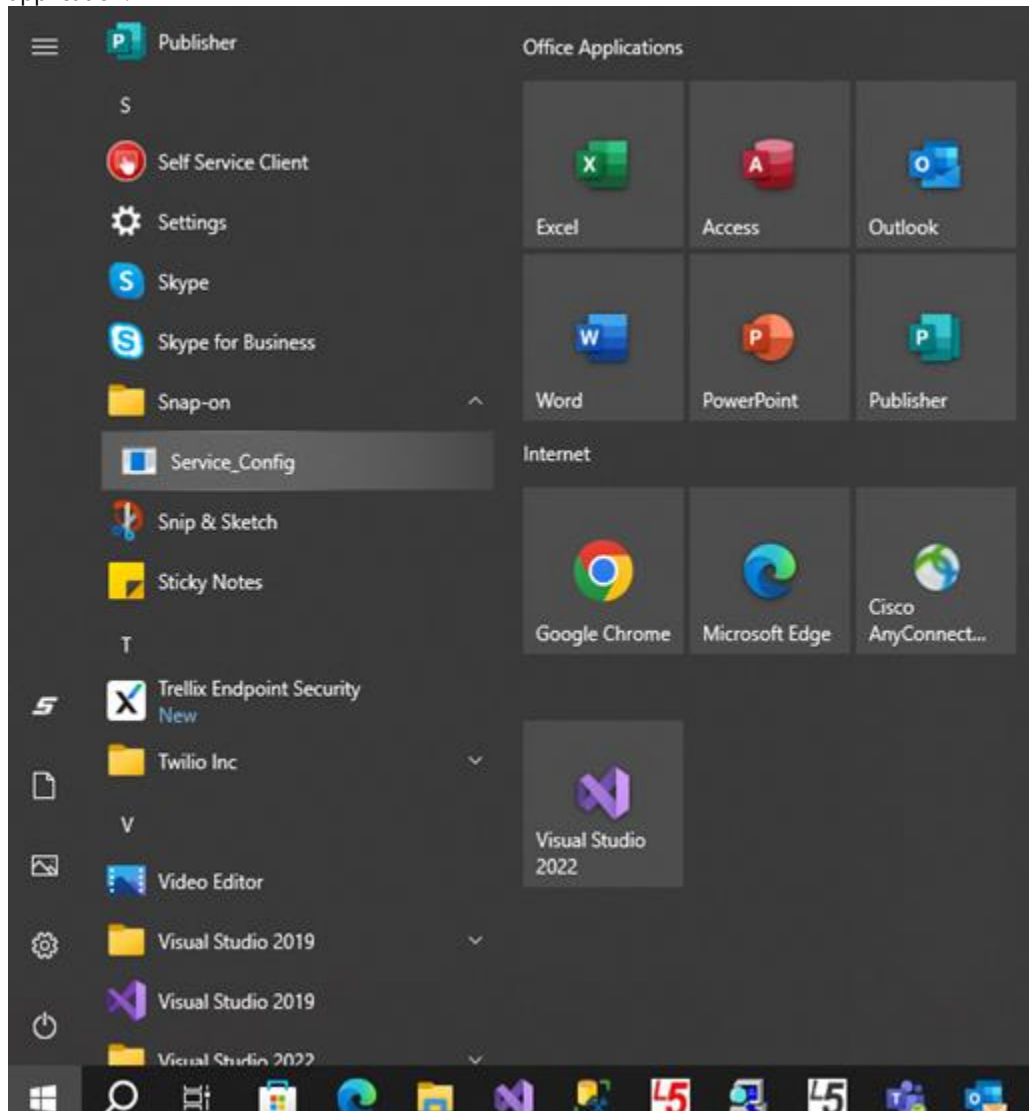
L5 Connect System Time Server Configuration

This section will explain the process of setting up the L5 Connect system service as a time server. This will allow all the devices in the L5 system to keep their time synchronized with the L5 service machine. It is critical for the devices in the L5 system to maintain close time synchronization with the L5 service so that they can properly communicate with each other. For L5 systems where the devices are configured to be on a domain, the domain controller will typically provide time synchronization, and this process would not be used. In situations where the devices are not on a local domain and there is not an option for Windows based time server configuration, the L5 system can be configured as a time server using this document.

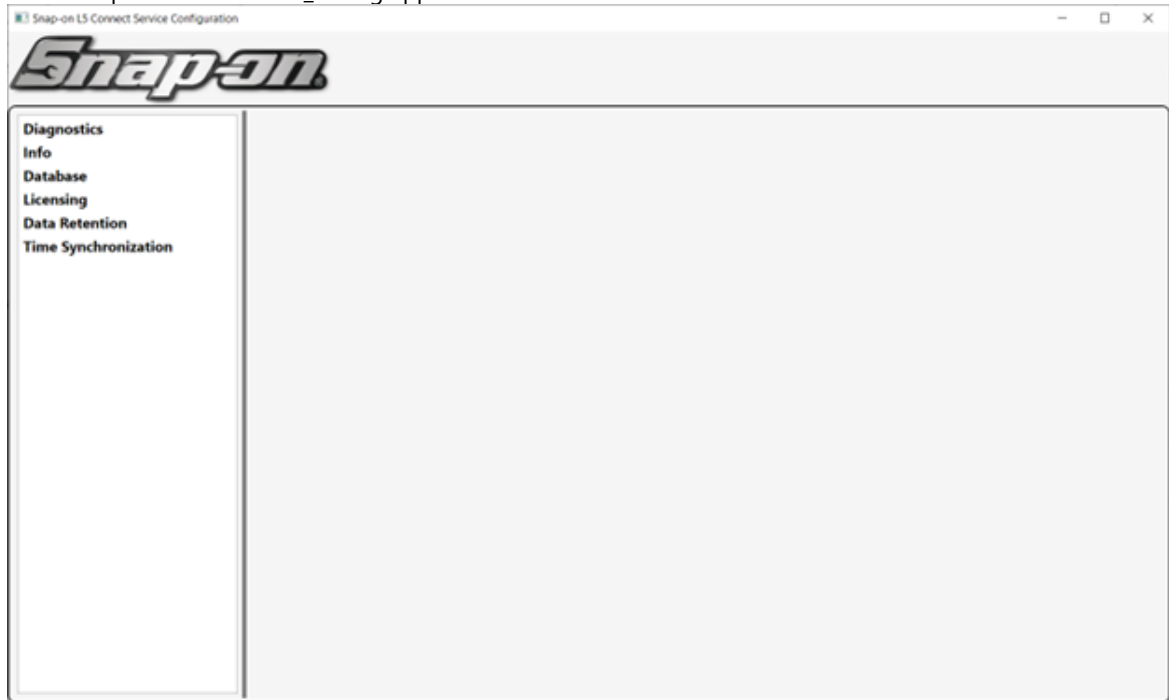
This document will walk the user through the steps of configuring the L5 system as a time server. The first step is configuring the L5 service to be a time server. The second step is configuring the devices in the system so that they can properly respond to requests from the L5 service to adjust their system time.

Configuration of the L5 Service

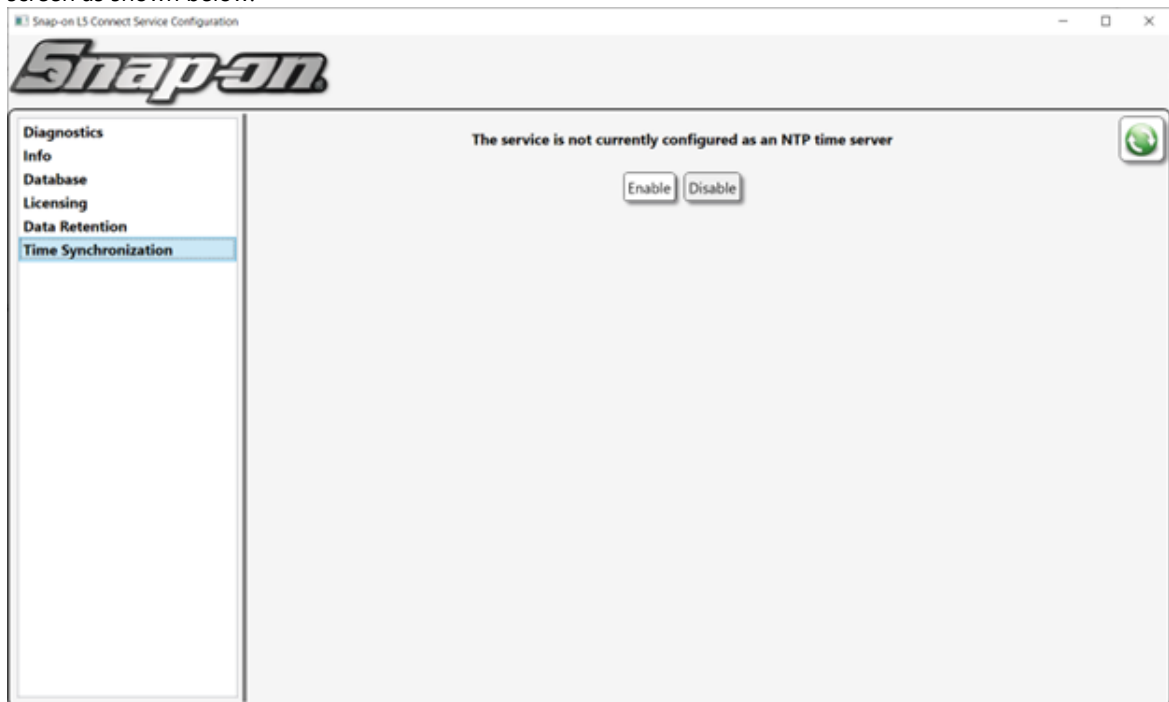
1. Go to the computer on which the L5 Connect service is installed. Open the start menu and scroll down to the Snap-on folder and click it. Then click the Service_Config shortcut to open the L5 Service configuration application.



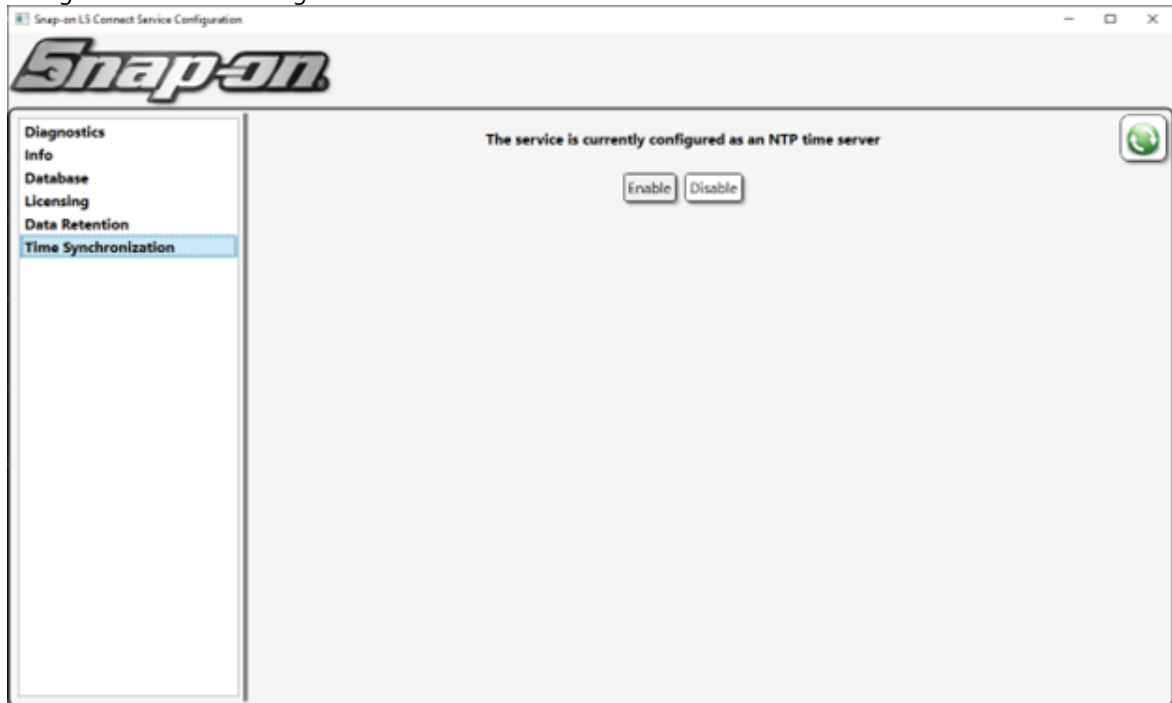
- This will open the L5 Service_Config application.



- Click the "Time Synchronization" item in the list on the left-hand side to open the time sync configuration screen as shown below.



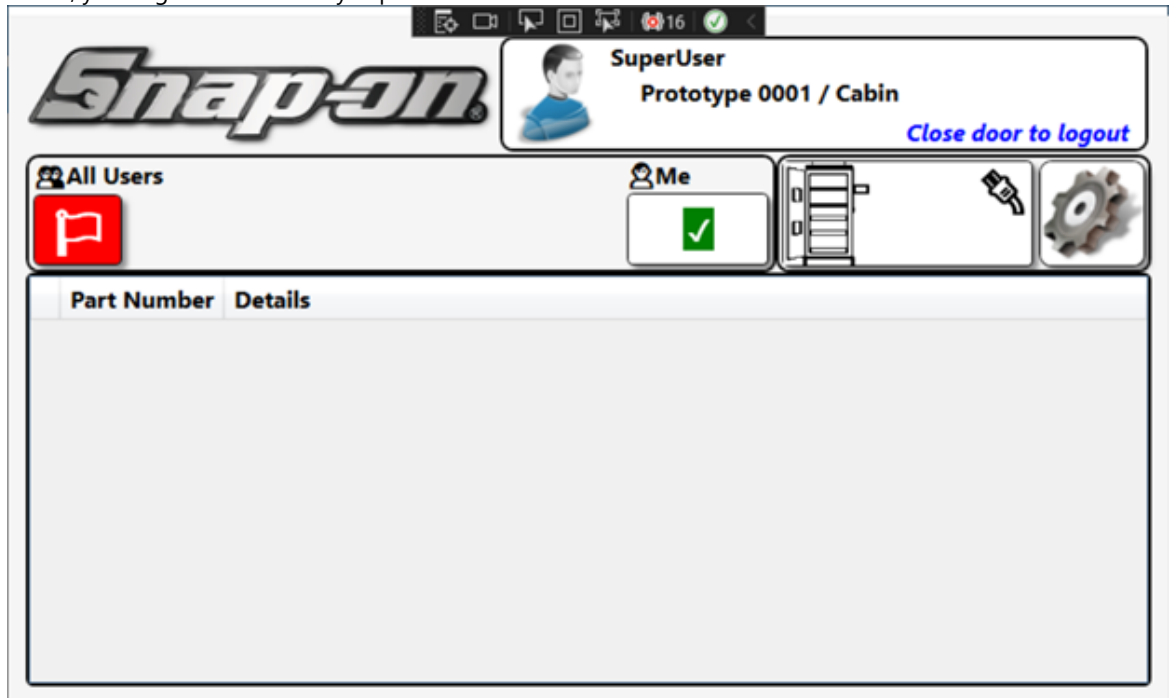
4. If the app shows that the service is not currently configured as a time server, click the Enable button. This will configure the server running the L5 Service to be a time server.



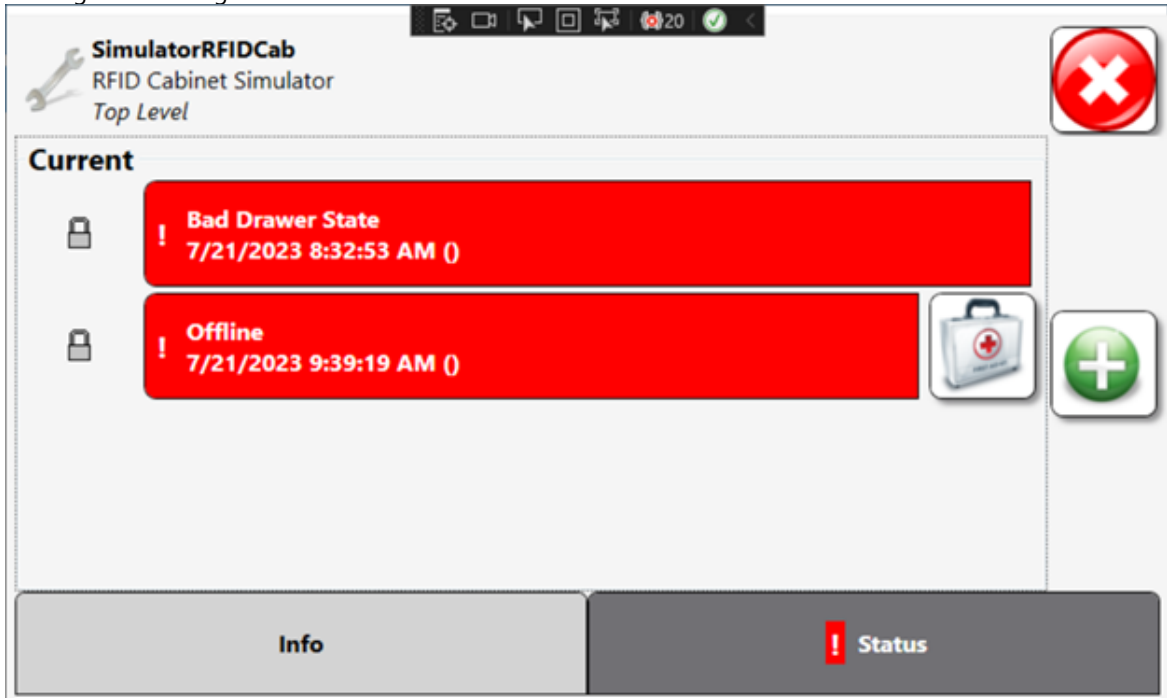
5. Once this has been done, devices in the L5 system that are connected to this L5 Service and configured for time synchronization will use this machine as a time server.

Configuration of an Existing L5 Device

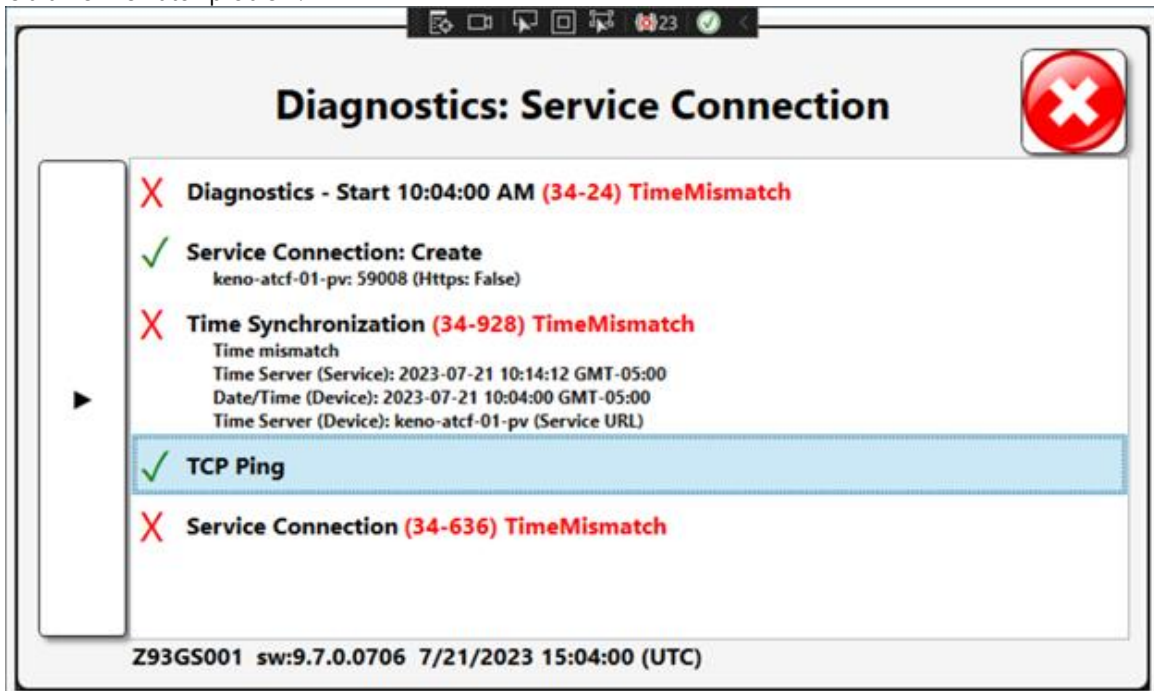
1. There are two scenarios for configuring an L5 device for using a time server. The first is for a device that is already part of the L5 system, i.e., the device has already been connected to the L5 Service. If your device does not show a satellite dish on the main screen then it is in an offline state and has an alert flag as shown below, you might have a time sync problem.



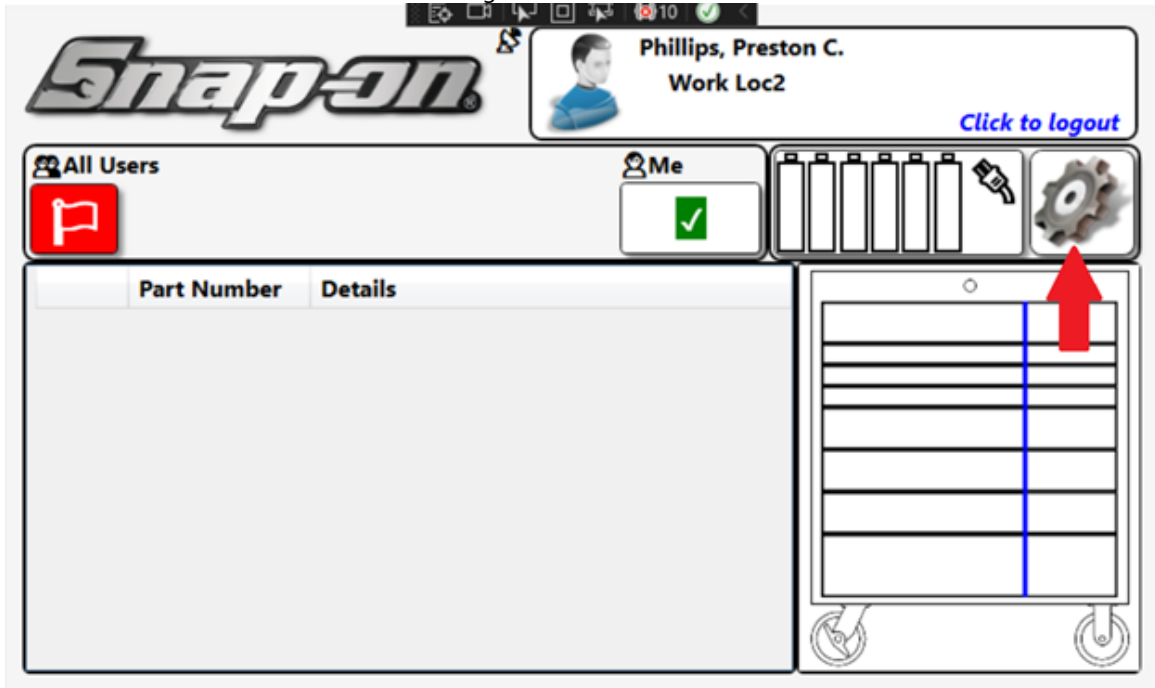
- Clicking the alert flag will show the offline state as shown below.



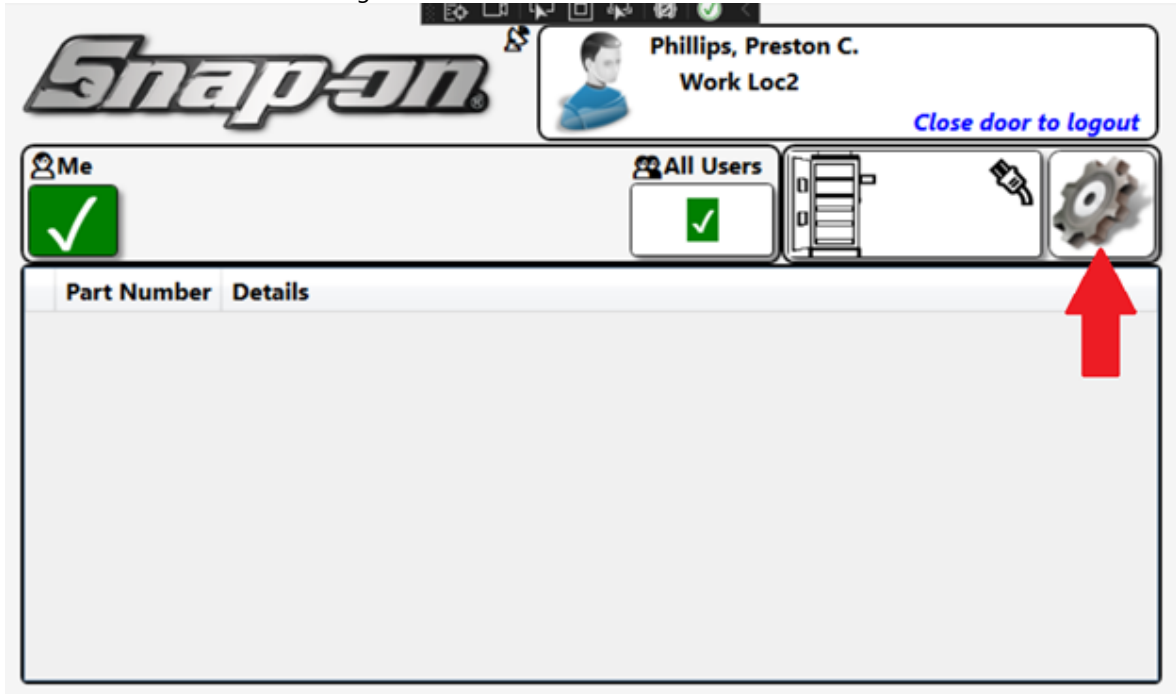
- Clicking the diagnostic suitcase button will show details about this error. As shown below it is clear that there is a time mismatch problem.



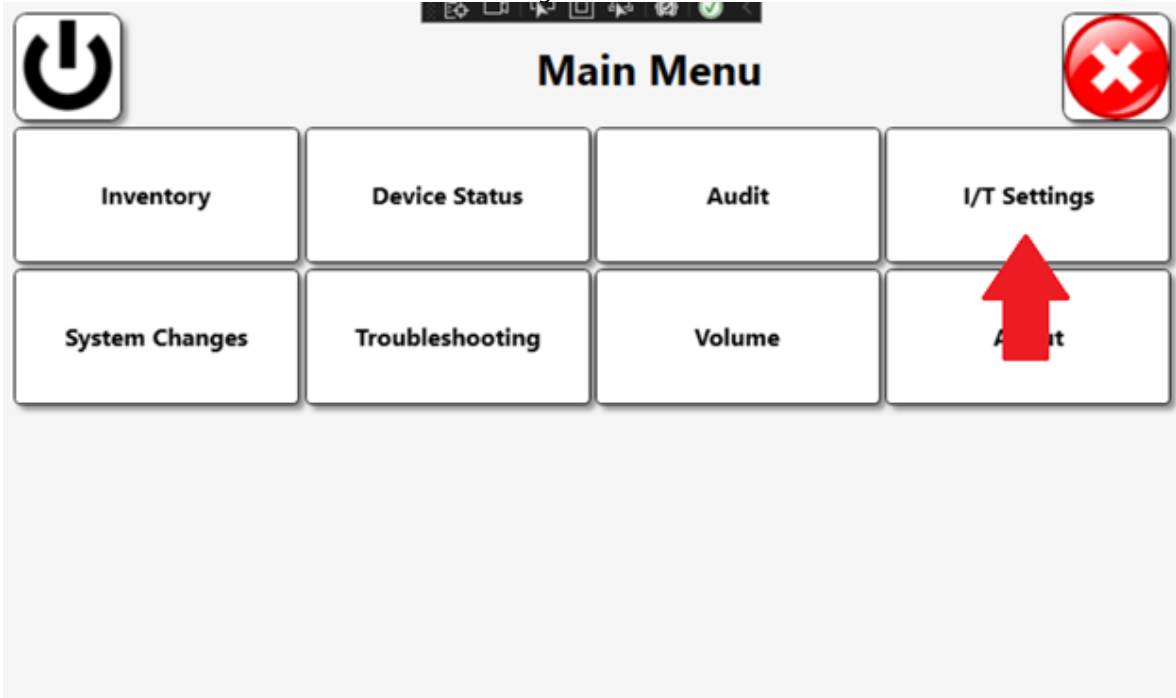
4. To configure this device to use the L5 Service as a time server you would navigate to the main menu from the home screen. On an L5 Toolbox, click the gear on the main window.



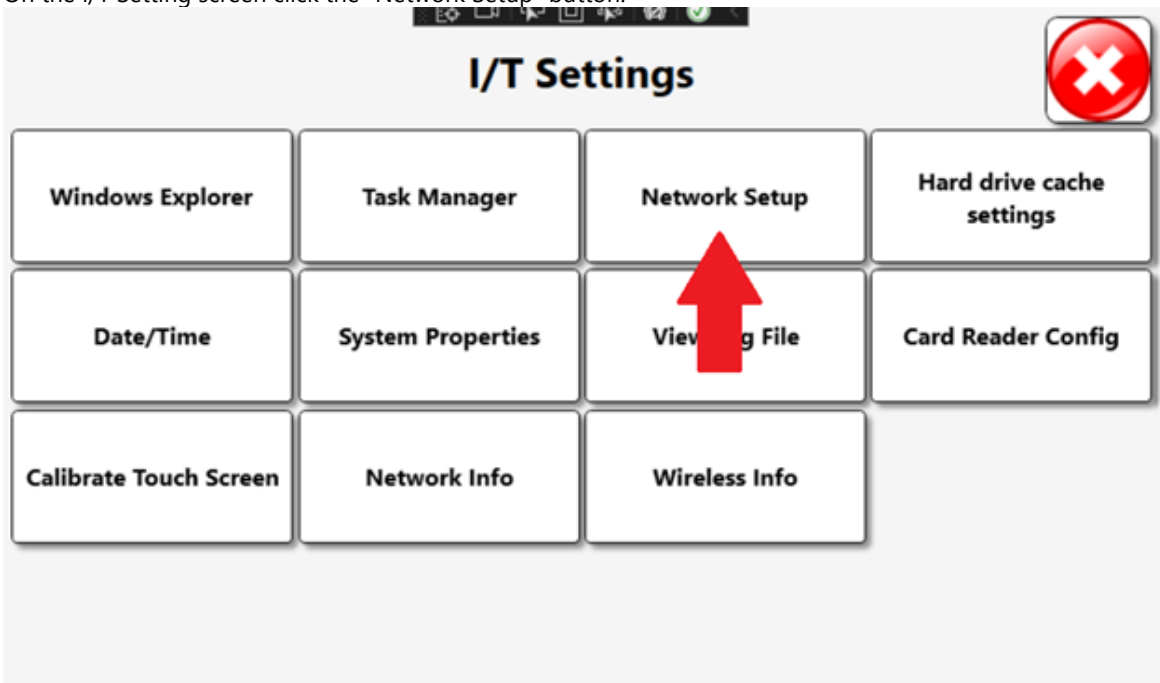
5. On the L5 RFID Cabinet, click the gear on the main screen as well.



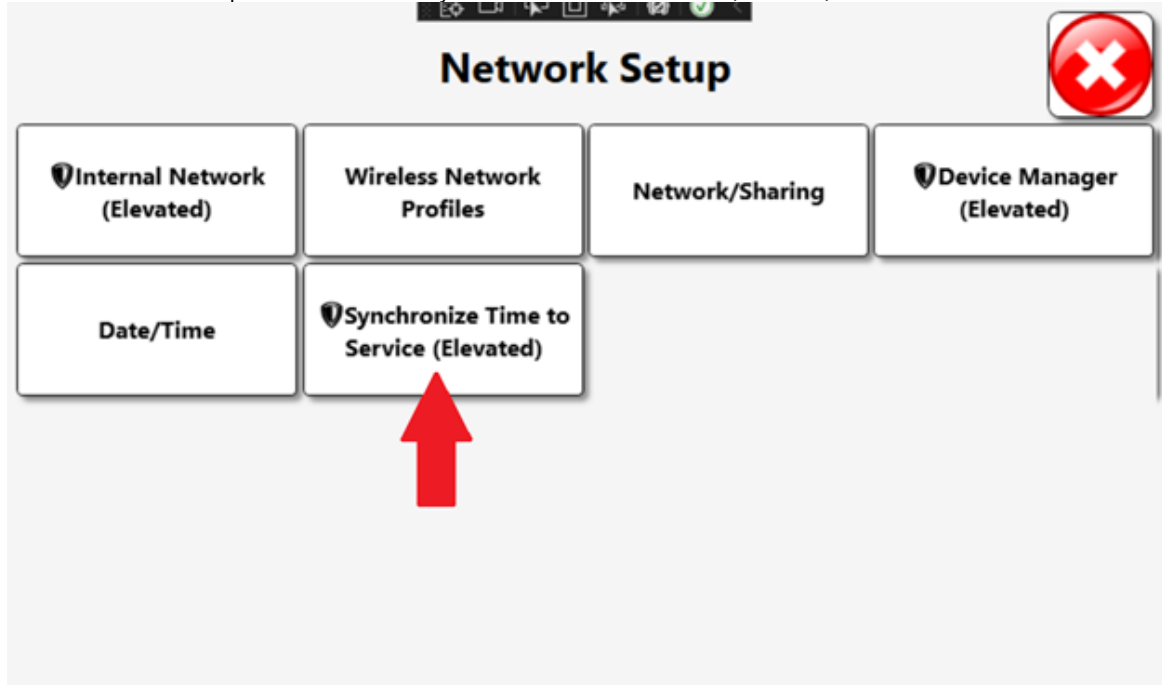
6. Once on the main menu screen click the "I/T Settings" button.



7. On the I/T Setting screen click the "Network Setup" button.



8. On the Network Setup screen click the "Synchronize Time to Service (Elevated)" button.

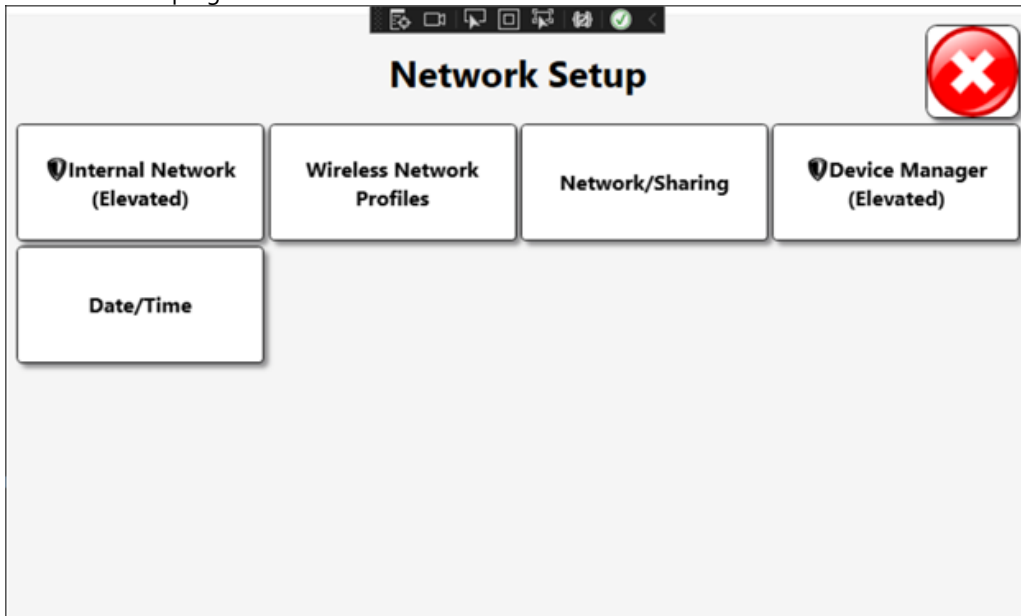


9. You will then see a window prompting you to enter administrator credentials to continue. The default credentials are:
User Name: user1
Password: F0urth@ndInch3\$

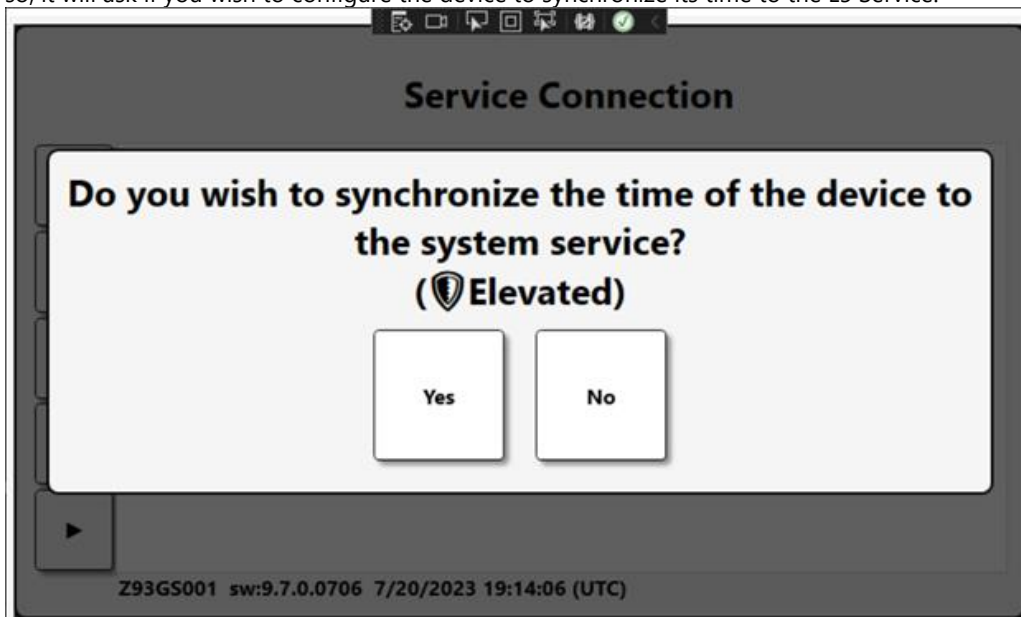
After entering the credentials, the device will then configure itself to be able to properly adjust its operating system time when the L5 Service requests it.

Configuration of a new L5 Device

1. When adding a new device to an existing L5 system that has been configured to operate as a time server, you will be initially put in a Network Setup screen. Once you have properly configured any network parameters and are ready to continue with the process to connect to the L5 Service, click the red close button in the top right corner of the screen.



2. You can then follow the process to connect to an L5 Service as described in the L5 Connect ATC Operation Guide. Look for the table of contents header "Connecting to a L5 Connect Service". Once you have provided all the required information, the system will detect if the L5 Service has been configured as a time server. If so, it will ask if you wish to configure the device to synchronize its time to the L5 Service.

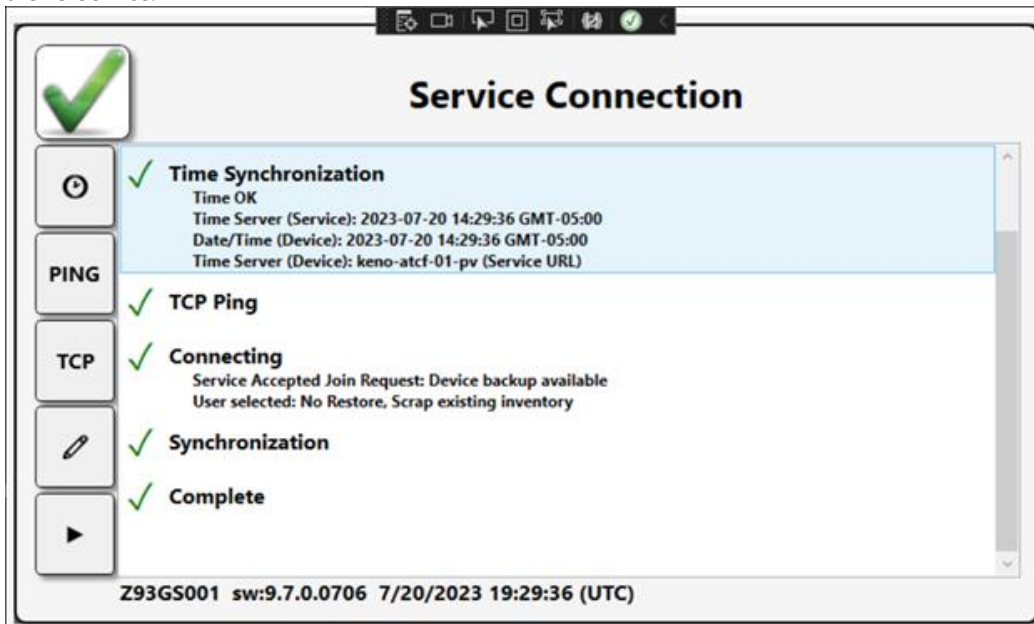


3. Select Yes to configure your device to synchronize its time to the L5 Service. You will then see a window prompting you to enter administrator credentials to continue. The default credentials are:

User Name: user1

Password: F0urth@ndInch3\$

After entering the credentials, the device will then configure itself to be able to properly adjust its operating system time when the L5 Service requests it. The device will then continue with the process to join itself to the L5 Service.



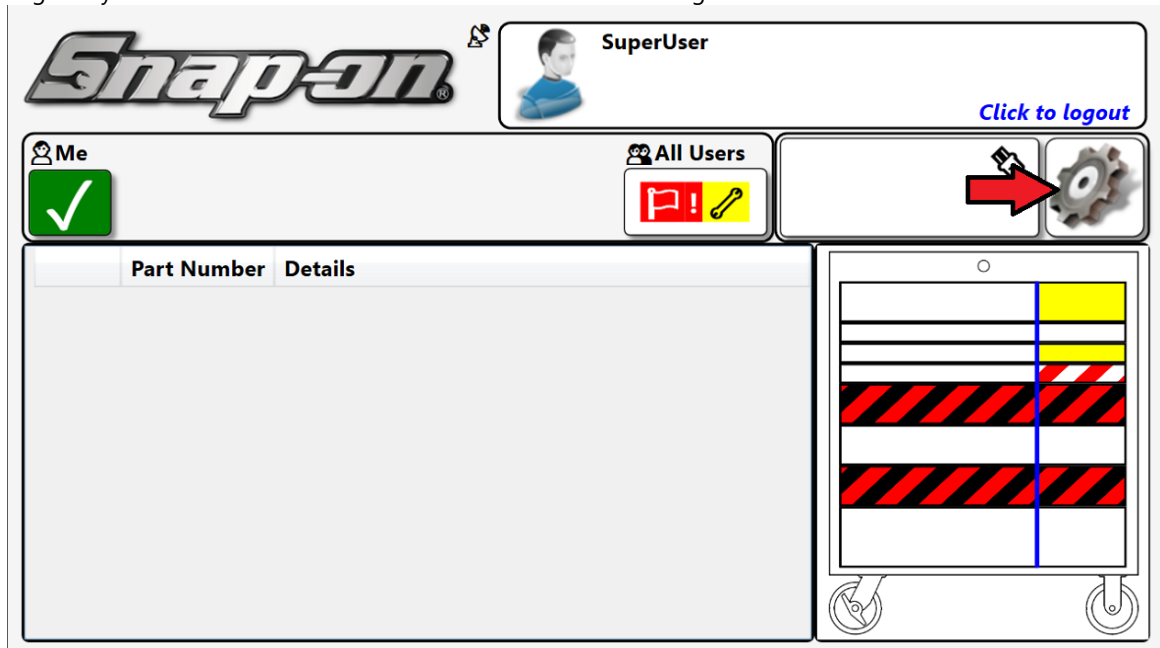
4. Now your new device should be added to the L5 System and set up to keep its local time synchronized with the L5 Service machine, ensuring their ability to properly communicate.

Device Time Zone Configuration

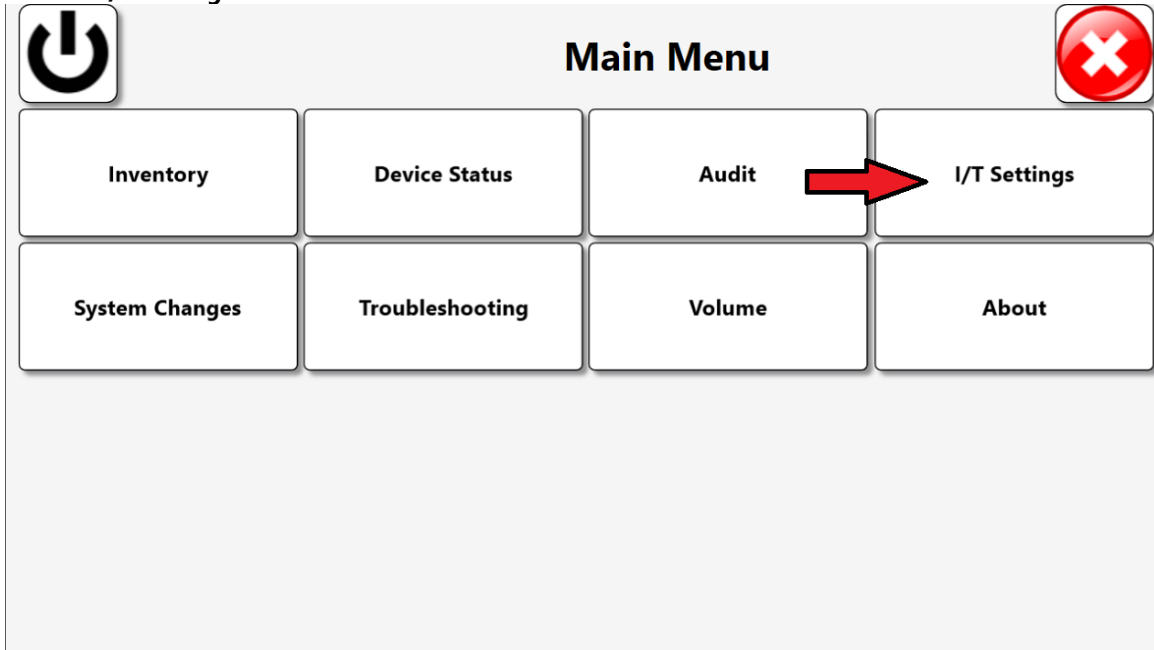
Some features in the L5 Connect system use the local time on the device. Currently, all devices are shipped with the default time zone of Central Standard Time (CST). To modify the time zone on your device, use the following procedure.

NOTE: The employee performing this procedure will need the **Date Time** and **IT Function Access** permissions in their profile.

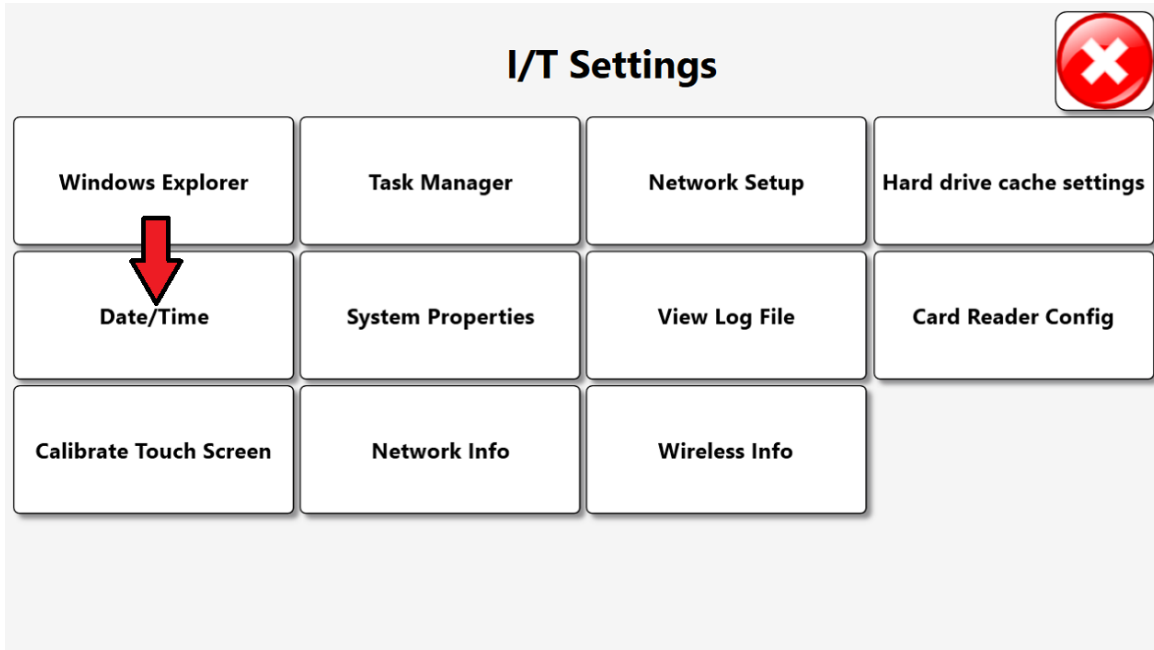
1. Log into your device and click the **Menu** button that looks like a gear.



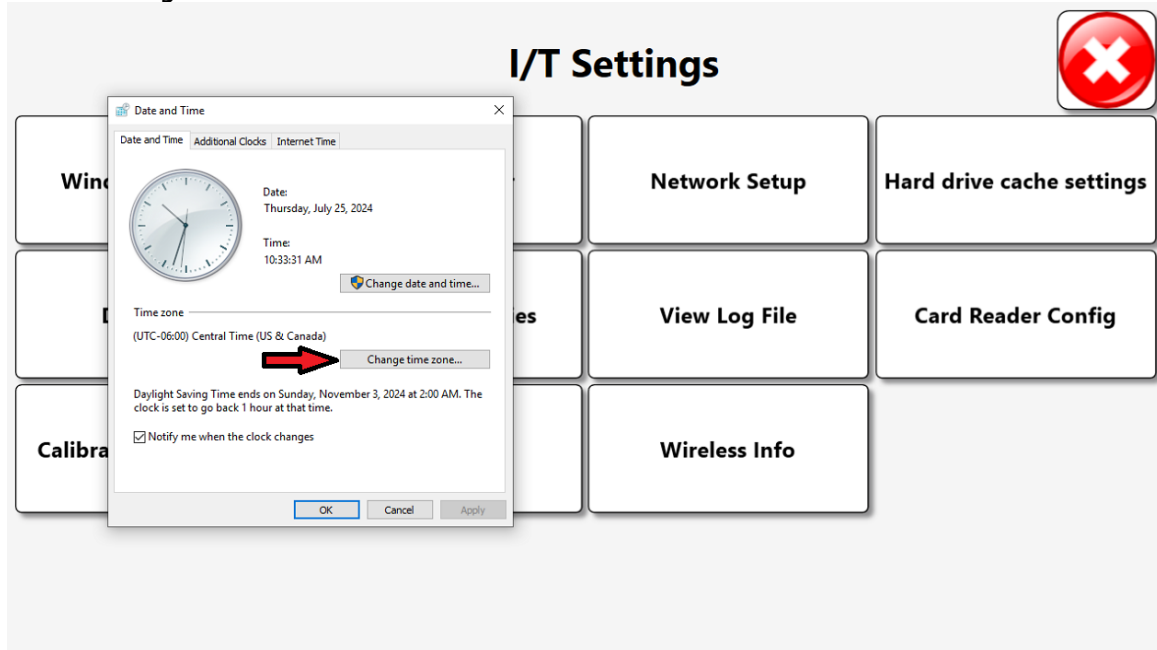
2. Click the **I/T Settings** button.



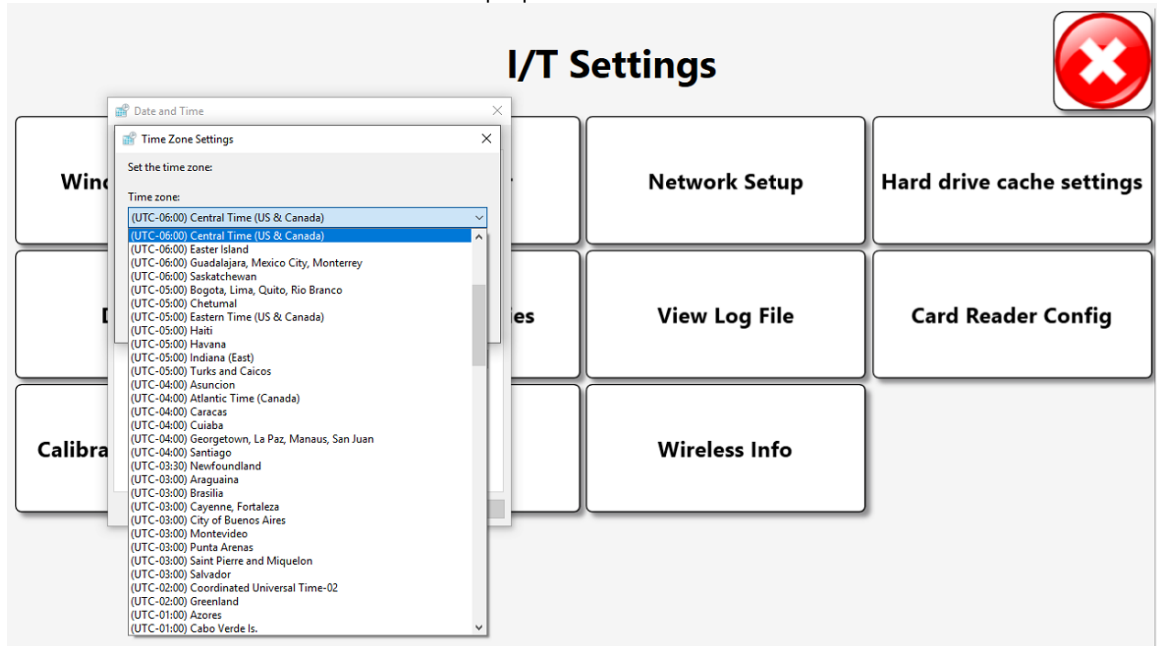
3. Click the **Date/Time** button.



- Click the **Change time zone...** button.



- Use the **Time zone:** combo box to select the proper time zone.



- Click the **OK** button and then click the **OK** button to close the windows and save the change.



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Connecting to a L5 Connect™ Service

You must connect your new Device to a licensed L5 Connect™ service. This requires the Device to be connected to a network in which it can communicate with the service. ATC devices need to be connected to the Service to function. However, it can run if the Service or network goes down for a short time. The system is designed to be connected 24/7 to the Service to receive changes and new users and push backups and updates.

Configuring the Service

The first step is to make sure that you have your L5 Connect™ Service configured properly for the type of communication you wish to use.

Service_Config Application Setup

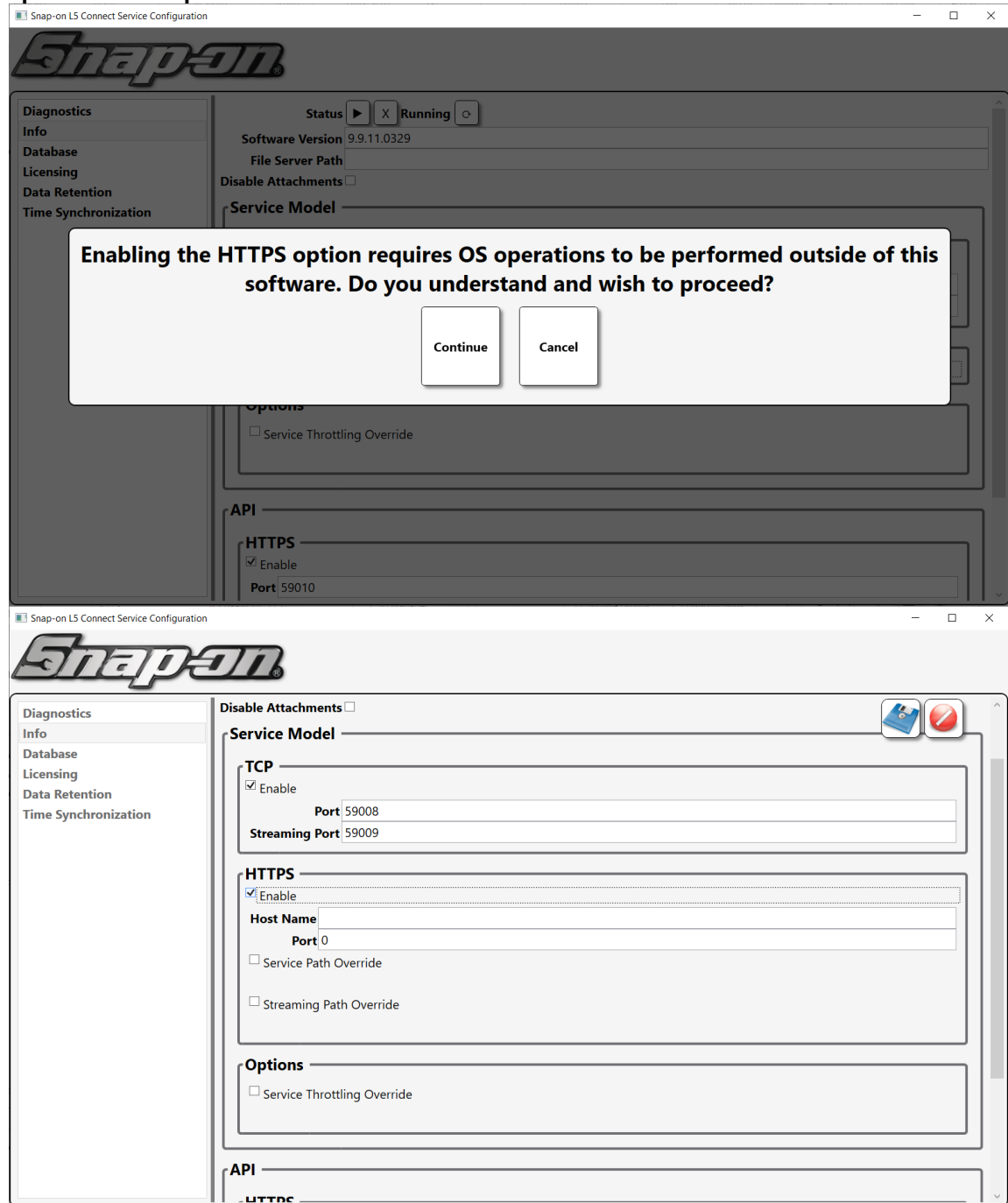
1. On the computer where your L5 Connect™ service is installed, open the **Windows Start Menu**, expand the **Snap-on** item, and then open the **Service_Config** application.
2. Select the **Info** tab on the left-hand side.

3. By default, the service will be configured for TCP communication on ports 59008 and 59009 for streaming.

Configuring HTTPS

1. L5 Connect Supports both TCP and HTTPS connections. You may want to use HTTPS if you are connecting to the service over a WAN connection or the internet to further secure the connection. To use HTTPS, check the **enable** checkbox under the **HTTPS** service model. **NOTE: When you save, you will see a warning that OS**

operations are required as well. This will be covered in this document as well.

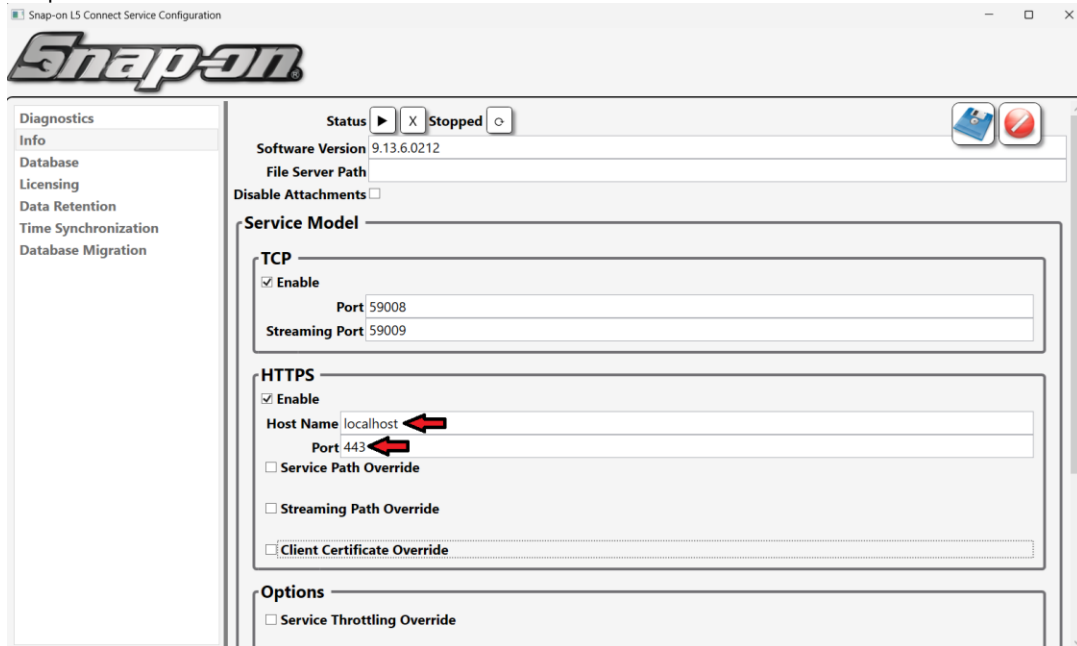


The top screenshot shows the Snap-on L5 Connect Service Configuration window. A dialog box is displayed with the text: "Enabling the HTTPS option requires OS operations to be performed outside of this software. Do you understand and wish to proceed?". There are "Continue" and "Cancel" buttons.

The bottom screenshot shows the same window with the "Enable" checkbox for the "HTTPS" option checked. The "Host Name" field is highlighted, indicating it needs to be set.

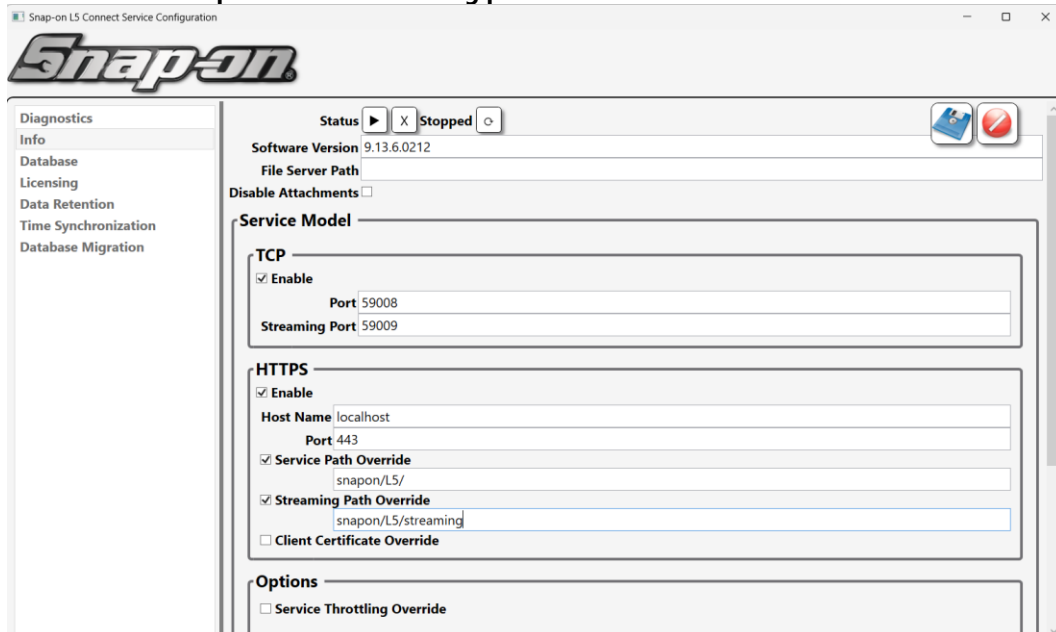
2. Set the **Host Name** to name of your service's server. This will be the host name that must be used by devices and admin clients to connect.

- Set the **Port** to the HTTPS port over which you want to communicate. Snap-on recommends using 443 for the port value.



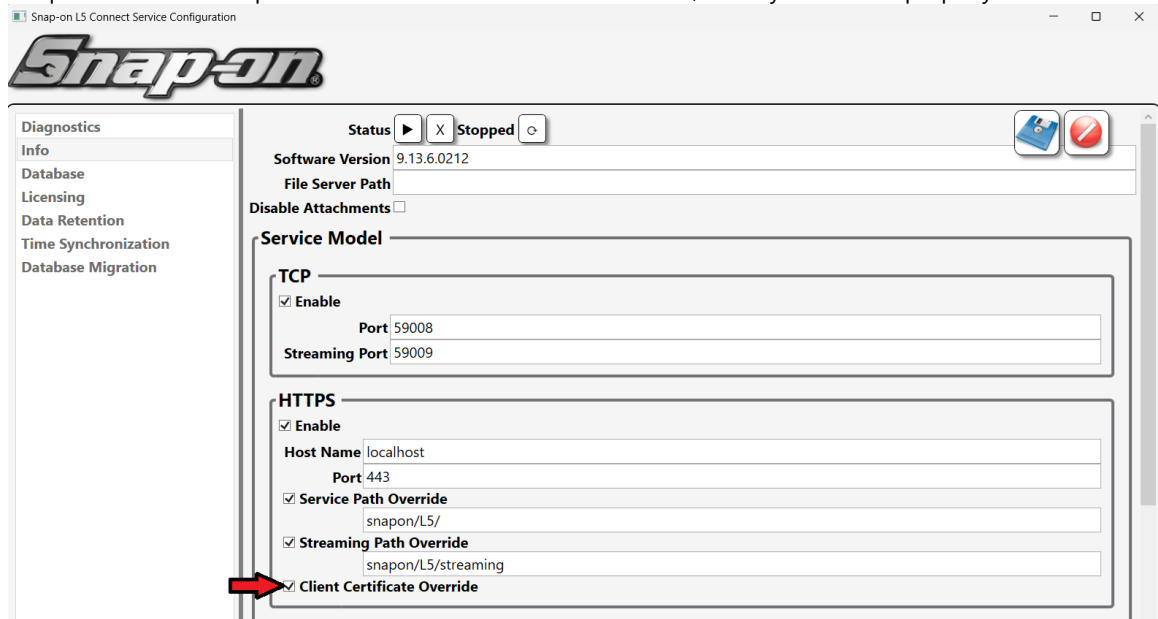
The screenshot shows the Snap-on L5 Connect Service Configuration window. The left sidebar contains a menu with options: Diagnostics, Info, Database, Licensing, Data Retention, Time Synchronization, and Database Migration. The main area displays the configuration for the L5 Connect service. The status is 'Stopped'. The software version is 9.13.6.0212. The file server path is empty. The 'Disable Attachments' checkbox is unchecked. The 'Service Model' section is expanded, showing the 'TCP' and 'HTTPS' sections. In the 'HTTPS' section, the 'Enable' checkbox is checked, the 'Host Name' is 'localhost', and the 'Port' is '443', which is highlighted by a red arrow. The 'Service Path Override' checkbox is unchecked. The 'Streaming Path Override' checkbox is unchecked. The 'Client Certificate Override' checkbox is unchecked. The 'Options' section is expanded, showing the 'Service Throttling Override' checkbox, which is unchecked.

- If you need to add a path to the server name, you can select the **Service Path Override** checkbox and/or the **Streaming Path Override**. The default service path is **IDeviceService** and the default streaming path is **IFileStreamService**.
- Then input the desired path to replace the default value, making sure that the combination of that path and the rest of the pieces still make a valid URL. The proper format for the host name URL is **https://{HOST_NAME}:{PORT}/{PATH}**.
- NOTE: The service path and the streaming path must be different!**



The screenshot shows the Snap-on L5 Connect Service Configuration window. The left sidebar contains a menu with options: Diagnostics, Info, Database, Licensing, Data Retention, Time Synchronization, and Database Migration. The main area displays the configuration for the L5 Connect service. The status is 'Stopped'. The software version is 9.13.6.0212. The file server path is empty. The 'Disable Attachments' checkbox is unchecked. The 'Service Model' section is expanded, showing the 'TCP' and 'HTTPS' sections. In the 'HTTPS' section, the 'Enable' checkbox is checked, the 'Host Name' is 'localhost', and the 'Port' is '443'. The 'Service Path Override' checkbox is checked, and the path 'snapon/L5/' is entered. The 'Streaming Path Override' checkbox is checked, and the path 'snapon/L5/streaming' is entered. The 'Client Certificate Override' checkbox is unchecked. The 'Options' section is expanded, showing the 'Service Throttling Override' checkbox, which is unchecked.

- Whenever a device communicates with the L5 Connect service, that communication normally includes a certificate that is used to verify the device is a valid L5 Connect device. If the L5 Connect system is deployed in certain environments, IT security software may strip the certificate from these communications. This will cause communication errors with the system. Selecting the **Client Certificate Override** option allows the service to ignore the lack of certificate to prevent these communications errors. The devices also have a unique token that is required for communication with the service, so they will still be properly vetted.



Service Throttling

The L5 Connect™ Service is a Windows WCF based service and has a default value of maximum concurrent sessions that is 100 times the number of processor cores. Based on this formula, it is recommended that the service machine have one core per 50 devices and admin applications in your L5 Connect™ system. Otherwise, you will likely experience service instability. Some customers with large L5 Connect™ installations may wish to manually configure the maximum concurrent sessions to allow a larger number without actually increasing the cores of the server running the L5 Connect™ service. This can be done using the procedure detailed below. If you do decide to manually configure the maximum concurrent sessions, you should monitor your service process to make sure it has sufficient resources.

- Check the **Service Throttling Override** checkbox.
- Change the default value of 200 to the desired maximum number of simultaneous connections.
 - This value needs to be greater than two times the sum of devices and admin clients.

Service_Config Finalization

- Click the save button to save your changes.
- Finally, restart the service by clicking the **X** button to stop it and then the **▶** button to restart it and make the changes take effect.



L5 Connect User Manual

Setting Up HTTPS Certificate

If you have configured your L5 Connect™ service to use HTTPS, you will need to follow this procedure:

SSL Certificate

1. Obtain a public SSL certificate and move it to the L5 Connect Service PC. **NOTE: This can be obtained from several 3rd party providers or your own Certificate Authority server. Check with your IT Department on how to obtain an SSL certificate.**
2. **Also, be sure to set the common name of the certificate to the Host Name specified in the Service_Config HTTPS setup.**
3. Required Cert Format: PKCS#12 with private key included in cert.
4. Install the cert into the LocalMachine/Personal cert store of the L5 Connect Service PC.
5. Make sure to get the thumbprint of cert, it will be used in the following commands. The thumbprint can be found in the cert properties-> Details Tab (Scroll to bottom)
6. Highlight and Copy/Paste the thumbprint to a notepad, make sure to remove all the spaces.

Map-Server Certificate to Port (on the server)

1. **From elevated Command Prompt or PowerShell:**
Issue this command to bind the cert to all interfaces on the system.

```
netsh http add sslcert iport=0.0.0.0:PORT_TO_BIND appid={d5bf2edf-23fd-44cf-a984-ccd2095bdd0c} certhash=CERTIFICATE THUMBPRINT
```

OR issue this command to bind the cert to a specific IP address.

```
netsh http add sslcert iport=IP_OF_INTERFACE:PORT TO BIND  
appid={d5bf2edf-23fd-44cf-a984-ccd2095bdd0c} certhash=CERTIFICATE  
THUMBPRINT
```

Configuring Windows Firewall

Sometimes, for the different pieces of an L5 Connect System to communicate to the Service, changes may need to be made to the Windows firewall on the service machine. Whether this needs to be done, and exactly how it needs to be done, depends on the configuration of the specific L5 Connect system. This section will cover the common scenarios and how to configure the Windows firewall for them.

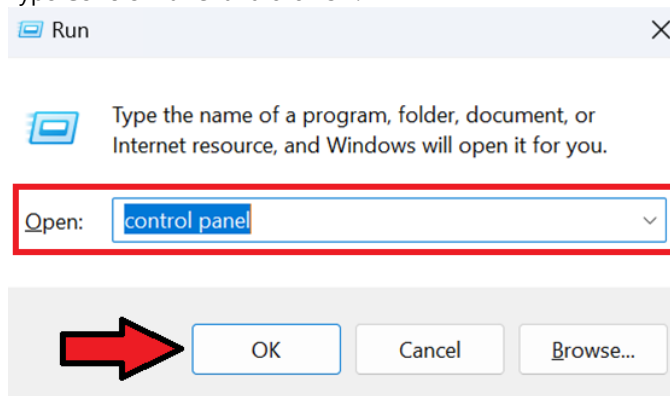
Everything on One PC

For cases where all of the components of the L5 Connect system are on the same PC no firewall configuration needs to be done. For instance, If the system is a single tool crib with the service running on the same PC as the tool crib application, no firewall configuration needs to be done. All the pieces can talk to each other without crossing the firewall boundary. This is probably the least likely but the simplest setup.

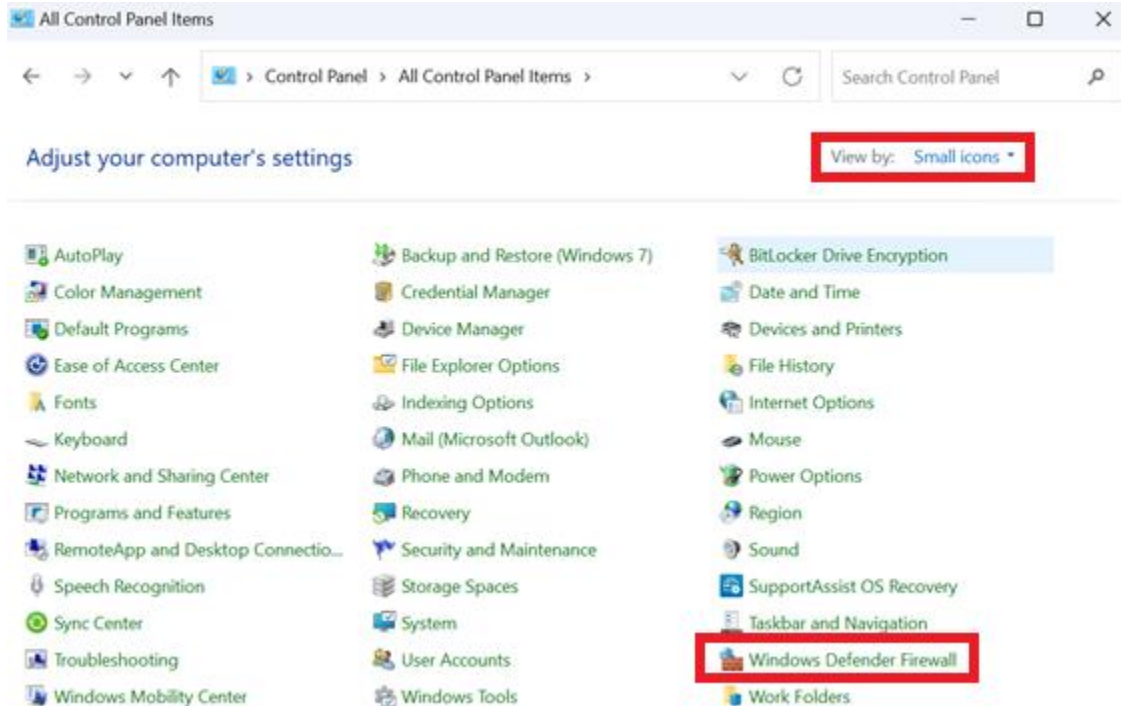
Distributed System on Corporate Network

When L5 Connect system pieces must communicate across PC boundaries the service PC will need firewall configuration to open ports for that communication. Here is the process used to open ports for the service to communicate. Sometimes you might also need to enable file and printer sharing rules as part of the configuration. But in the case where the system is on a corporate network, there is almost certainly a DNS provider, and this is not necessary and shouldn't be done. It will be discussed more in the next section.

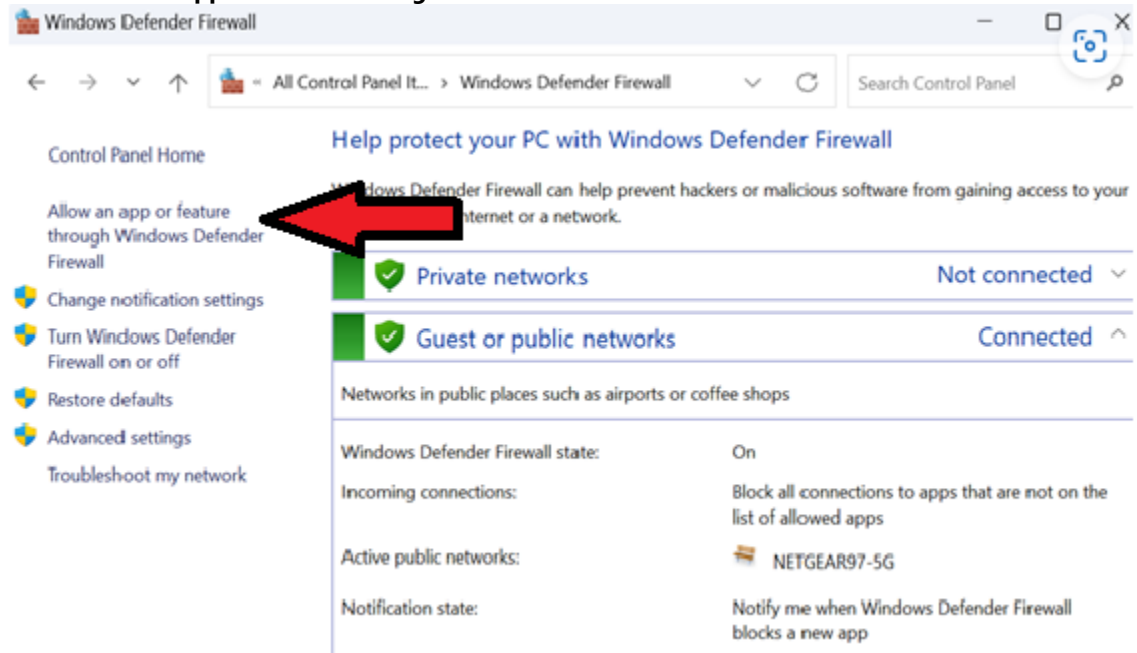
1. Press the **Windows** and **R** keys to open the Run window.
2. Type **Control Panel** and click **OK**.



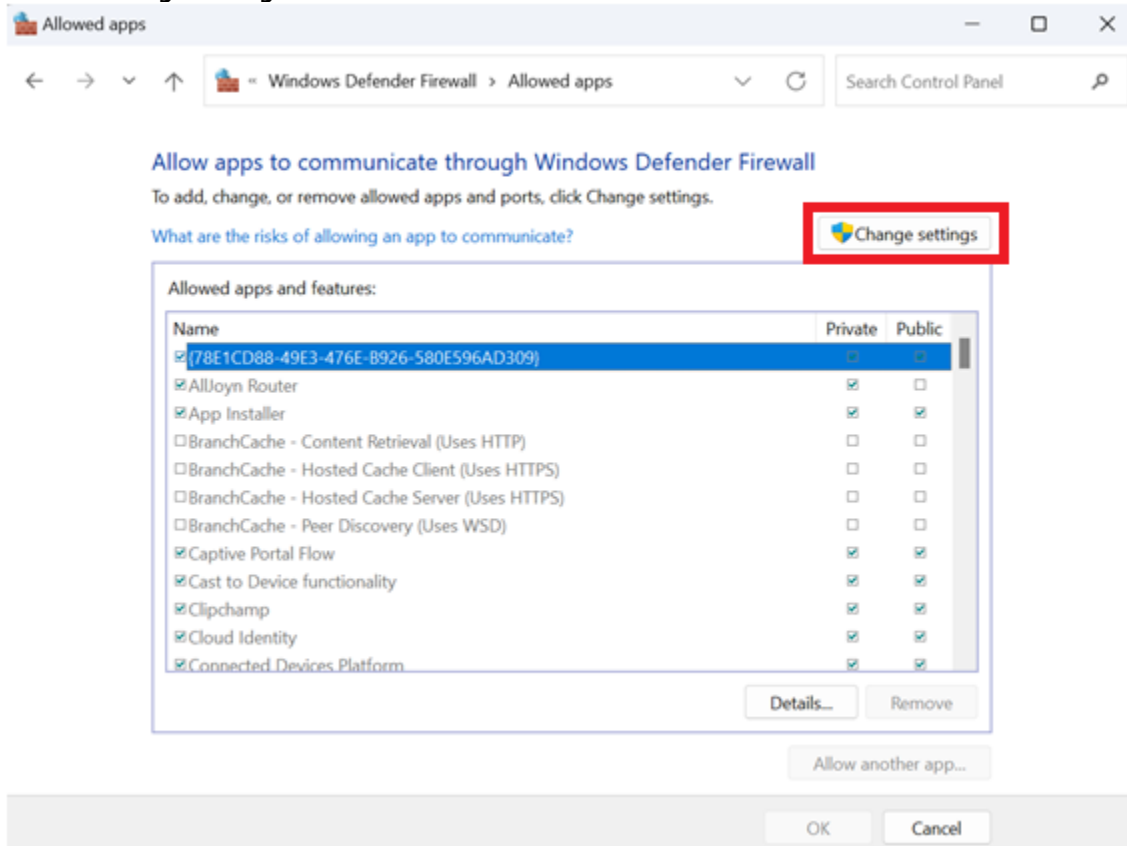
3. Select **Small Icons** and click on **Windows Defender Firewall**.



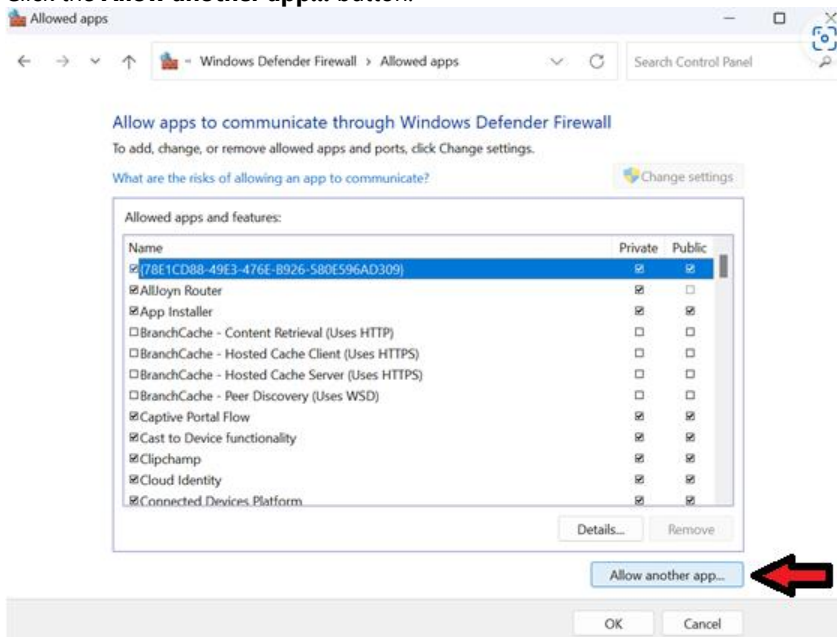
4. Select **Allow an app or feature through Windows Defender Firewall**.



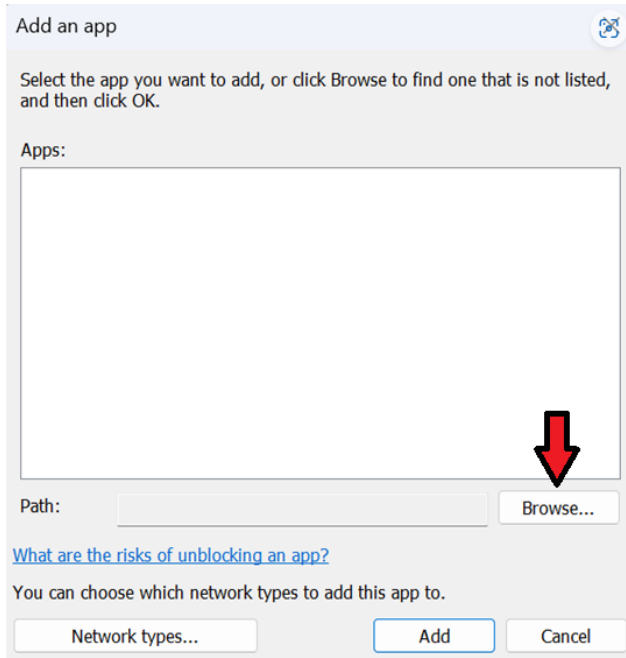
- Click the **Change Settings** button.



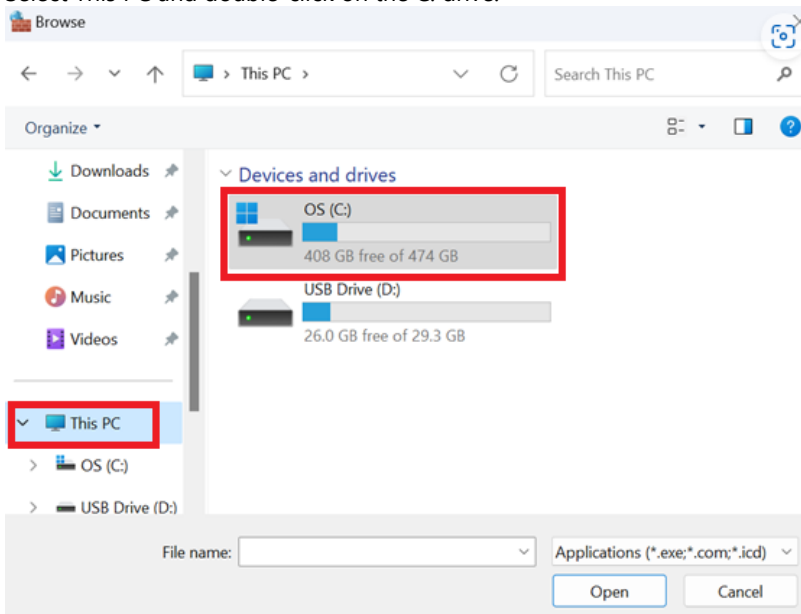
- Click the **Allow another app...** button.



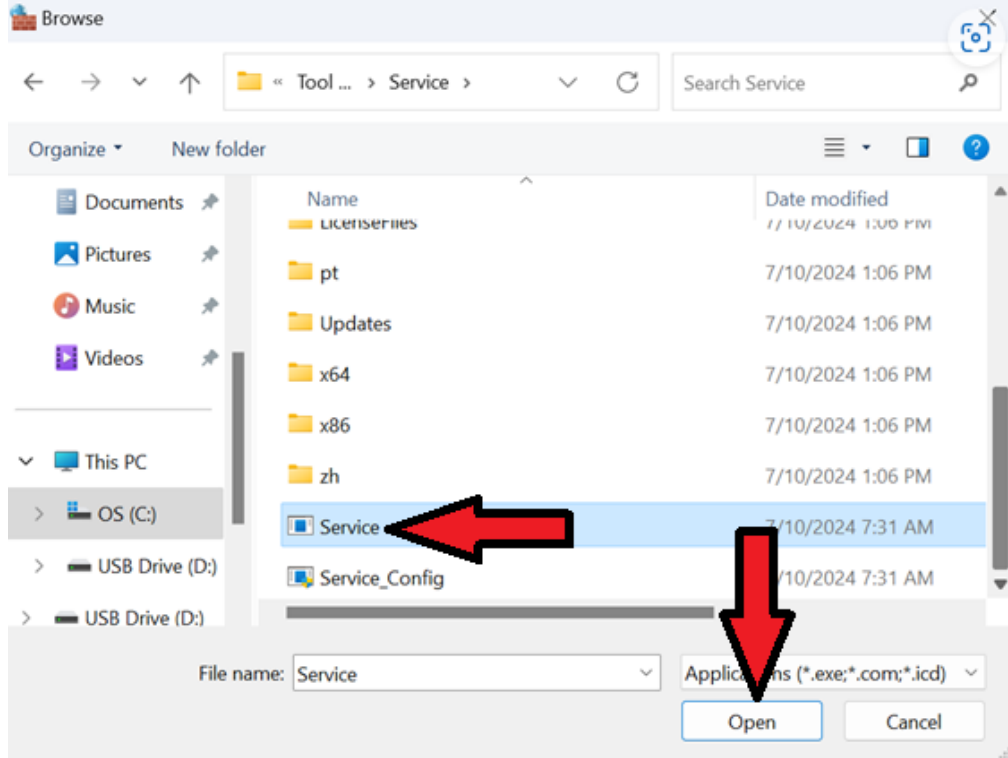
7. Click the **Browse** button.



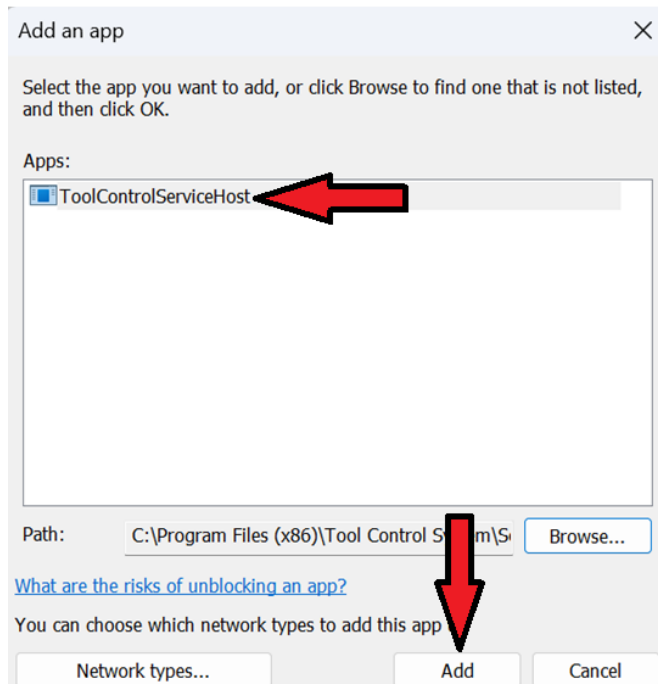
8. Select This PC and double-click on the C: drive.



9. Navigate to **c:\Program Files (x86)\Tool Control System\Service**, select **Service.exe**, and click **Open**.

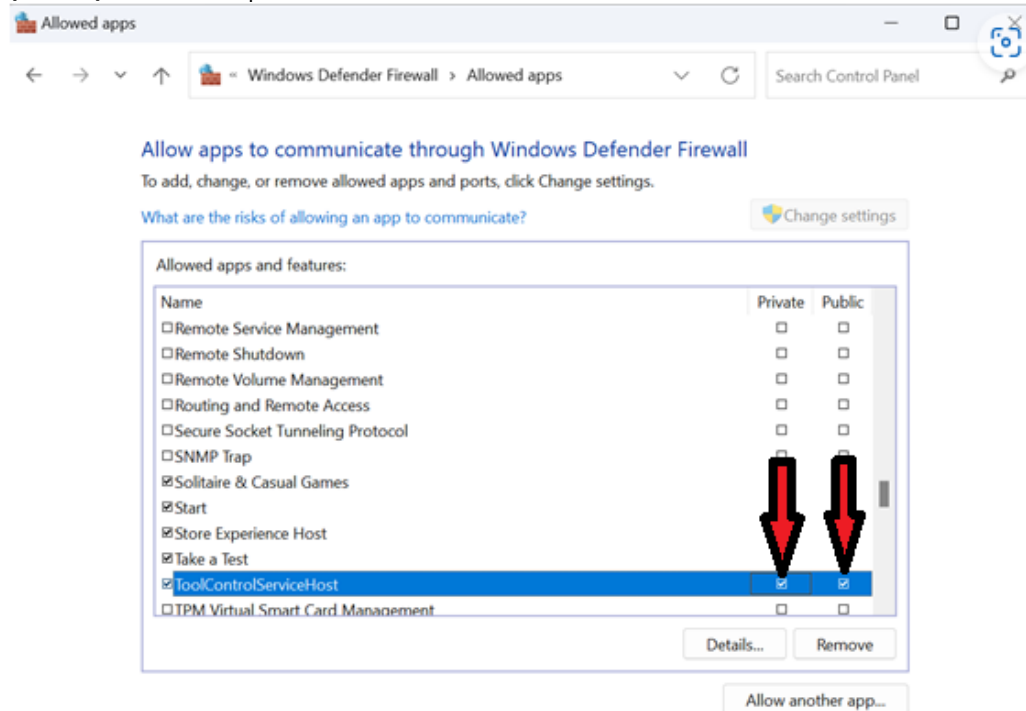


10. Make sure **ToolControlServiceHost** is selected and click the **Add** button.

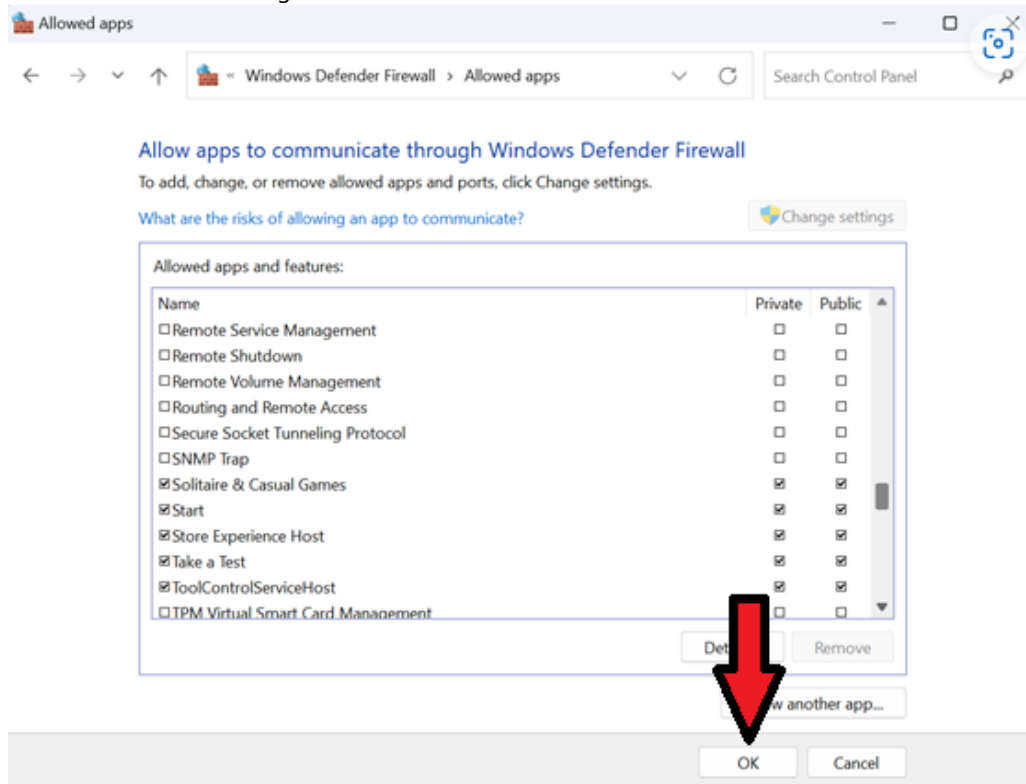


11. Make sure the appropriate network type(s) for your network environment are checked for **ToolControlServiceHost**. For simple closed networks (see below) make sure both the **Home/Work**

(Private) and **Public** options are checked for **ToolControlServiceHost**.



12. Click **OK** to save the changes.

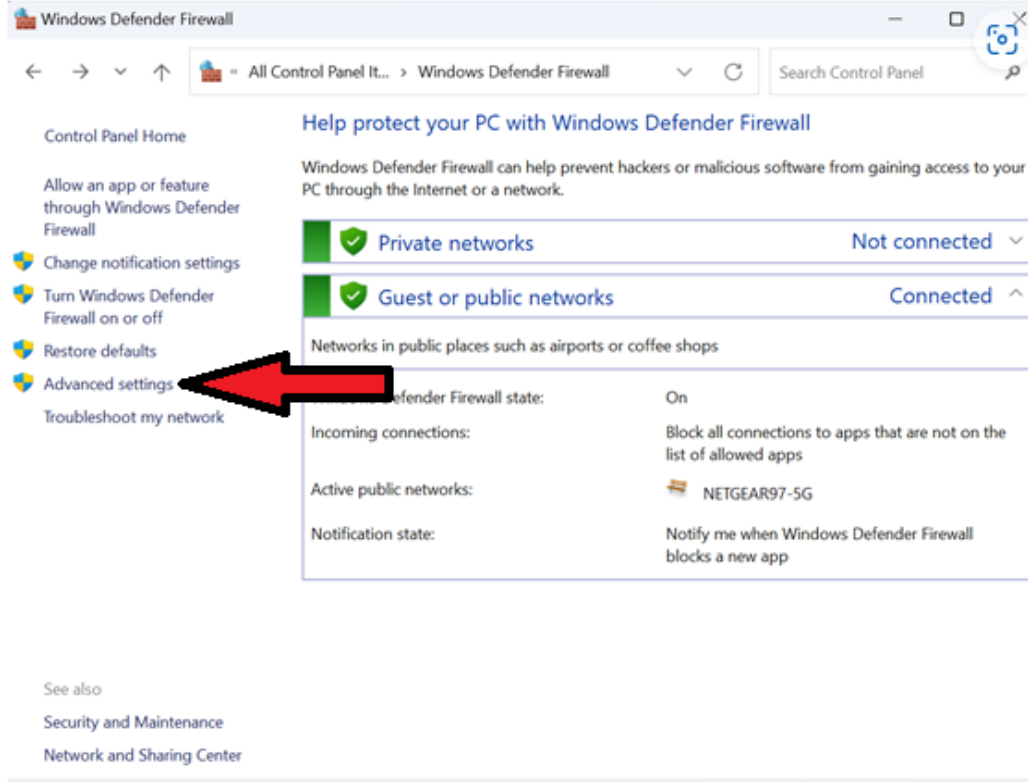


13. Close all open windows.

Distributed System Using a Simple Closed Network

Some L5 Connect systems will be installed in a location where there is not already a network to which all the devices can be connected so that they may communicate with each other. In cases like this a simple network may be set up with a router to allow all the devices to connect to the L5 Connect Service application. For this case you will need to configure the firewall to allow the service to accept communication from the devices as described in the previous section. Because the network may not have a DNS service running on, you should also use the following process to enable file and printer sharing. Doing this will allow Net Bios on the service PC to resolve requests across the network that would normally be handled by a DNS server.

1. Perform the process in the previous section until you get to the last step. Instead of closing all open windows proceed to the next step here.
2. Select **Advanced settings**.

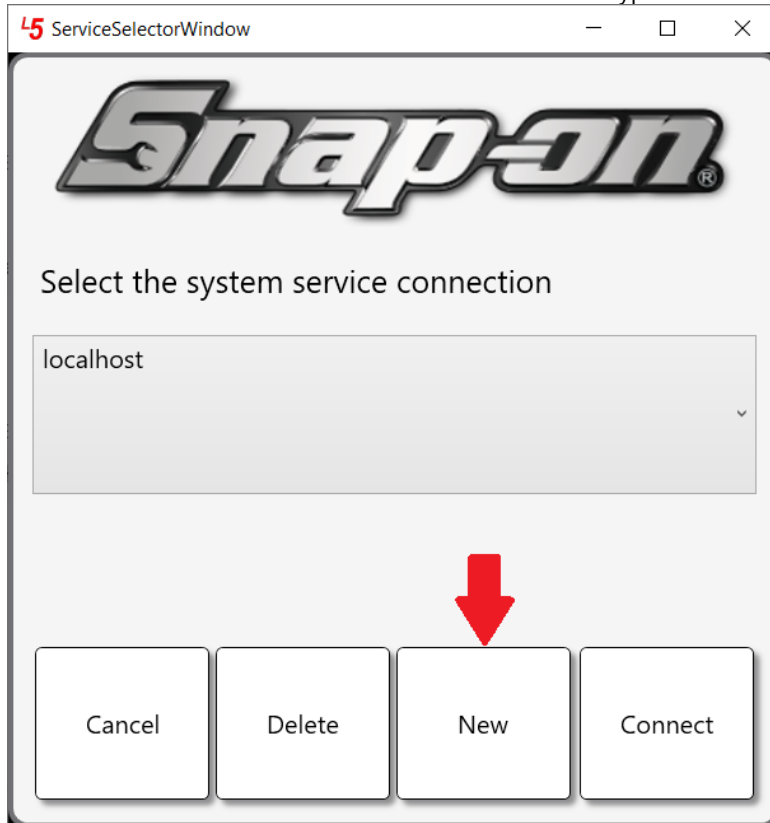


-
- The screenshot shows the 'Windows Defender Firewall with Advanced Security' window. The 'Inbound Rules' tab is selected, as indicated by a red arrow. The list of rules is displayed in a table with columns: Group, Profile, Enabled, and Action. The 'File and Printer Sharing (Echo Request - ICMPv4-In)' rule is highlighted, and a right-click context menu is open over it. A second red arrow points to the 'Enable Rule' option in this menu. Other rules visible include 'Distributed Transaction Coordinator (TCP-In)', 'Feedback Hub', and 'Game Bar'.
- | Group | Profile | Enabled | Action |
|---|---------|---------|--------|
| Distributed Transaction Coordinator (TCP-In) | Domain | No | Allow |
| Distributed Transaction Coordinator (TCP-In) | Private | No | Allow |
| Feedback Hub | Domain | Yes | Allow |
| File and Printer Sharing (Echo Request - ICMPv4-In) | Domain | No | Allow |
| File and Printer Sharing (Echo Request - ICMPv4-In) | Private | No | Allow |
| File and Printer Sharing (Echo Request - ICMPv4-In) | Public | No | Allow |
| File and Printer Sharing (Echo Request - ICMPv4-In) | Domain | No | Allow |
| File and Printer Sharing (LLMNR-UDP-In) | All | No | Allow |
| File and Printer Sharing (NB-Datagram-In) | Domain | No | Allow |
| File and Printer Sharing (NB-Datagram-In) | Private | No | Allow |
| File and Printer Sharing (NB-Datagram-In) | Public | No | Allow |
| File and Printer Sharing (NB-Session-In) | Domain | No | Allow |
| File and Printer Sharing (NB-Session-In) | Private | No | Allow |
| File and Printer Sharing (NB-Session-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | No | Allow |
| File and Printer Sharing (SMB-In) | Public | No | Allow |
| File and Printer Sharing (SMB-In) | Domain | No | Allow |
| File and Printer Sharing (SMB-In) | Private | | |

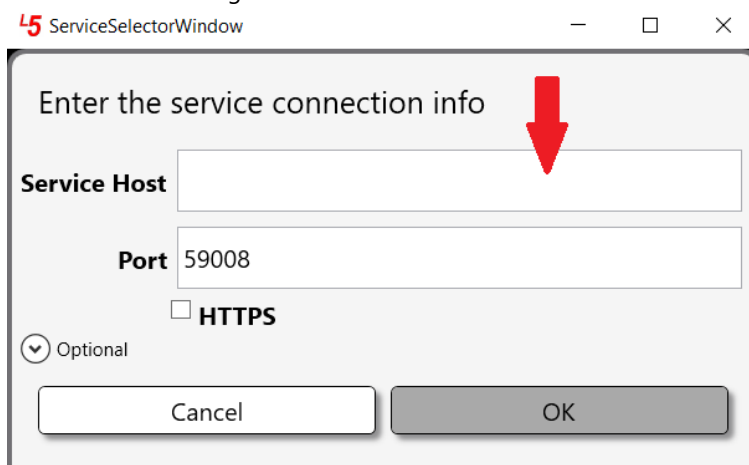
- # How to Connect the L5 Administrator Application to an L5 Connect™ Service

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- 5 December 2025

- Click the **New** button to create a new service connection type.

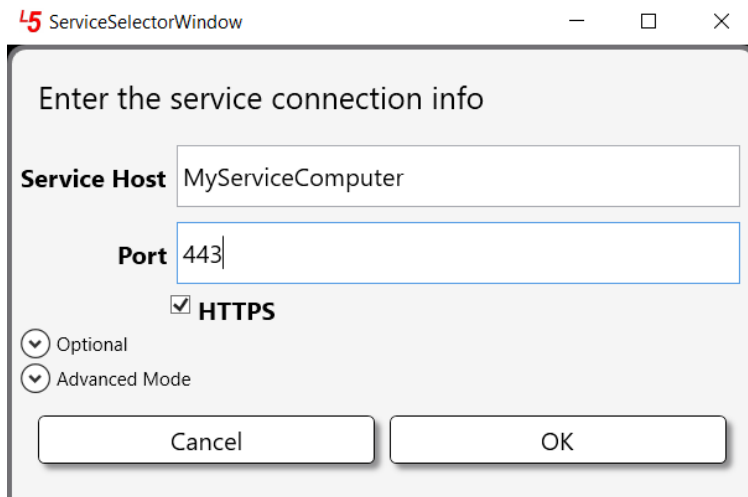


- Enter the computer name, domain, or static IP address of the server hosting the L5 Connect™ Service in the **Service Host** field. This must match the **Host Name** field configured in the Service_Config portion of the document when using HTTPS.

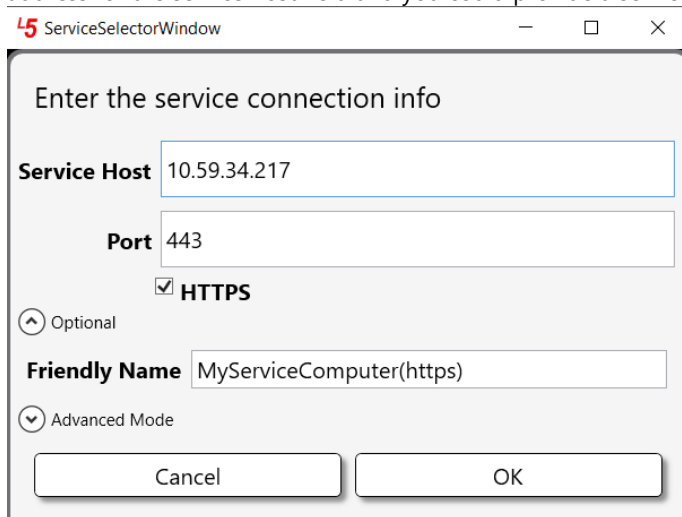


- If you changed the default port value in your service configuration you will need to set the **Port** value to match that value.

- By default, the L5 Connect™ Service communicates over TCP. If you have configured the service to communicate via HTTPS select the **HTTPS** checkbox.



- Expanding the **Optional** section will reveal the **Friendly Name** field. This field can be used to give the service connection a different name than the **Service Host** field. This could be useful if you were using an IP address for the service host field and you could provide a service connection field that is easier to remember.



- Expanding the **Advanced Mode** section will reveal the **Service Path Override** and **Streaming Path Override** checkboxes. If you added paths to your service configuration you will need to match those paths here.
- Finally, click the **OK** button to save this service connection to the list of service connections that will be available to choose from when you start the admin application.
- Click the **Connect** button to connect to your selected service.

How to Connect L5 Devices to an L5 Connect™ Service

Required Permissions:

- Add/Remove from Service

When to Use:

- Initial Device Setup
- Network service connection has changed

Procedure

Tool Crib

The service join process will automatically begin on the first start after installation. You will be prompted to start a new device or restore one backed up on the Service.

New Device

1. In this case, you want to create a new device, so you must click the **New** button.



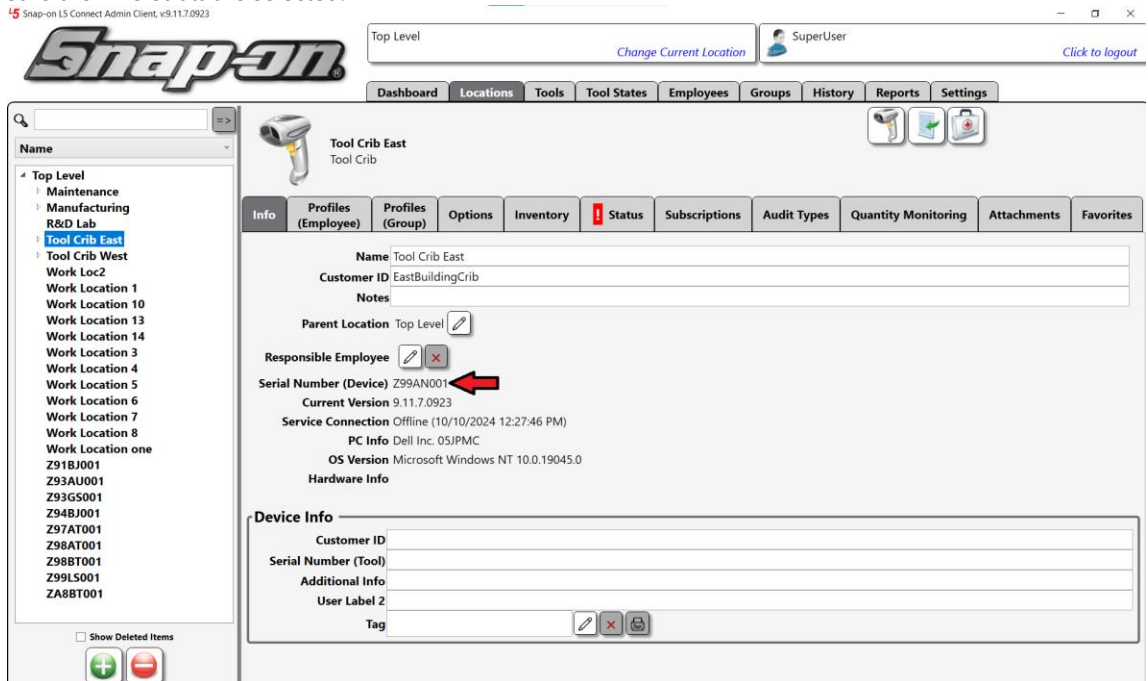
2. Proceed to step 4 on the section below, **All other devices** to continue.

Restore Device

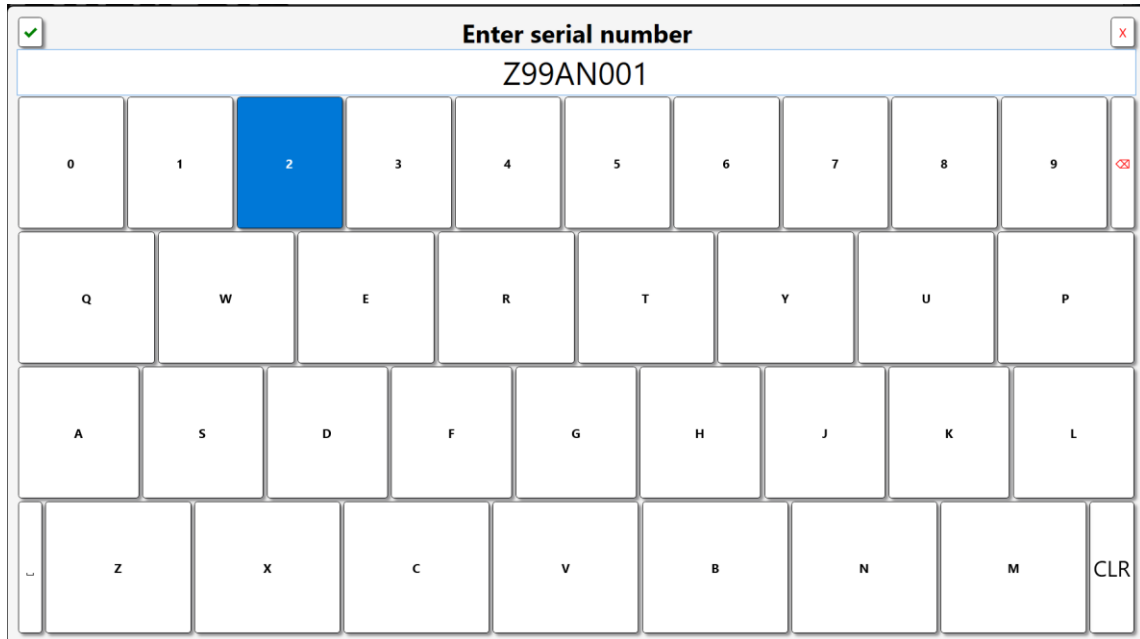
1. To restore a crib that has been previously connected to the service from a backup click the **Restore** button.



2. You will then need to enter the serial number of the crib you wish to restore to the system. You can get this from the **Locations** tab of the Admin application. Select the crib from the list of locations and then make sure the **Info** subtab is selected.



- Now enter the serial number.



- Then click the green checkmark button in the top left corner. You will briefly see a window showing that the database is being initialized and then you will see the request for credential type.



- Proceed to step 4 on the section below, **All other devices** to continue.

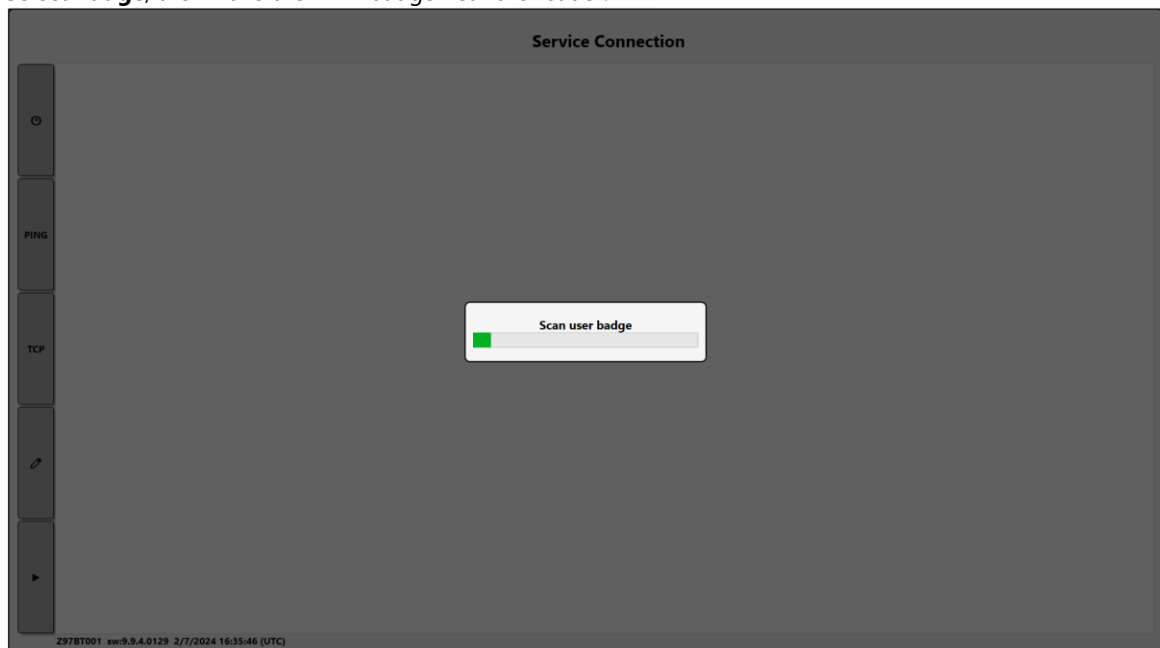
All other devices

- When you start an ATC device for the first time, it may restart to finalize its initial setup.
- Afterwards you will be presented with a network setup window. Use this screen to set up your network connection and then click on the red X in the top right corner to proceed.

3. This will bring you to the Service Connection window, which can also be reached through **Main Menu/System Changes/Change Service Connection**
4. Next, you will be asked what authentication you want to use to connect to the Service. A user attempting to add a device to a service requires the correct connection permissions. You can join either by badge scan or username and password. We are going to use the badge method. **NOTE: User Name / Password method is only supported in Self Contained authentication mode. Badge credentials are required in Domain Based and Current Windows User authentication modes.**

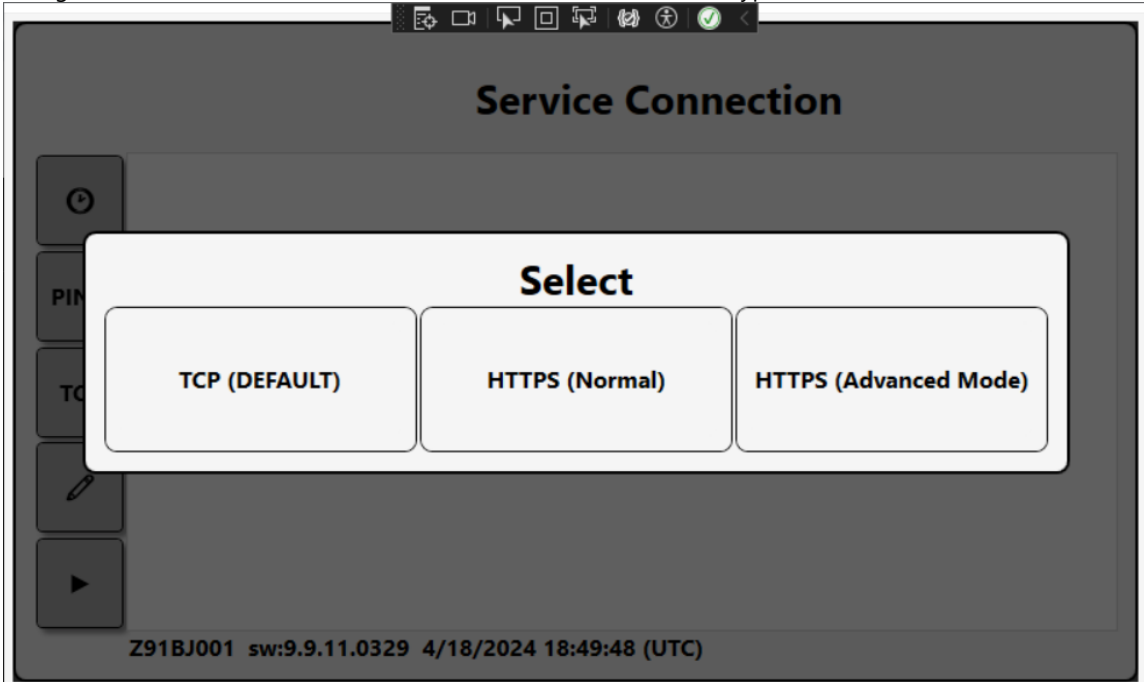


5. Select **Badge**, then wave the RFID badge near the reader.



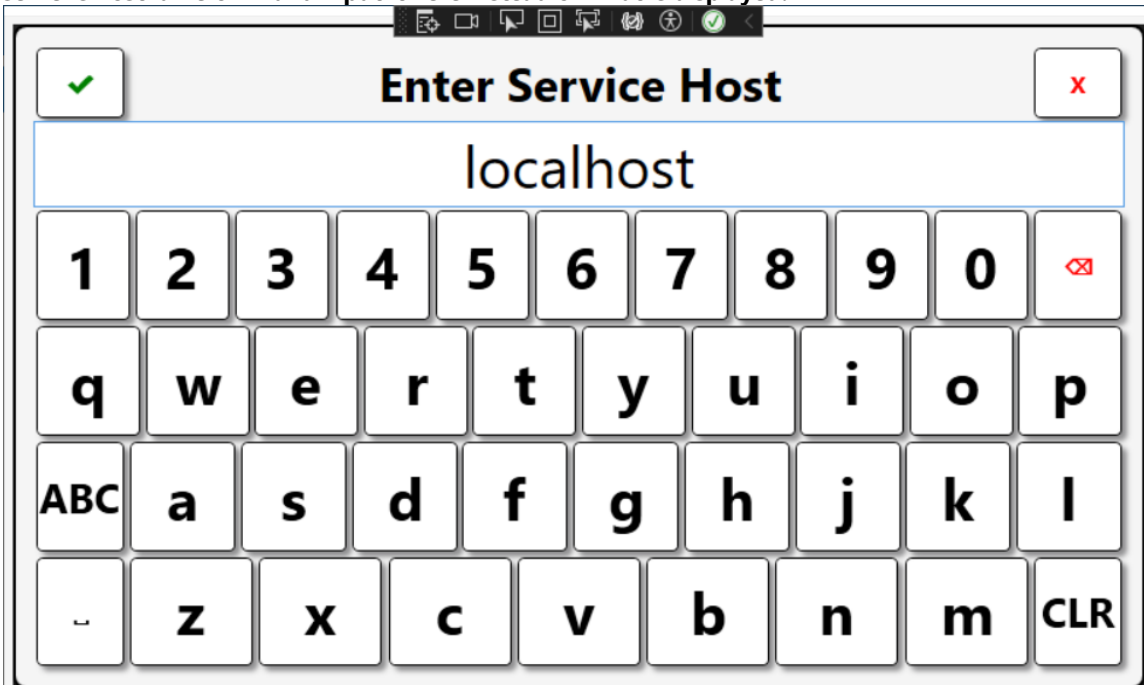
6. Next, you will be prompted to select the connection type for the Service. By default, the connection type is TCP. However, HTTPS is an advanced connection type that provides additional security and requires

additional setup on the Service to implement. The HTTPS (Advanced Mode) provides the ability to override the default path to the service URL and service streaming URL. These values must match the values configured for the L5 Service. Click on the correct service connection type.

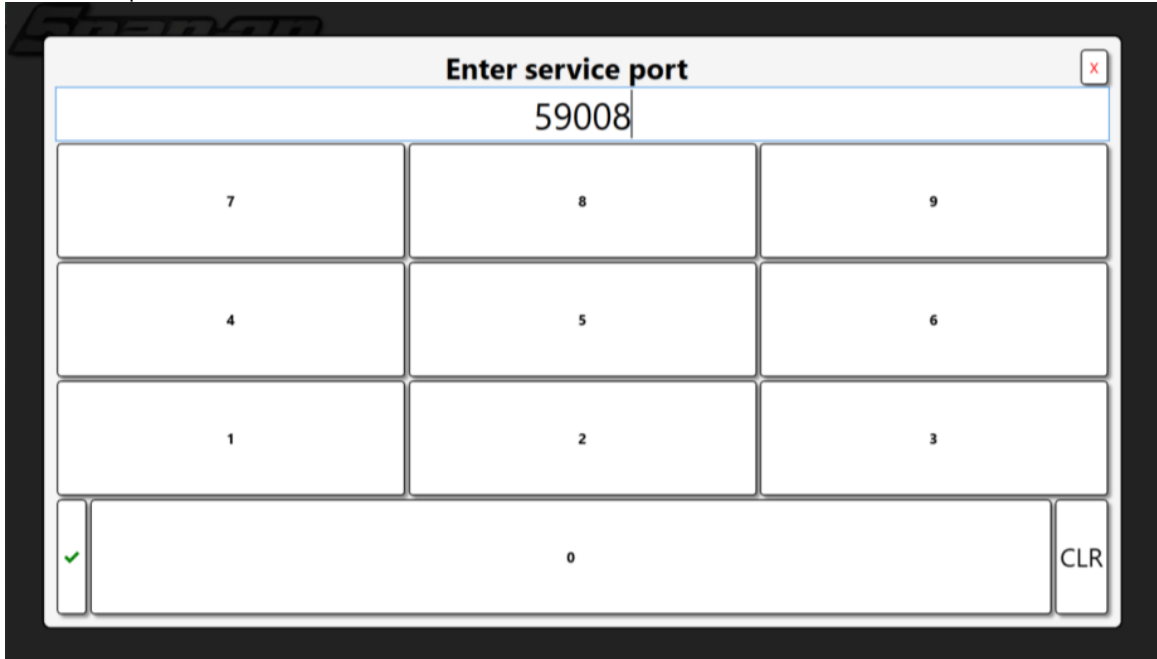


7. Next, you will be asked to type in the Host Name of the computer running the L5 Connect Service. In this example, we will use the hostname LOCALHOST but this will need to be the name of **YOUR SERVICE** when you are installing this in your environment. Type in localhost and press Enter.

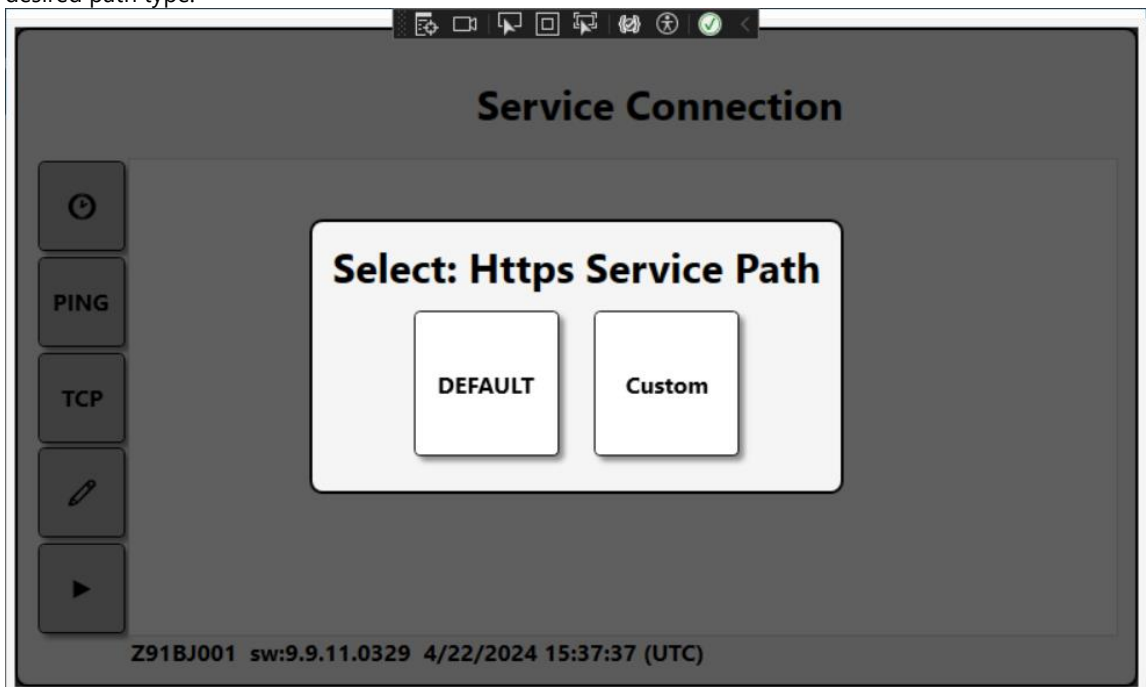
NOTE: The Server name shown here may not match the one in your environment. Please verify your server's hostname or IP and input it here instead of what is displayed.



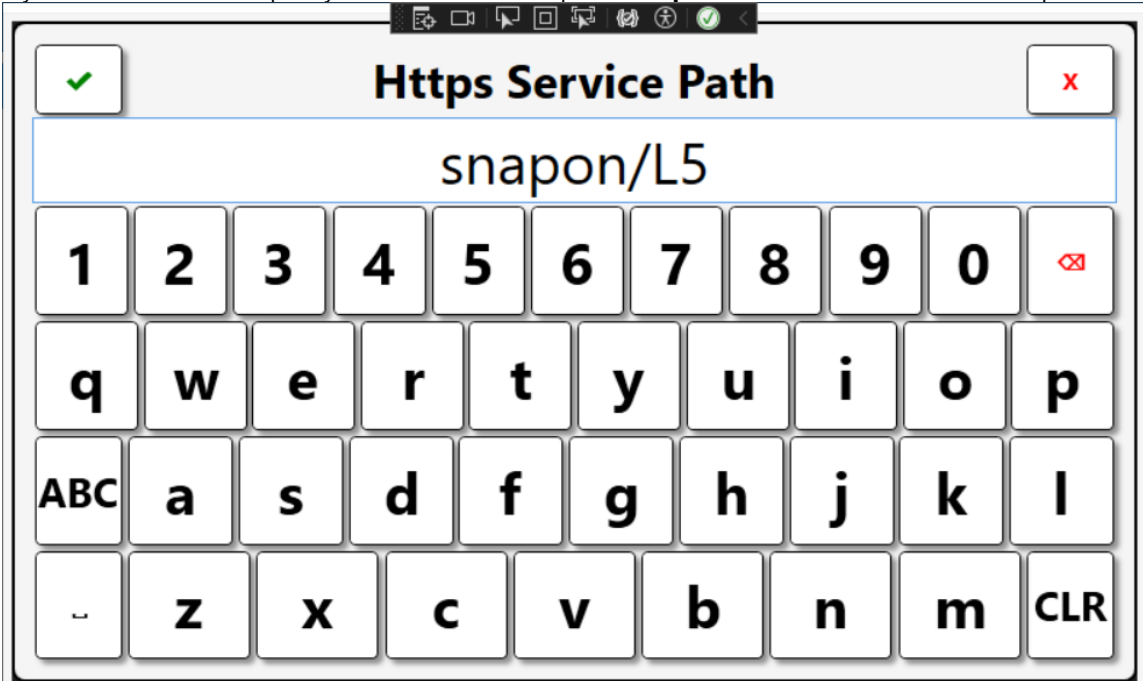
8. Following that, you will be asked to define the port the Service is listing to for incoming connections. The default is 59008, but this can be defined in the configuration settings of the Service. Enter the correct service connection port.



9. If you previously selected **HTTPS (Advanced Mode)** you will be prompted to **Select: Https Service Path**. This will give you the choice of selecting to use the **DEFAULT** path or creating **Custom** path. Choose the desired path type.



10. If you chose the **Custom** path you will be asked to input an **Https Service Path**. Enter the desired path.



Https Service Path

snapon/L5

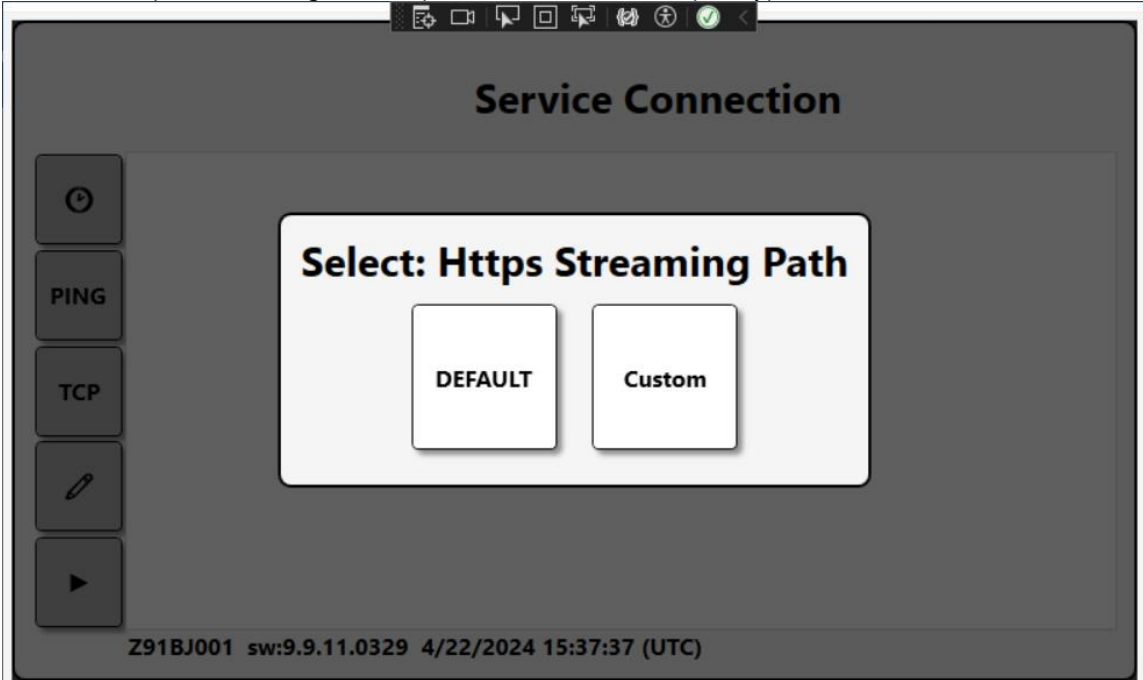
1 2 3 4 5 6 7 8 9 0 [Red X]

q w e r t y u i o p

ABC a s d f g h j k l

[Underscore] z x c v b n m CLR

11. You will then be prompted to **Select: Https Streaming Path**. This will give you the choice of selecting to use the **DEFAULT** path or creating **Custom** path. Choose the desired path type.



Service Connection

Select: Https Streaming Path

DEFAULT Custom

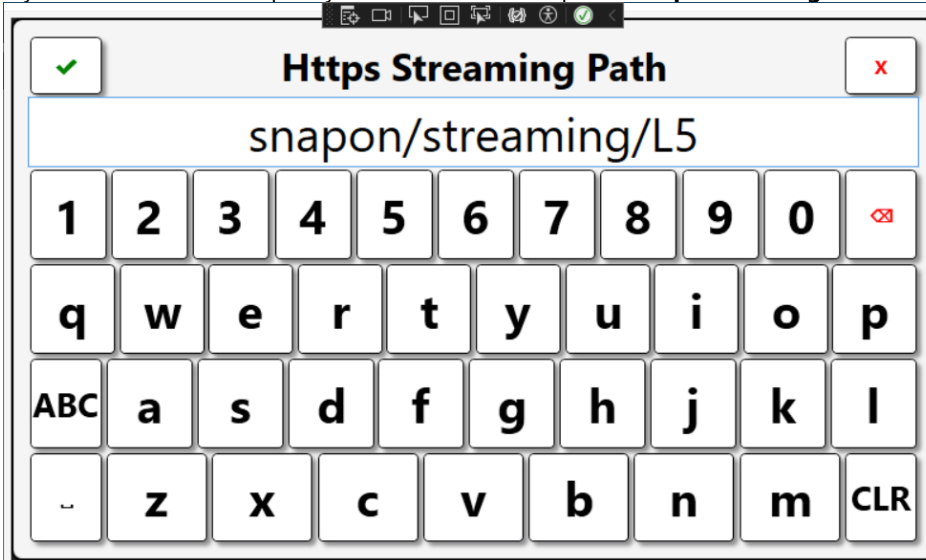
PING

TCP

[Play Button]

Z91BJ001 sw:9.9.11.0329 4/22/2024 15:37:37 (UTC)

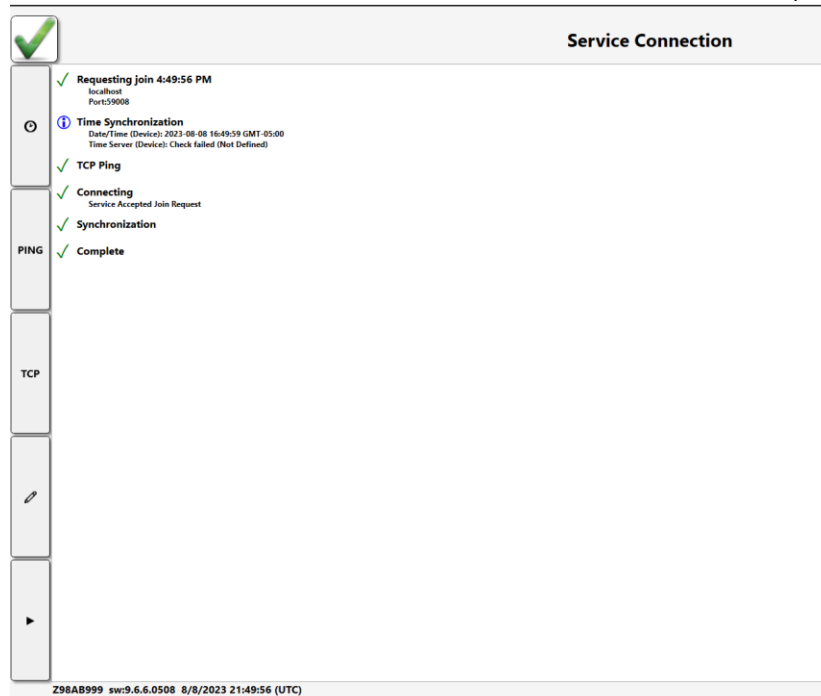
12. If you chose the **Custom** path you will be asked to input an **Https Streaming Path**. Enter the desired path.



13. The system will then go through some validation checks. You may be prompted to update the software as the software version must match the software version running on the Service. If that happens, just follow the update prompts. When you are done, the software will restart and ask if you want to continue the process of connecting to the Service.

NOTE: During this process you may be prompted to set the Time Sync to the L5Connect service if it has been configured as a Time Server. This will allow the ATC device to keep within the same time as the service.

Once the connection has been established, and all the validations are complete, click on the ✓ button.



14. You will now be connected to the service and ready to begin setting up your devices



L5 Connect User Manual

Admin Application Basics

The L5 Connect™ Administration Client is the tool you will use to manage L5 Connect™. It can generate reports, create, and manage users & groups, and set e-mail and text alerts if there are any issues. In addition, you can create and manage your tools, set maintenance and quantity monitors, and much more. The Admin Client is your control and management dashboard to L5 Connect™.

Local User Install vs. Admin User Install

There are two different installers for the admin application. When installing the admin client on a computer, it's important to run the proper installer for how the application will be used. Here is the link for the latest admin application installers. [Software Installers](#)

L5 Connect™ AdminClient Installer

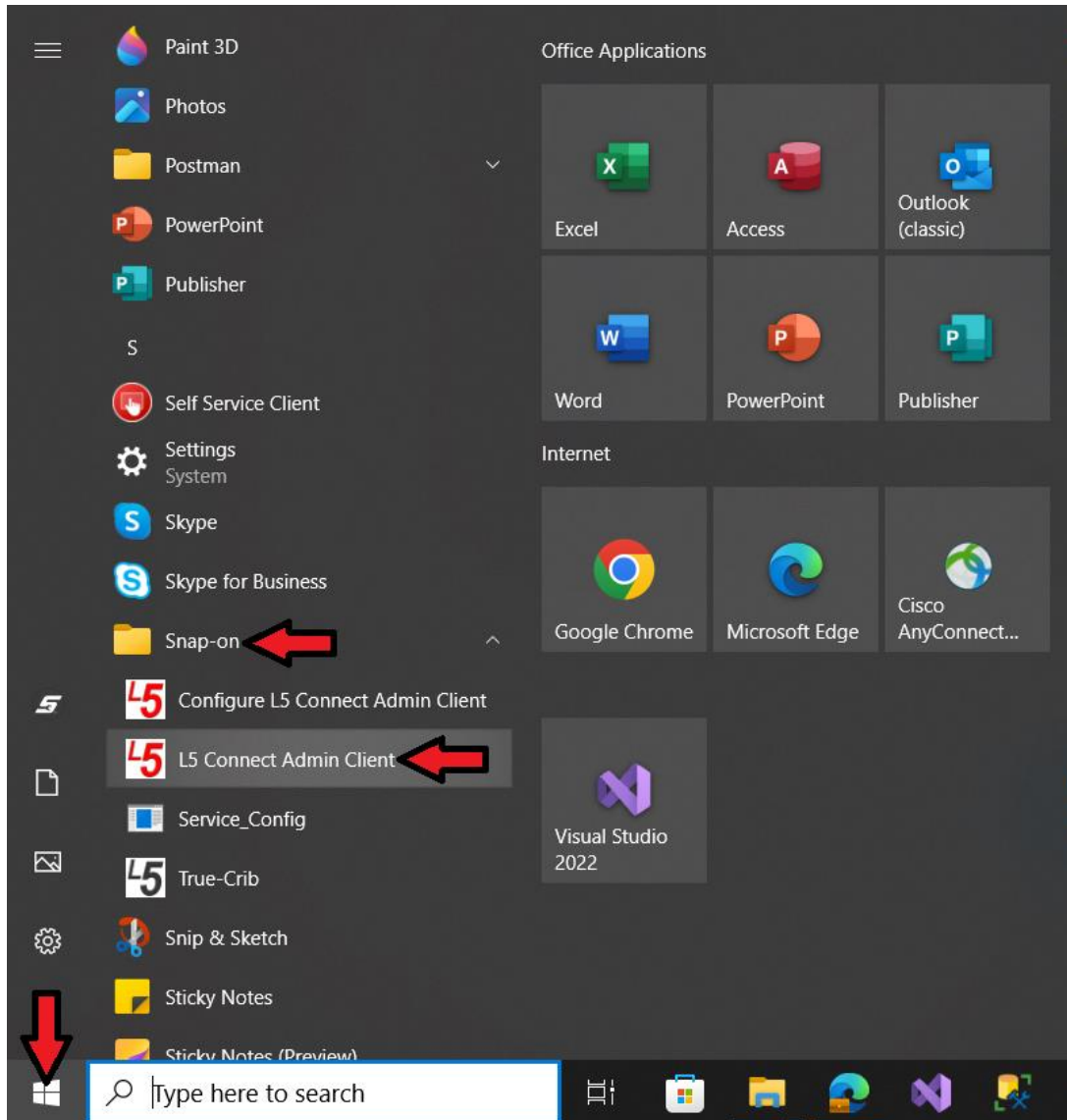
This installer requires Windows administrator privileges to install and update the application. This installation will install the application so that any user of the computer will have access to the application.

L5 Connect™ AdminClient Installer(Local User)

This installer does not require Windows administrator privileges to install or update. It will install the application only for the individual Windows user who runs the installer. Before installing this version of the admin client, however, you need to first install some prerequisites. This prerequisite installer has a name of PreReqs_Admin_LocalUser_X_X_X_XXXX, where the Xs represent the software version. This installer will install .NET Framework 4.8, Visual C++ Redistributable, and Zebra Core Scanner Driver. This prerequisite installer does require Windows administrator privileges. You can contact the Pro Services team for a copy of this installer or download it from the [Software Installers](#) website.

Logging In Locally

Once you have installed the admin application, you can start it by going to the Windows Menu, scrolling down to the **Snap-on** menu, and then clicking the **L5 Connect Admin Client** item. The Admin application defaults to having a single connection to the L5 Connect service on the same machine that the Admin was just installed. For now, we will assume this is the case and we will discuss the other options in the next section.

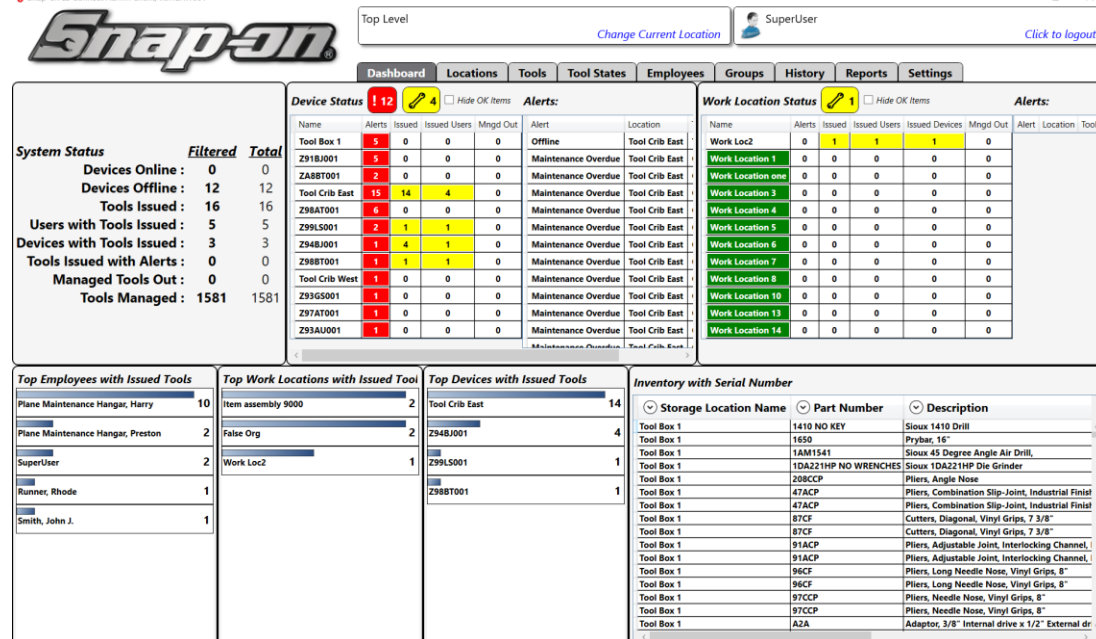


Once you have successfully connected to the service you will be prompted to log into the admin application. Use the credentials provided by your L5 System administrator. If this is the first time any user has logged into this L5 Connect system use the following default credentials.



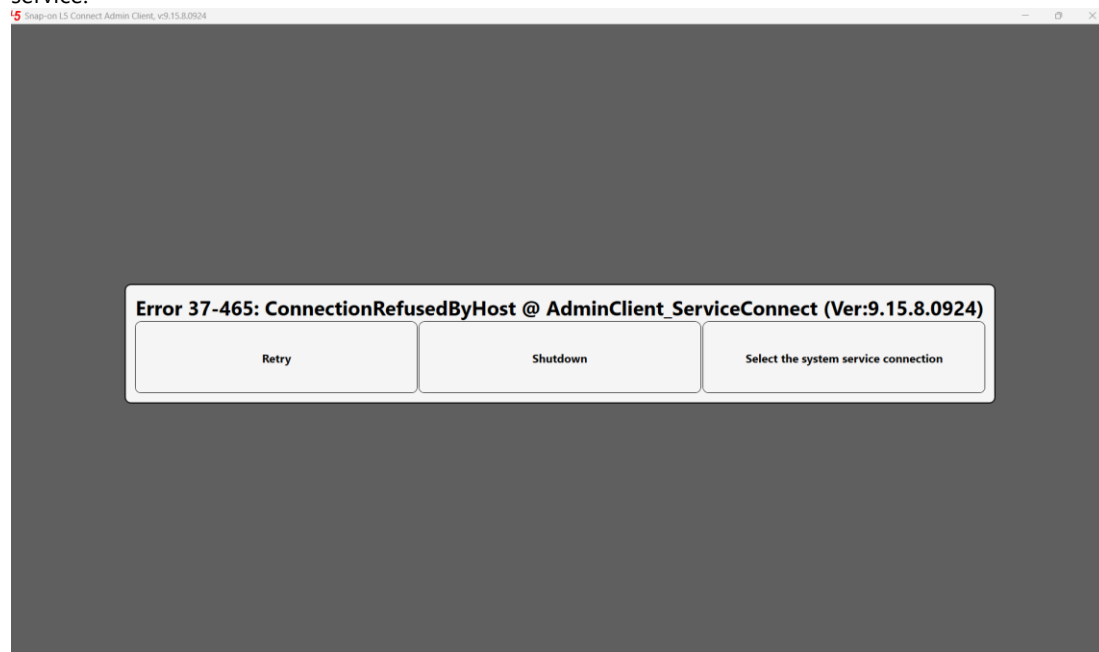
Password: superuser

Enter the above credentials to log into the admin application. Then click the **Login** button.



Logging In to Networked/Multiple Services

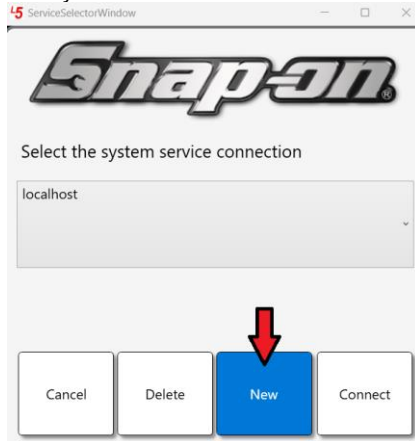
If your service is not located on the same machine as your admin, and you attempt to connect in the manner described in the previous section you will receive an error because the admin will be attempting to connect to a local service.



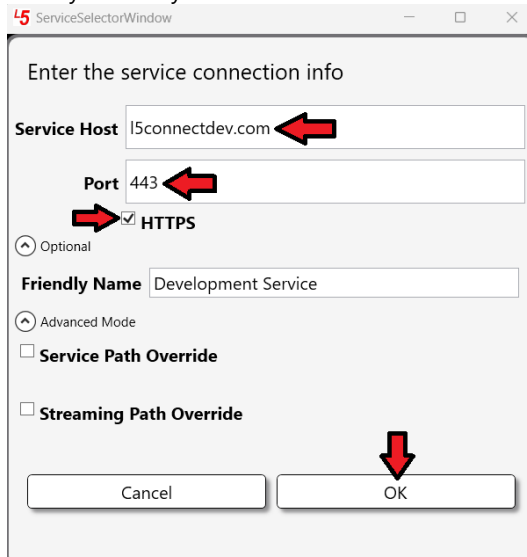
Or your organization may have many L5 Connect devices located over a large area split across multiple L5 Connect Services. You might then need to connect to multiple services from your admin application. This can be done easily by adding additional service connections to your service selection window. Because the initial installation is only configured for one service, the system will go straight to attempting to connect to that service. To alter the configuration of which service or services should be supported go to the Windows Menu, scrolling down to the **Snap-on** menu, and then clicking the **Configure L5 Connect Admin Client** item. **NOTE: for Windows 11 systems you will need to select the "All >" button after selecting the Windows Menu to get the complete menu.**



Now you can add a new service connection to the configuration by clicking the **New** button.



You will now need to provide a valid network resolvable computer name, URL, or IP address for the PC to which you wish to connect as well as the TCP port on which this service has been configured to communicate. If this connection is an HTTPS port you will need to check the **HTTPS** checkbox as well. Optionally, you can expand the **Optional** section to reveal the **Friendly Name** parameter. You can add an easy to remember name for the service connection if you will be connecting to multiple services. Lastly, in the **Advanced Mode** section there are fields that allow you to override the default location on the service PC for where the service files reside. This is only needed in very rare occurrences. Once you have your new service connection configured properly, click the **OK** button to save it.

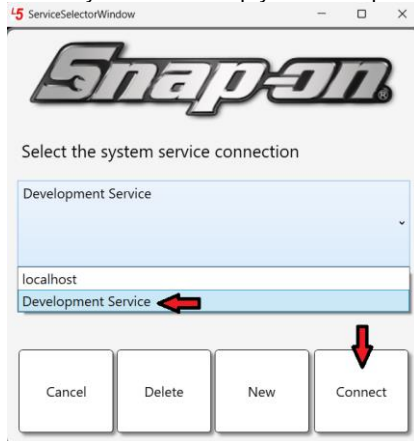


If you only wanted the new service connection, you could delete the default connection by selecting it and then clicking the **Delete** button. As long as the system is only configured for one service connection, it will simply boot straight into that service and prompt you with the login window. If you have more than one service connection configured, you will be presented with the service selector window to choose which service you wish to log into. To



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do this you would simply click the pull-down menu to select the desired service and then click the **Connect** button.





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New User Password Change Process

When a new user is added to the system who needs access to the admin application, a system administrator will add a username and temporary password to his employee data. He will then pass that information on to the new user. When that user logs into the system for the first time with that username and password, he will be required to change the password to something else, for security purposes.

Location Filtering

Once you have completed logging into the admin application the dashboard tab is displayed. This shows you the state of the system in real time. At the top of the applications, you can see the **Change Current Location** button, which shows the current location for which the data in the system will be filtered. This location will default to the home location of the employee who has logged into the application.

5 Snap-on L5 Connect Admin Client, v9.12.1.1001

System Status

	Filtered	Total
Devices Online :	0	0
Devices Offline :	12	12
Tools Issued :	16	16
Users with Tools Issued :	5	5
Devices with Tools Issued :	3	3
Tools Issued with Alerts :	0	0
Managed Tools Out :	0	0
Tools Managed :	1581	1581

Device Status (12 Alerts)

Name	Alerts	Issued	Issued Users	Mngd Out	Alert	Location
Tool Box 1	5	0	0	0	Offline	Tool Crib East
Z918J001	5	0	0	0	Maintenance Overdue	Tool Crib East
ZA88T001	2	0	0	0	Maintenance Overdue	Tool Crib East
Tool Crib East	15	14	4	0	Maintenance Overdue	Tool Crib East
Z98AT001	6	0	0	0	Maintenance Overdue	Tool Crib East
Z99LS001	2	1	1	0	Maintenance Overdue	Tool Crib East
Z948J001	1	4	1	0	Maintenance Overdue	Tool Crib East
Z98BT001	1	1	1	0	Maintenance Overdue	Tool Crib East
Tool Crib West	1	0	0	0	Maintenance Overdue	Tool Crib East
Z91G5001	1	0	0	0	Maintenance Overdue	Tool Crib East
Z97AT001	1	0	0	0	Maintenance Overdue	Tool Crib East
Z93AU001	1	0	0	0	Maintenance Overdue	Tool Crib East

Work Location Status (1 Alert)

Name	Alerts	Issued	Issued Users	Issued Devices	Mngd Out	Alert	Location	Tool
Work Loc2	0	1	1	1	0			
Work Location 1	0	0	0	0	0			
Work Location one	0	0	0	0	0			
Work Location 3	0	0	0	0	0			
Work Location 4	0	0	0	0	0			
Work Location 5	0	0	0	0	0			
Work Location 6	0	0	0	0	0			
Work Location 7	0	0	0	0	0			
Work Location 8	0	0	0	0	0			
Work Location 10	0	0	0	0	0			
Work Location 13	0	0	0	0	0			
Work Location 14	0	0	0	0	0			

Top Employees with Issued Tools

Employee	Count
Plane Maintenance Hangar, Harry	10
Plane Maintenance Hangar, Preston	2
SuperUser	2
Runner, Rhode	1
Smith, John J.	1

Top Work Locations with Issued Tools

Location	Count
Item assembly 9000	2
False Org	2
Work Loc2	1

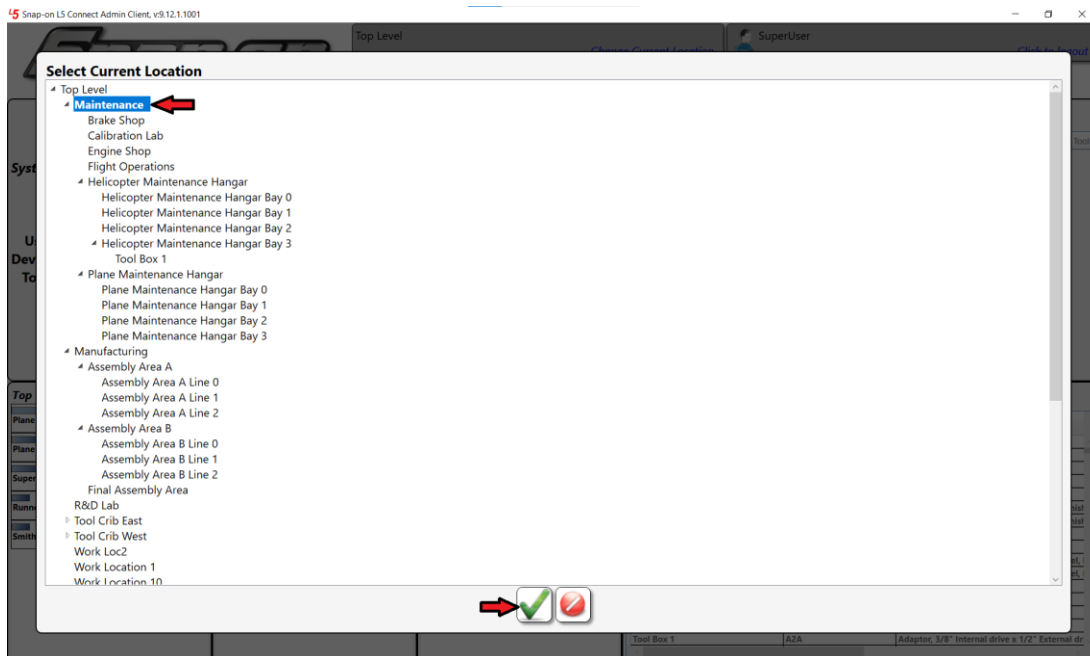
Top Devices with Issued Tools

Device	Count
Tool Crib East	14
Z948J001	4
Z99LS001	1
Z98BT001	1

Inventory with Serial Number

Storage Location Name	Part Number	Description
Tool Box 1	1410 NO KEY	Sioux 1410 Drill
Tool Box 1	1650	Prybar, 16"
Tool Box 1	1AM1541	Sioux 45 Degree Angle Air Drill
Tool Box 1	1DA221HP NO WRENCHES	Sioux 1DA221HP Die Grinder
Tool Box 1	208CCP	Pliers, Angle Nose
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Final
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Final
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"
Tool Box 1	AZA	Adaptor, 3/8" Internal drive x 1/2" External dr

Because the Superuser account is logged in, the current location is the **Top Level** location, so there is no filtering of data. Suppose he was currently interested in seeing the state of things in the **Maintenance** part of the system. He would click the **Change Current Location** button. This will open the **Select Current Location** window allowing him to choose a new current location. He can then select the **Maintenance** location and then the **OK** button to confirm his selection.



Notice the change in the dashboard display after this new current location is selected compared to when he first logged in and it was set to **Top Level**. Also, it should be pointed out that data is not only filtered by the current location but also by the system profile of the currently logged in user. For more information on how to configure user profiles see the Configuring User Profiles document.



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Search Box Text Filtering

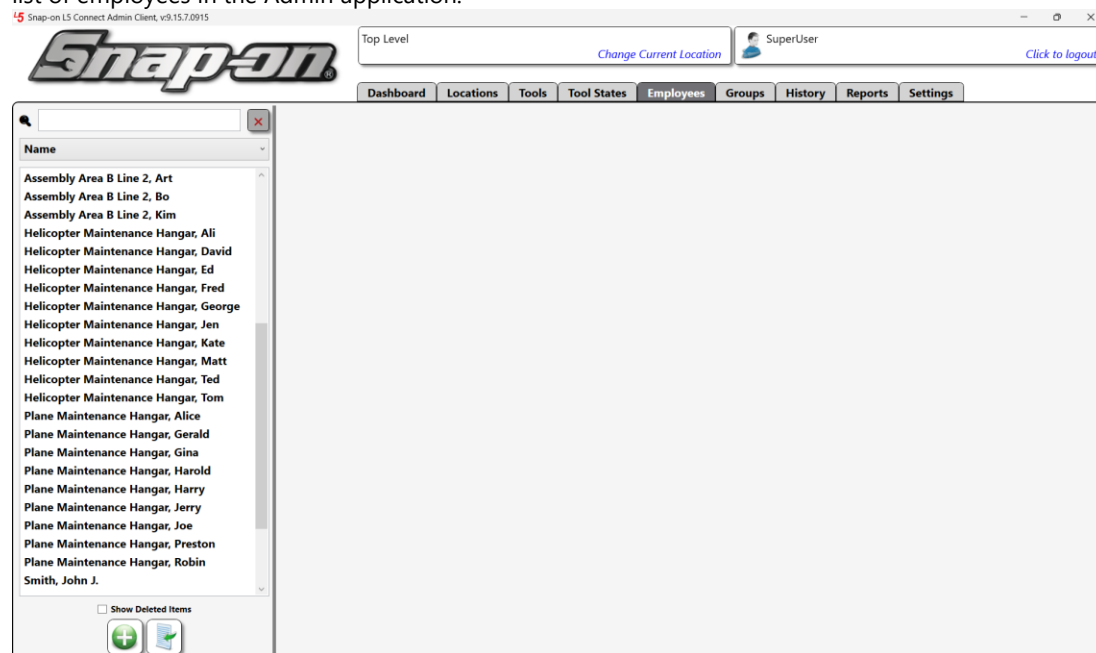
The L5 Connect system provides powerful text filtering tools to help you search through large lists or grids of data. This could be anything from searching the list of employees in the system to searching a list of inventory on the tool states tab or a report.

Multi-Keyword Text Filtering

The system provides the ability to apply more complex text filtering than just looking for a single string. This document will explain how these text filtering features work in the L5 Connect system.

The AND Operator

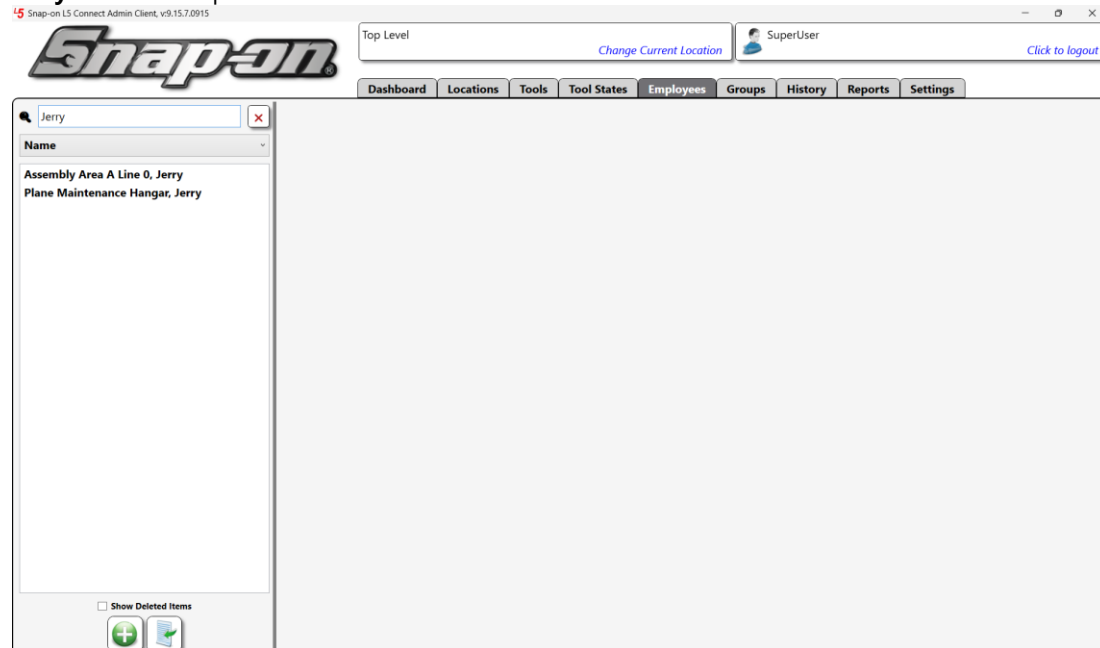
The AND operator will allow you to search for items that contain two separate strings. For instance, let's look at this list of employees in the Admin application.



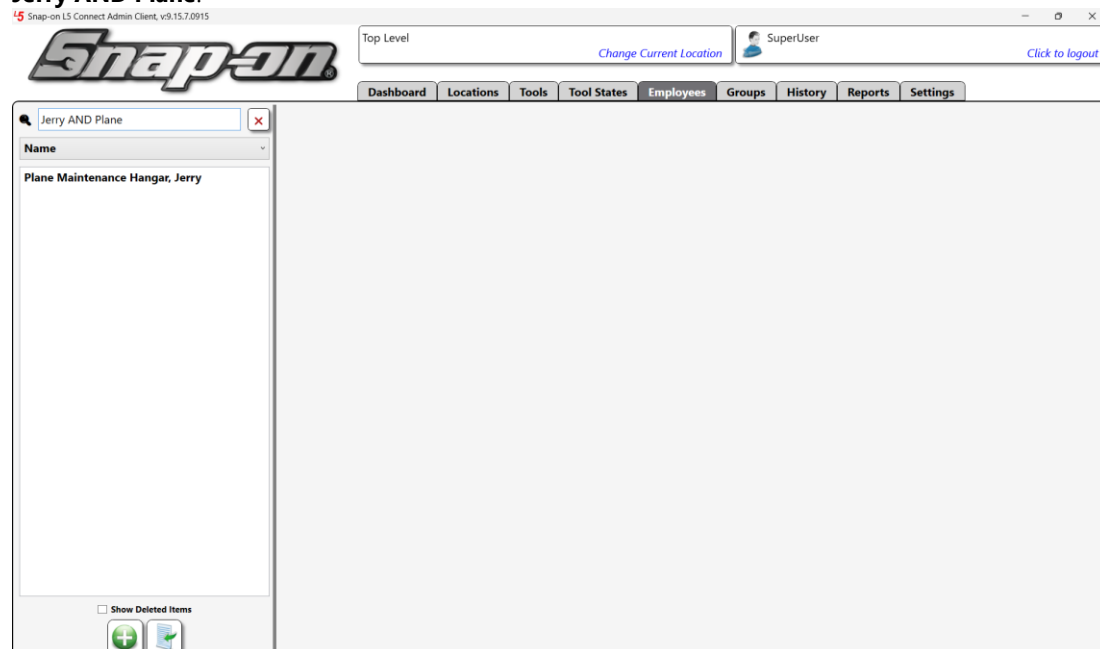


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Suppose we wanted to find an employee named Jerry who works in the plane maintenance hangar. If we search for **Jerry** we find multiple matches.

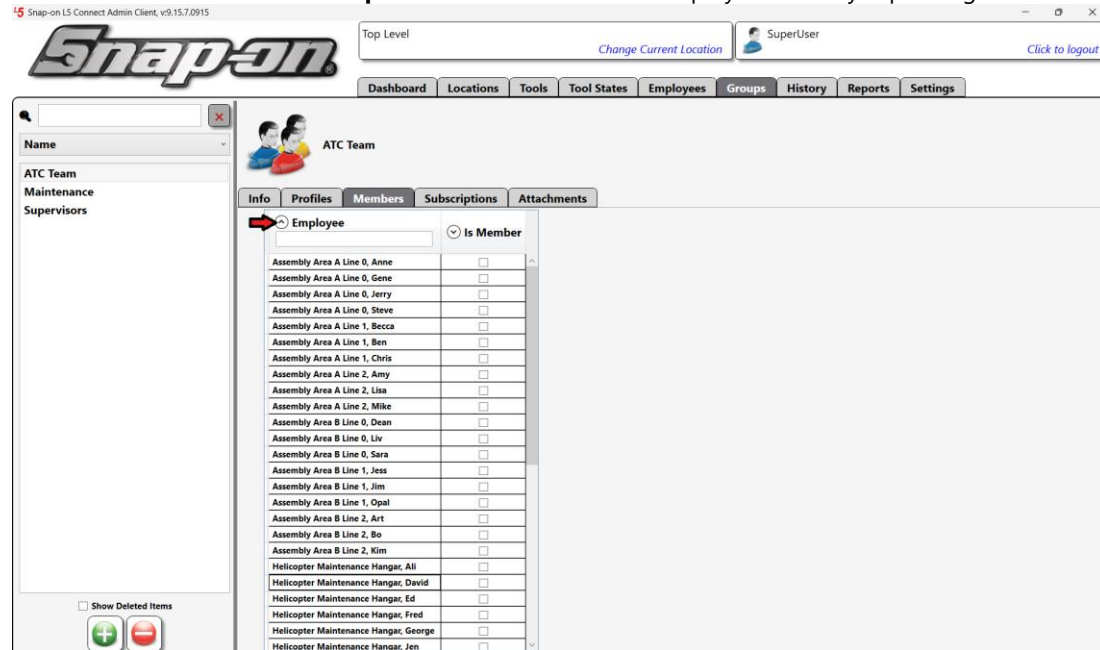


If there were a lot of employees in the system, there could be a lot of potential matches to still look through for the right person. Since we know he works in the plane maintenance hangar we can more accurately filter the search term **Jerry AND Plane**.

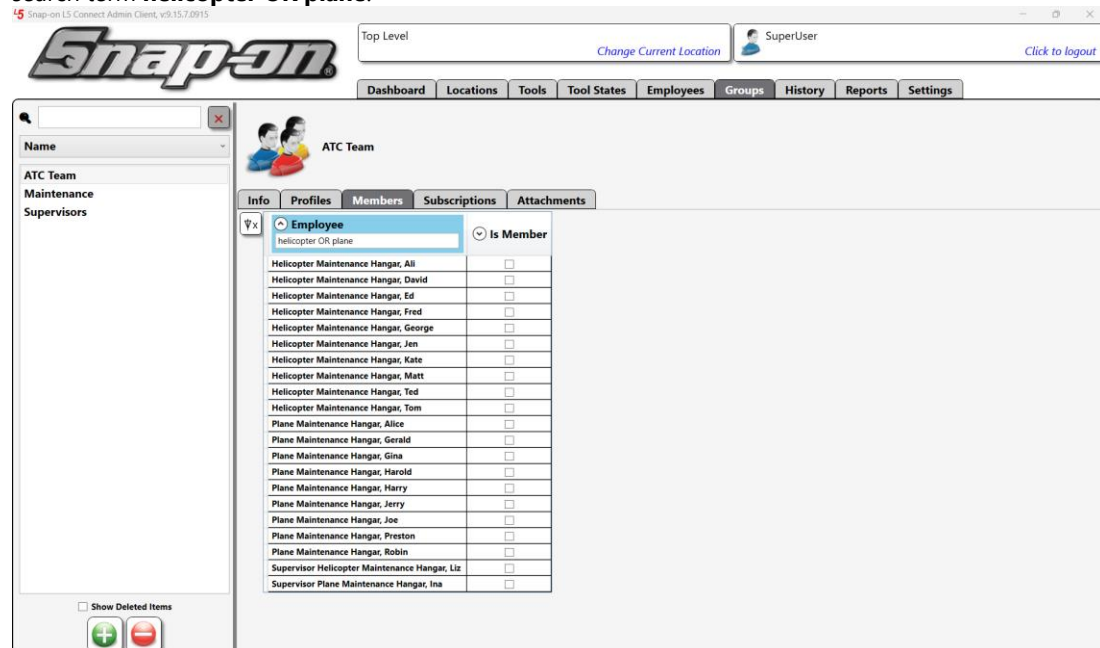


The OR Operator

The OR operator will let you search for items that contain one string or another different string. This time we will look at **Members** sub-tab of the **Groups** tab. We can filter on the employee name by expanding the **Filter** button.



Suppose we wanted to filter the list to only show the Helicopter and Plane maintenance employees. We could use the search term **helicopter OR plane**.





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Notice that we did not capitalize helicopter or plane. The strings that you search for are not case sensitive. **NOTE: The Boolean operators AND and OR must be all upper case.**

Complex/Compound Searches

You can also combine the **AND** and the **OR** keywords into a single search term. The **AND** operator will take precedence over the **OR** operator.

For example, continuing with the **Members** sub-tab of the **Groups** tab we will try the search term **Plane AND Jerry OR Helicopter**.

The screenshot shows the Snap-on L5 Connect Admin Client interface. The top navigation bar includes 'Top Level', 'Change Current Location', and a user profile for 'SuperUser' with a 'Click to logout' link. Below this is a menu bar with 'Dashboard', 'Locations', 'Tools', 'Tool States', 'Employees', 'Groups', 'History', 'Reports', and 'Settings'. The main content area is titled 'Maintenance' and has a sidebar on the left with 'Name', 'ATC Team', 'Maintenance', and 'Supervisors'. The main area has tabs for 'Info', 'Profiles', 'Members', 'Subscriptions', and 'Attachments'. The 'Members' tab is active, showing a search bar with the text 'Plane AND Jerry OR Helicopter' and a 'Is Member' dropdown. Below the search bar is a table of results:

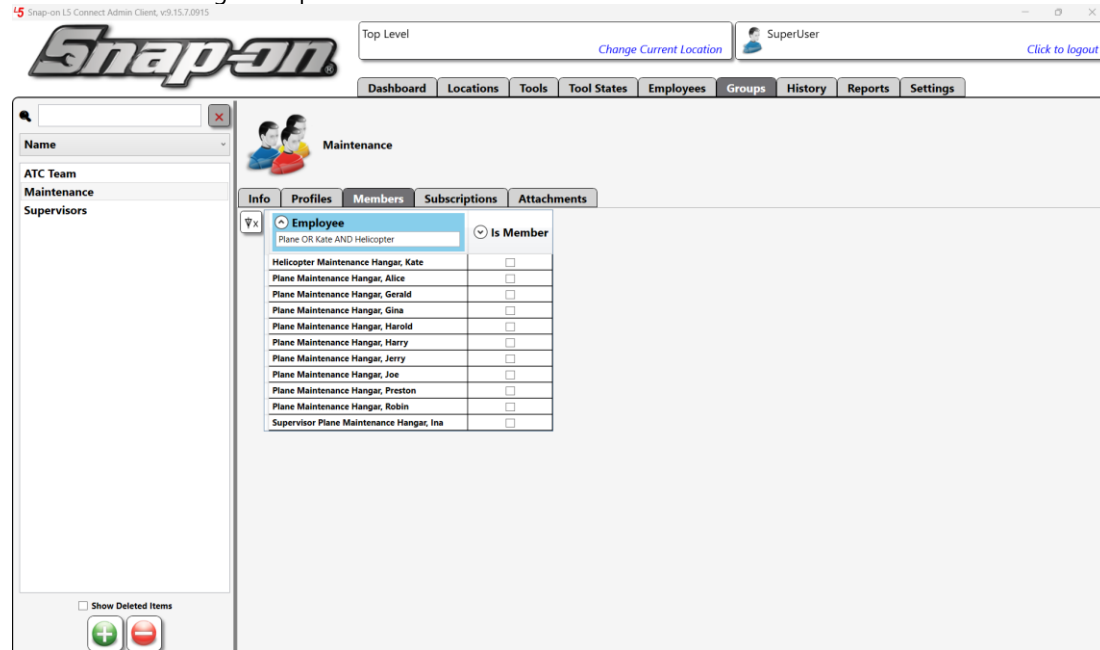
Employee	Is Member
Helicopter Maintenance Hangar, Ali	<input checked="" type="checkbox"/>
Helicopter Maintenance Hangar, David	<input type="checkbox"/>
Helicopter Maintenance Hangar, Ed	<input checked="" type="checkbox"/>
Helicopter Maintenance Hangar, Fred	<input checked="" type="checkbox"/>
Helicopter Maintenance Hangar, George	<input checked="" type="checkbox"/>
Helicopter Maintenance Hangar, Jen	<input type="checkbox"/>
Helicopter Maintenance Hangar, Kate	<input type="checkbox"/>
Helicopter Maintenance Hangar, Matt	<input type="checkbox"/>
Helicopter Maintenance Hangar, Ted	<input type="checkbox"/>
Helicopter Maintenance Hangar, Tom	<input type="checkbox"/>
Plane Maintenance Hangar, Jerry	<input type="checkbox"/>
Supervisor Helicopter Maintenance Hangar, Liz	<input type="checkbox"/>

You can see that the **AND** was processed first to get all the items that had Plane and Jerry in them. Then the **Or** provided all the items with Helicopter in them. If we were to try the search term **Plane OR Kate AND Helicopter** the



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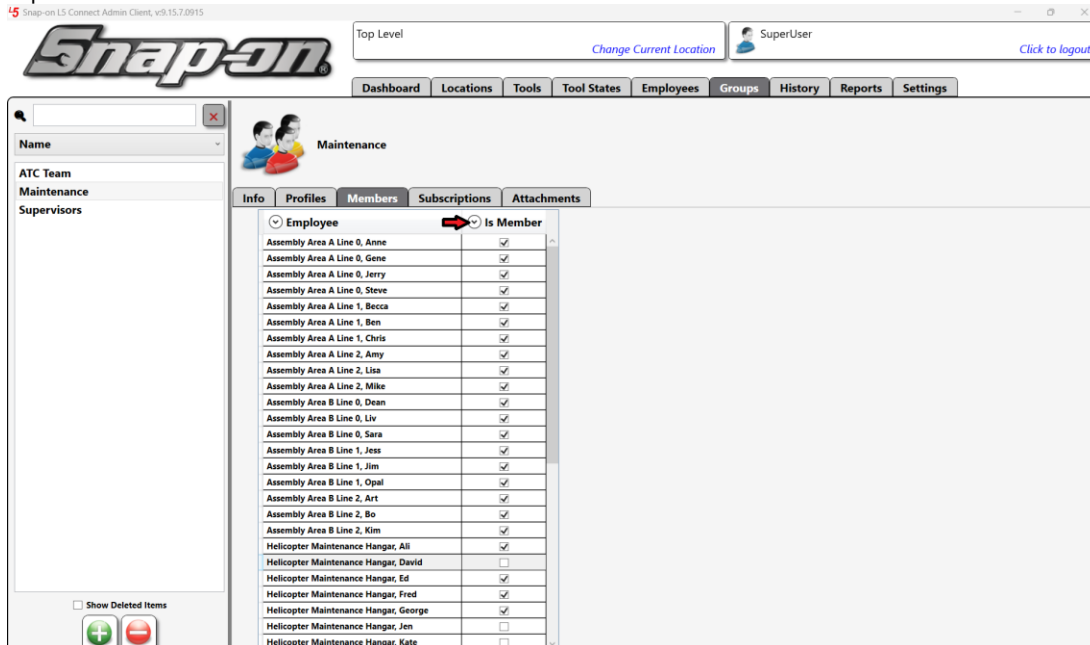
AND would once again be processed first.



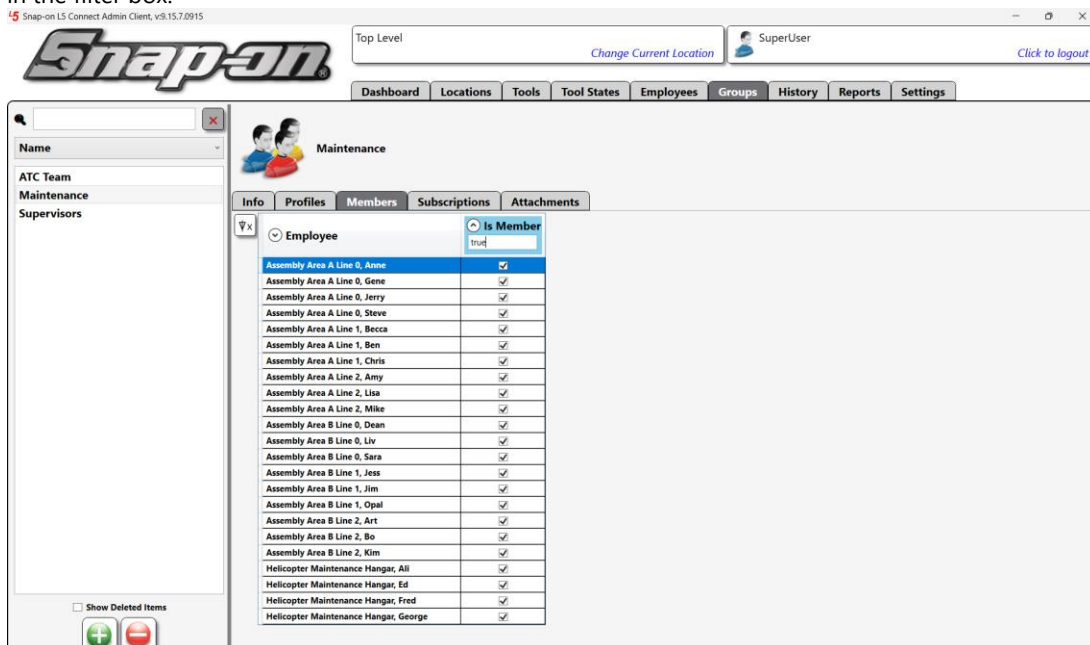
This time we get Kate from the helicopter maintenance team and all items with plane in the name.

Boolean Data Filtering

Boolean values are usually visually depicted as checkboxes in the L5 Connect system. We will continue with the **Members** sub-tab of the **Groups** tab example. To filter by the **Is Member** boolean column, you would click the **Filter** expander.



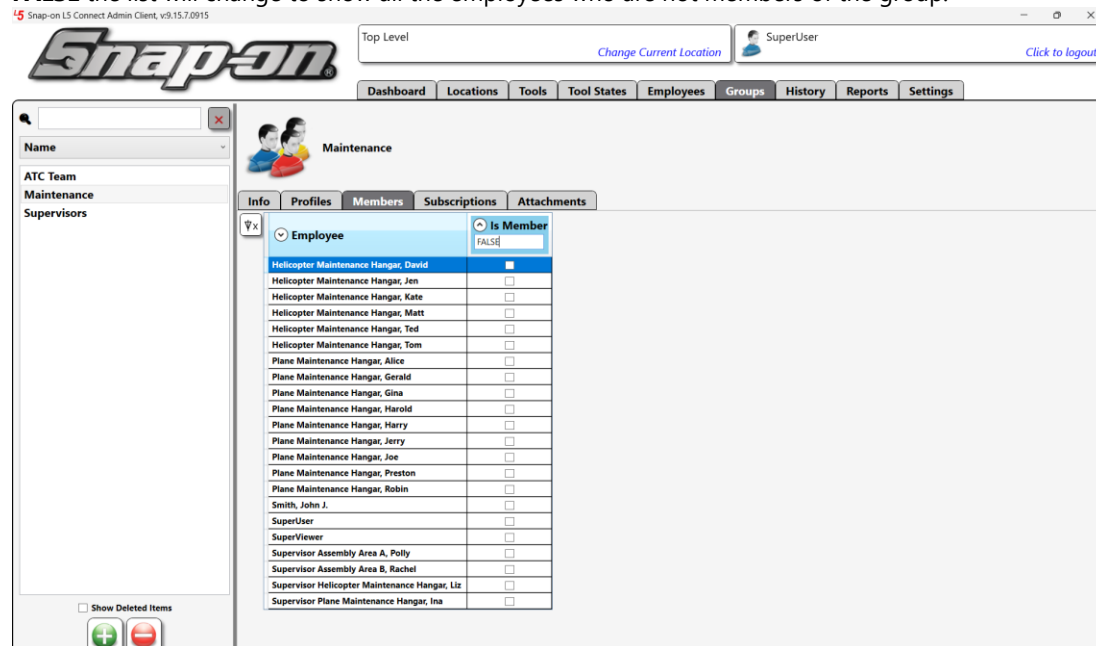
This will show the filter text box. To filter out any employees who are not members of this group you would type **true** in the filter box.





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Now the list only includes all the employees who had the **Is Member** field checked. If we change the filter text to **FALSE** the list will change to show all the employees who are not members of the group.



****NOTE:** The true and false filter text is not case sensitive.

Numeric Data Filtering

Numeric fields are treated as text for filtering purposes in the L5 Connect system.

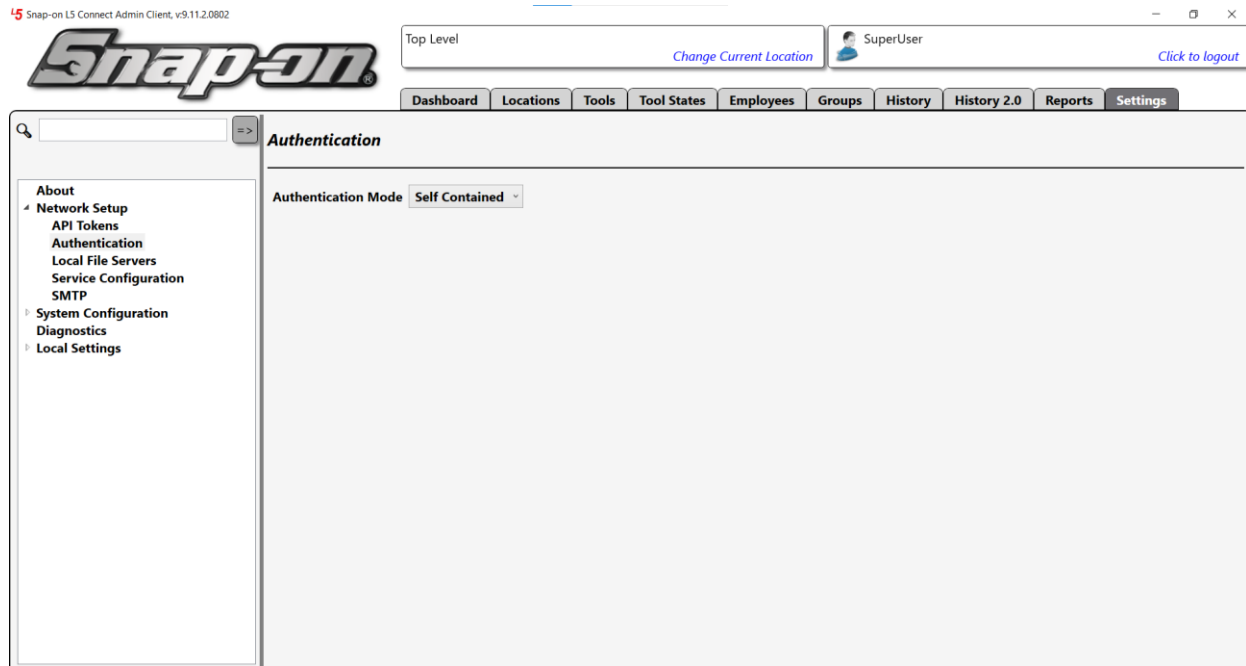
Logging Out

Once you have completed your work in the admin client, it's time to log out. In the top right corner of the application there is a **Click to logout** button that shows the name of the currently logged in user. All you need to do to log out of the application is click that button and you will be returned to the login prompt.



Authentication Configuration

This document will explain the different types of authentications that can be used in the L5 Connect™ system and how each is configured. Three authentication methods are available within L5 Connect™ to access the Administration functions. You can change the type of authentication by going to **Settings -> Network Setup -> Authentication** in the L5 Connect™ Admin Client.

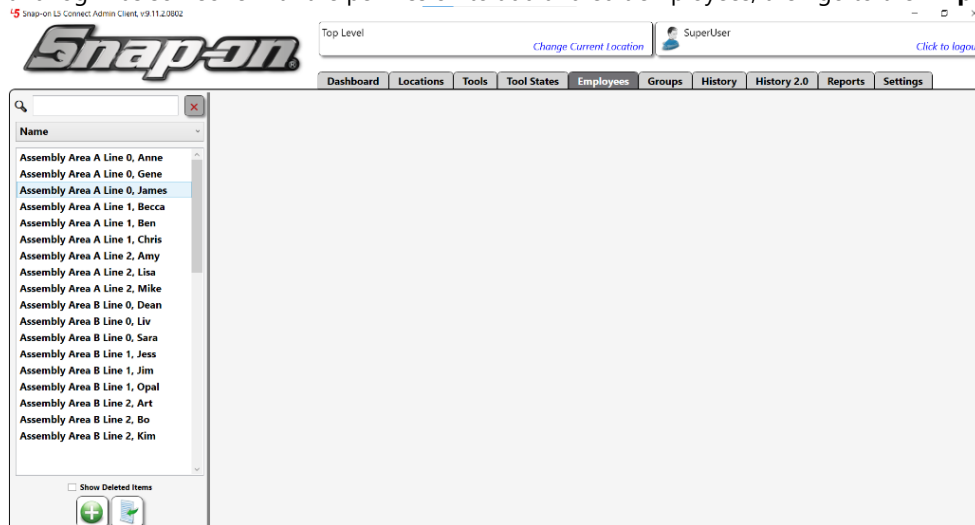


NOTE: These Authentication Methods are primarily used to access the Admin Client but are used in other parts of the system such as for access to admin mode in the True-Crib or for joining a device to the service.

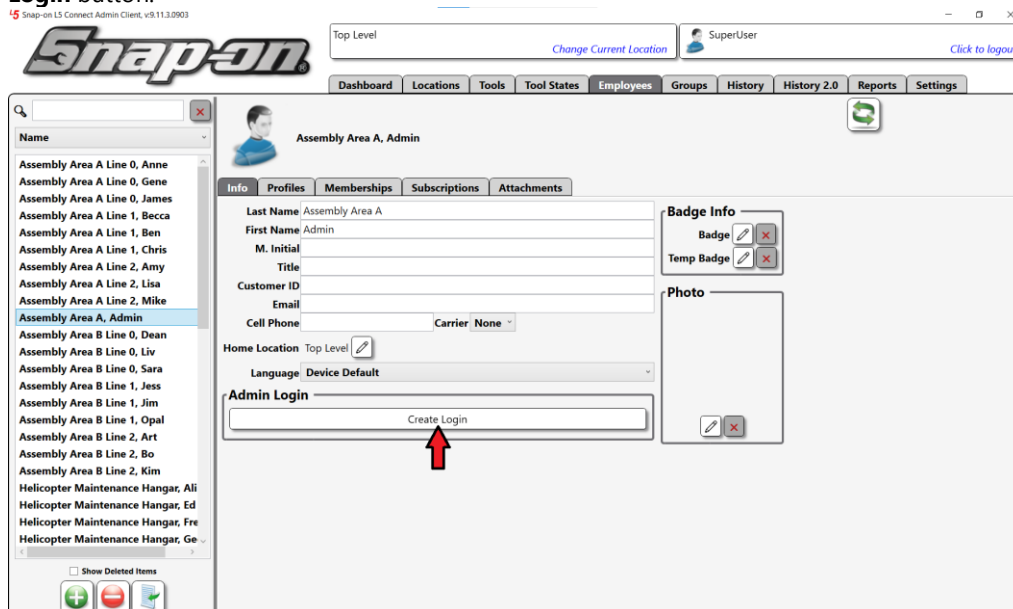
Self-Contained

This is the default method of authentication. It uses the L5 Connect™ Database to store employee data. Admins will need to type in an admin username and password to access the administrative functions. When an Admin attempts to log in this way, the database checks for the credentials of that Admin.

1. To configure a user to have admin access with the self-contained configuration start the admin application and log in as someone with the permission to add and edit employees, then go to the **Employees** tab.



2. Either create a new user or select the user to whom you wish to give admin access and click the **Create Login** button.





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3. Enter a **User Name** and **Password** and then confirm the password. The password must be at least 6 characters, and the user will be prompted to change it upon their first login.

New Password

User Name

Password

Confirm Password

4. Click the blue **Save** button to save the change and your user will be set up to log into the admin application.

Domain Based

This method utilizes an Active Directory domain to handle user authorization. An L5 Connect employee's username must be set to their domain username. When they log into the L5 Connect system they will put in this username and their domain password. These will be passed on to Active Directory by the L5 Connect system to verify that access should be granted. **NOTE: The L5 Connect system does not store Active Directory passwords. It merely forwards that information to Active Directory for a yes or no response on whether the user is authenticated.** If Active Directory says the credentials are valid, the employee who's **User Name** matches the domain username of the credentials will be granted access to the L5 Connect system.

When you attempt to configure the system to use Domain Based Authentication, you will be prompted to provide a valid username and password on that domain so that the L5 Connect system can make sure you will have at least one account that can access the system. This username and password will be used to verify that you can successfully log into the Active Directory for the domain upon saving, so be sure to set the domain as well before attempting to save your changes. The username will be saved as the L5 Connect **User Name** for the employee who configures the system for domain-based authentication.

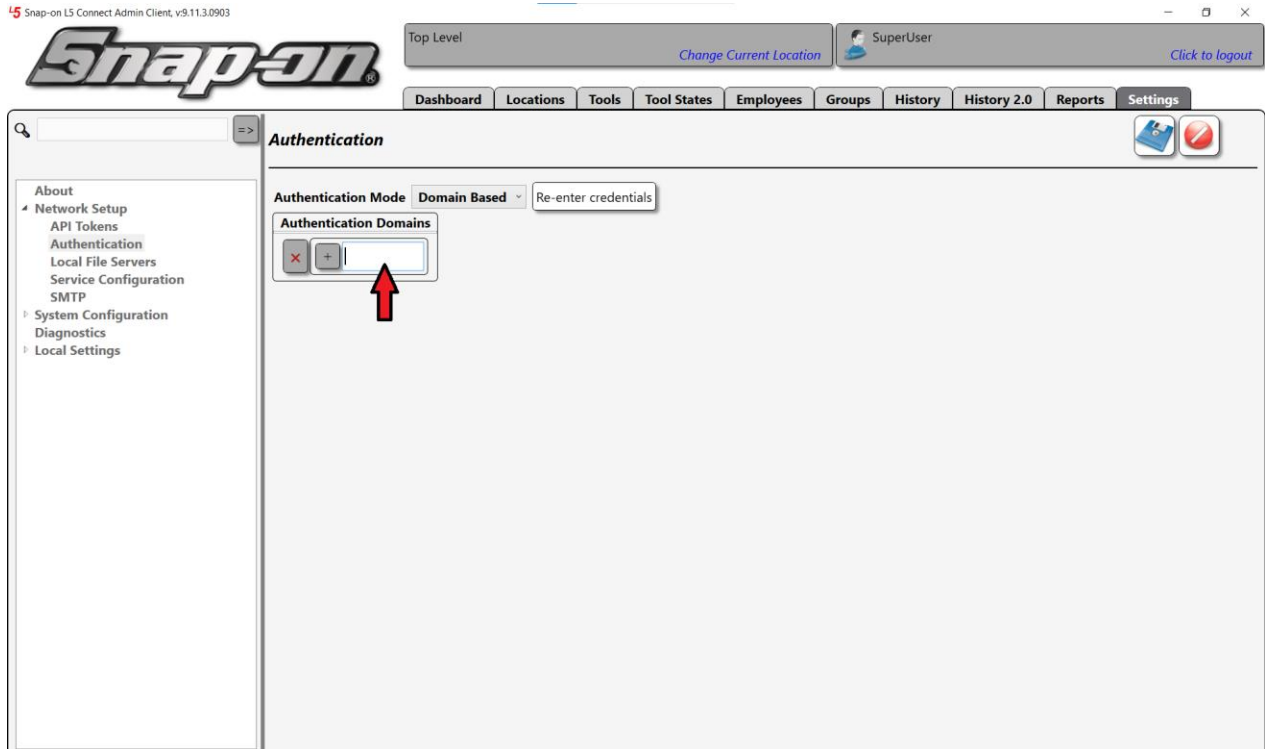
Please provide new login credentials to ensure that you can still access the system after changing settings.

User Name

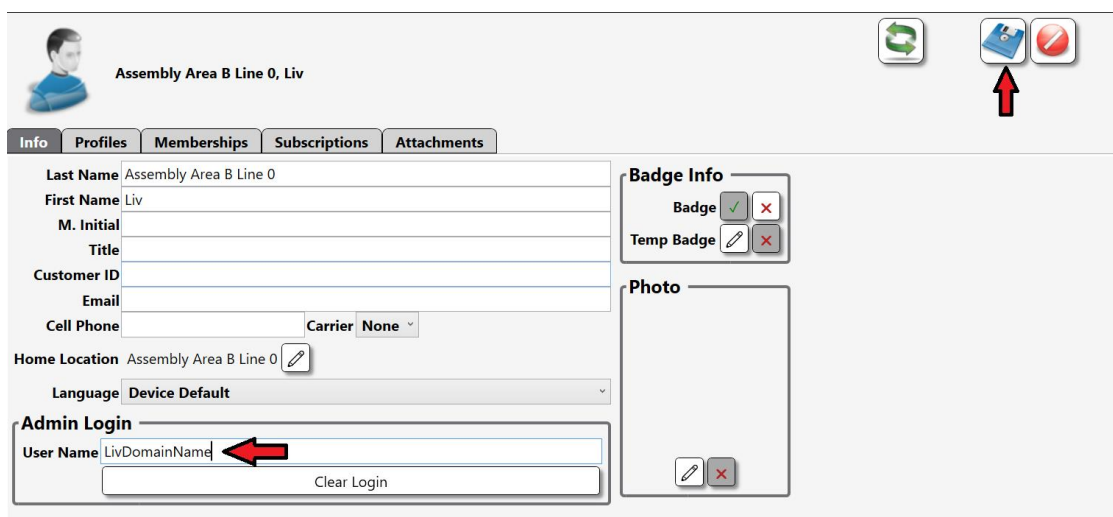
Password

Confirm Password

Then, type in the domain name and click the + button to add it. To remove a domain, select the name in the list and click the **X** button to remove a domain. Click the blue **Save** button once your domain has been set.



Other users requiring admin access will then need their L5 Connect **User Name** set to their domain-based username. At that point they will be able to log into the L5 Connect admin application with their domain credentials or authenticate other tasks.





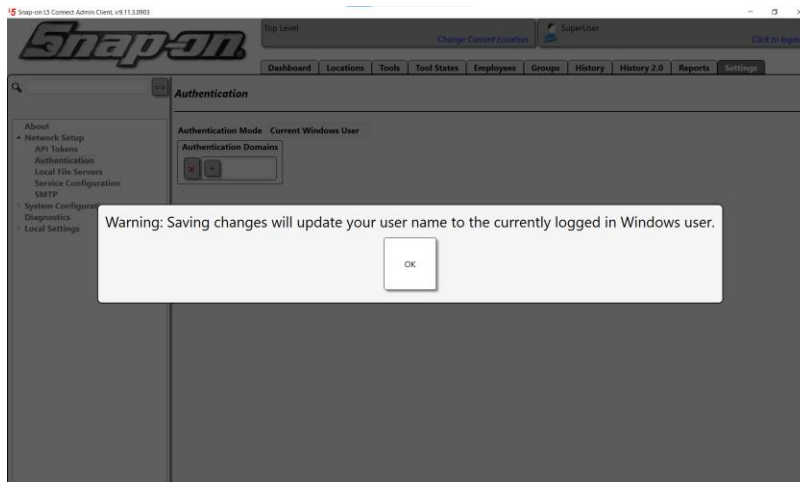
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Current Windows User

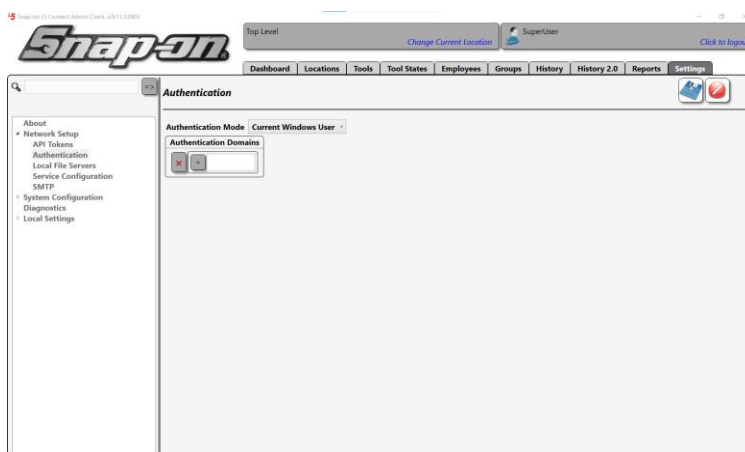
This method will allow users to authenticate without typing in a username or password (Single-Sign on). It utilizes the current windows session to log the user in.

NOTE: The Current Windows User auto-login feature only applies to the L5 Connect Admin Client. When interfacing with connected devices (ATC Toolbox, True-Crib, etc.) the user must authenticate with their domain username and password to gain access to administration functionality.

When you select this authentication mode, you will be prompted that your username will be changed to the currently logged in Windows username.



After clicking the **OK** button, you will need to add a domain to the domain list. Type in the domain name and click the **+** button to add it. To remove a domain, select the name in the list and click the **X** button to remove a domain. Click the blue **Save** button once your domain has been set.





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At this point if you go to the **Employees** tab and look at the info for the employee who just changed the authentication mode, you will see that their **User Name** has automatically changed to their domain username and that they no longer have a password associated with it.

Dashboard Locations Tools Tool States **Employees** Groups History History 2.0 Reports Settings

SuperUser

Info Profiles Memberships Subscriptions Attachments

Last Name SuperUser
First Name
M. Initial
Title
Customer ID
Email
Cell Phone Carrier None
Home Location Top Level
Language Device Default

Admin Login
User Name ss5952
Clear Login

Badge Info
Badge ☒ ☐
Temp Badge ☐ ☐

Photo

Any other users who will need to authenticate will need to have their L5 Connect **User Name** changed to their domain username as well.

Dashboard Locations Tools Tool States **Employees** Groups History History 2.0 Reports Settings

Assembly Area B Line 0, Liv

Info Profiles Memberships Subscriptions Attachments

Last Name Assembly Area B Line 0
First Name Liv
M. Initial
Title
Customer ID
Email
Cell Phone Carrier None
Home Location Assembly Area B Line 0
Language Device Default

Admin Login
User Name LivDomainName
Clear Login

Badge Info
Badge ☒ ☐
Temp Badge ☐ ☐

Photo



L5 Connect User Manual

SMTP Configuration

The purpose of this document is to define the process of setting up the L5 Connect system to send emails through an SMTP server. This will allow the system to be able to send subscriptions such as notifications, scheduled reports, etcetera. The process will require access to an SMTP server and configuration of the L5 Connect system.

SMTP Server Access


For the L5 Connect system to be able to successfully send emails, it must have access to an SMTP server. The L5 Connect system supports using no encryption (only recommended on an internal network), or encryption (checking the **Use SSL** checkbox) with an email server that supports the STARTTLS command. The L5 Connect system supports the SMTP Service Extension for Secure SMTP over Transport Layer Security as defined in RFC 3207. Typically supported ports are 25, 2525, 8025, 587 or 80.

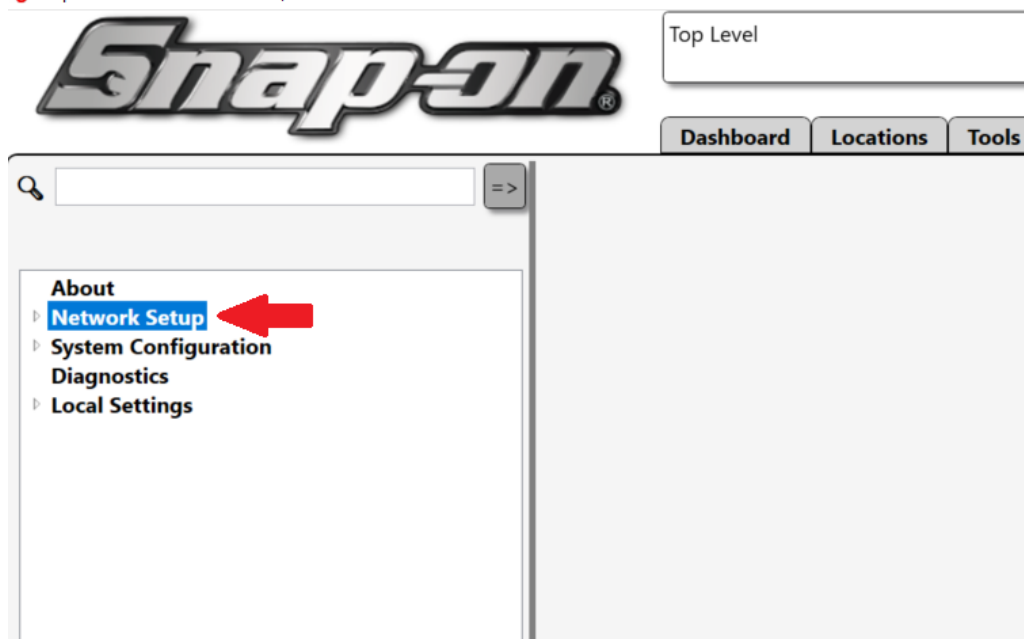
An alternate connection method is where an SSL session is established up front before any protocol commands are sent. This connection method is sometimes called SMTP/SSL, SMTP over SSL, or SMTPS and by default uses port 465. This alternate connection method using SSL is not currently supported.

If your organization has access to an internal SMTP server, you can use that. If not you will need to set that up first. There are several free options for setting up an SMTP server such as [SMTP2GO](#) That service has been verified to work with the L5 Connect system using port 587.

L5 Connect Configuration

1. Start the L5 Connect Administrator app and log in. You will need the System Configuration -> System Configuration permission to make the required changes.
2. Click the **Employees** tab and select your employee information.
3. Make sure you have an email address defined. This is required for testing. If editing the employee email is required you will need the **Employee -> Contact Info Edit** permission.
4. Click the **Settings** tab.
5. Click the carat to expand the **Network Setup** item.

 Snap-on L5 Connect Admin Client, v:9.9.10.0314



6. Click the **SMTP** sub-item.
7. Check the **Enable** checkbox.

SMTP Mail Server Configuration

Enable ☒

SMTP Host

SMTP Port 0

From Address

From Name


Use SSL ☐

8. For **SMTP Host** you should put the URL of the SMTP server you are using.
9. For **SMTP Port** you should put the port number of the SMTP server you are using.
10. For the **From Address**, you should put the email address that will be sending the notification email. This will be the address that will appear in the **From** field of the emails sent to employees.
11. For the **From Name** put a name that makes it clear who is sending the email.
12. If your SMTP requires authentication information check the **Use SSL** checkbox to enable authentication and encryption.
13. For the **User Name** field you will need to enter the username required by the SMTP server for authentication.
14. Click the **Change Password** button.
15. For the **Password** and **Confirm Password** boxes enter the password associated with your SMTP server credentials.
Click the **OK** button.
16. Click the blue disk button to save the SMTP changes.
17. Click the **Send Test Email** button to have a test email sent the email address associated with the employee currently logged into the admin application. You should shortly receive an email at the email address you set for your employee verifying that everything is set up and working.

Enable ☒

SMTP Host	mail.smtp2go.com
SMTP Port	587
From Address	l5connectexample@l5connectexample.com
From Name	L5 Connect System
Use SSL	<input checked="" type="checkbox"/>
User Name	l5connectuser

Change Password

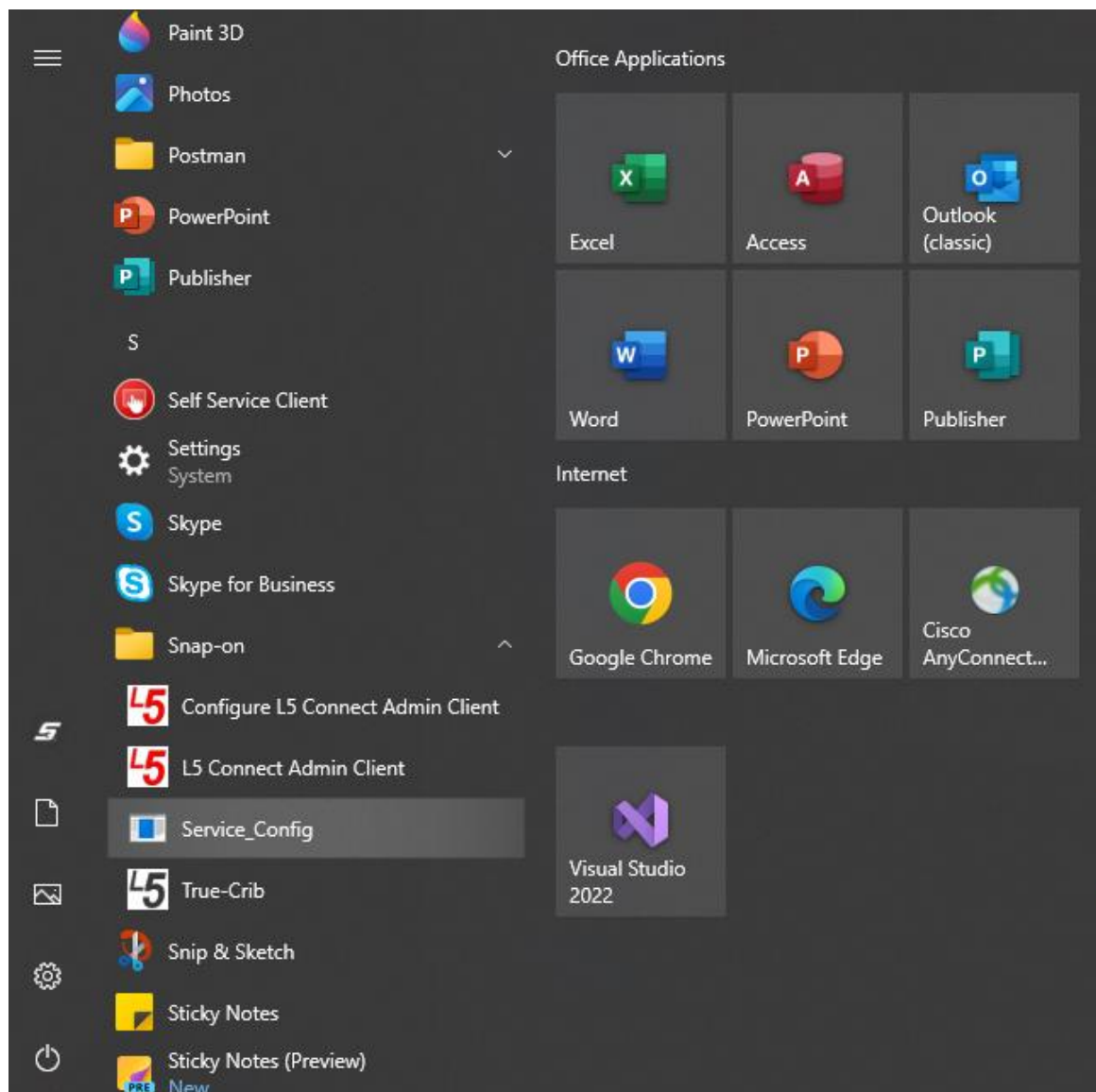
Send Test Email 

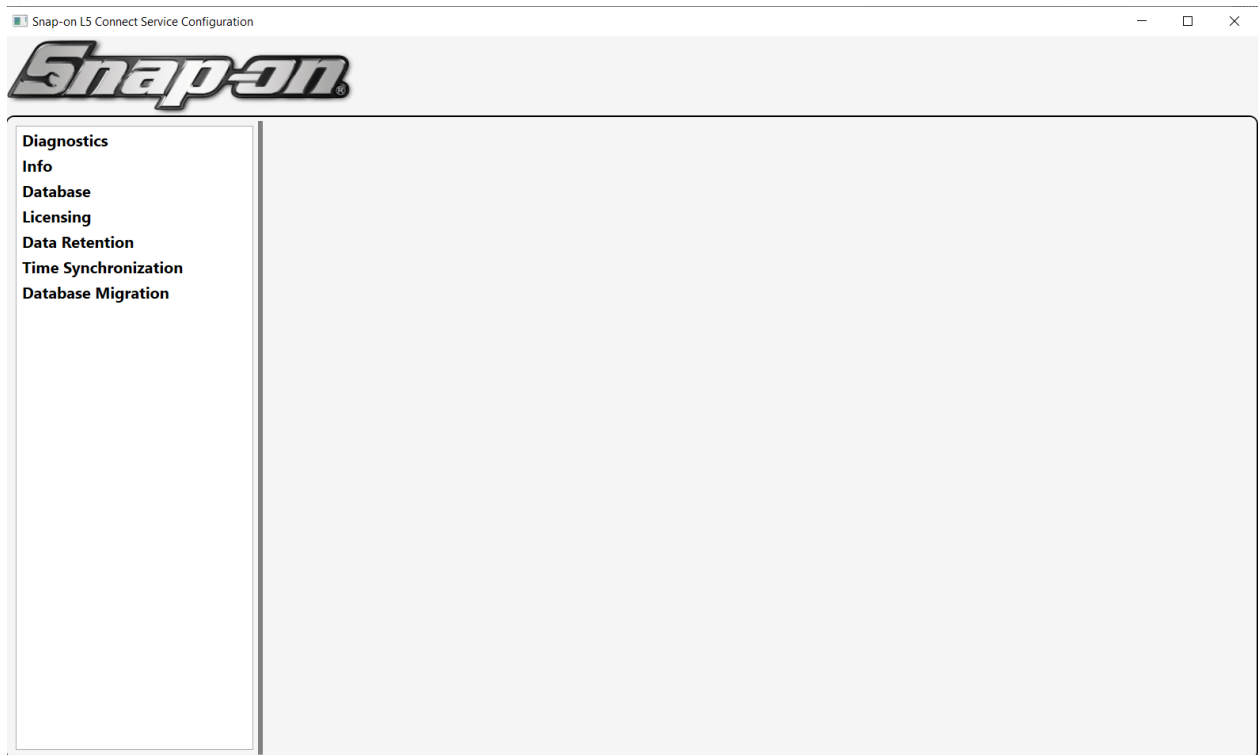
Data Retention

The L5 Connect system can permanently delete event history and archive image data. This may be desired to comply with maximum data retention requirements, reduce used file storage space, etc. This document contains the procedures to remove past data either automatically or manually.

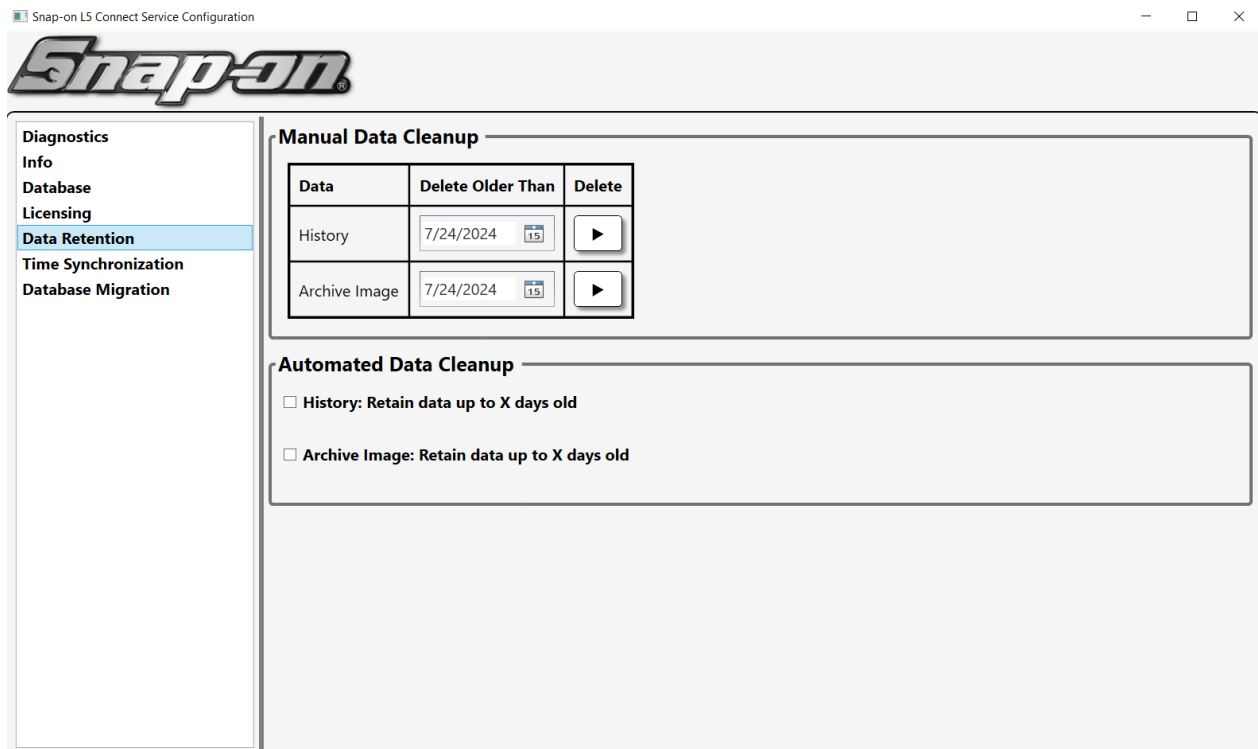
WARNING - All data deleted during the processes described below are permanently removed from the L5 Connect System. Any desired data archiving must be done before following these procedures.

To begin, go to the Windows start menu on the service PC, open the Snap-on folder, and launch the **Service_Config** application.










Then select the **Data Retention** tab.




Manual Cleanup

To perform manual cleanup of event history data, use the date picker for the **History** row in the **Manual Data Cleanup** section to set the date the oldest date of data that should be kept. Then click the **Start: Delete** button to initiate the cleanup.

Manual Data Cleanup

Data	Delete Older Than	Delete
History	1/3/2025 	 
Archive Image	7/24/2024 	



Then you will be prompted with the number of events that will be deleted, asking if you are sure. Click the **Yes** button to delete these events.

Delete: History < 1/25/2025
(Count = 194)
Are you sure?

You have successfully cleaned up your event history.

Delete: History < 1/25/2025

Success: Deleted (195)

To perform a manual cleanup of archive images, you use the same procedure with the date picker for the **Archive Image** row.

Automated Cleanup

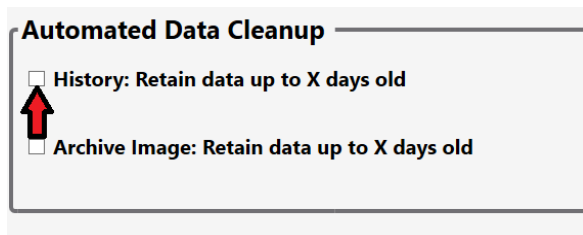
The L5 Connect system can be configured to automatically delete data older than a defined number of days. This automated process occurs every night at midnight (local time on the service PC) and when the service is restarted.

WARNING - The data retention time range is based on the current date/time settings of the L5 Connect service PC. Changing the date of that machine to an incorrect future date will result in the deletion of an incorrect data retention range.

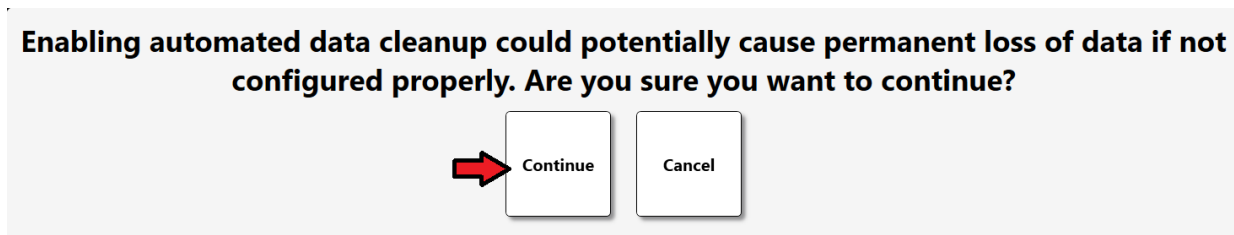
NOTE: Before enabling automated cleanup, follow the manual cleanup procedure above. This will avoid possible long duration deletion of multiple days of data during the first automated cleanup process.

Configuration

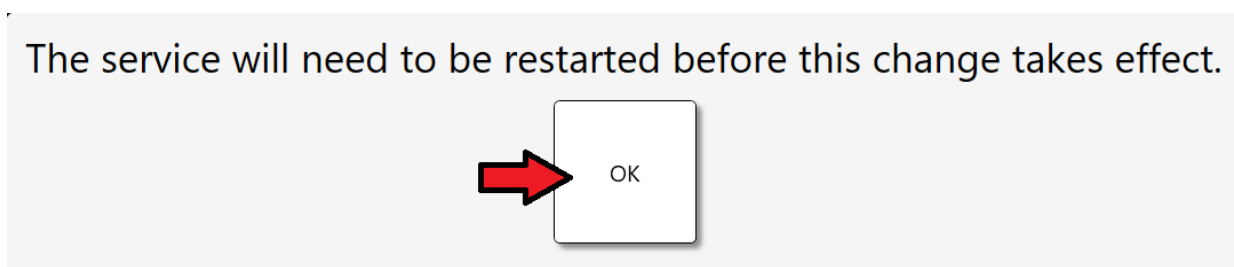
To enable automated data cleanup for event history, click the **History: Retain data up to X days old** checkbox.



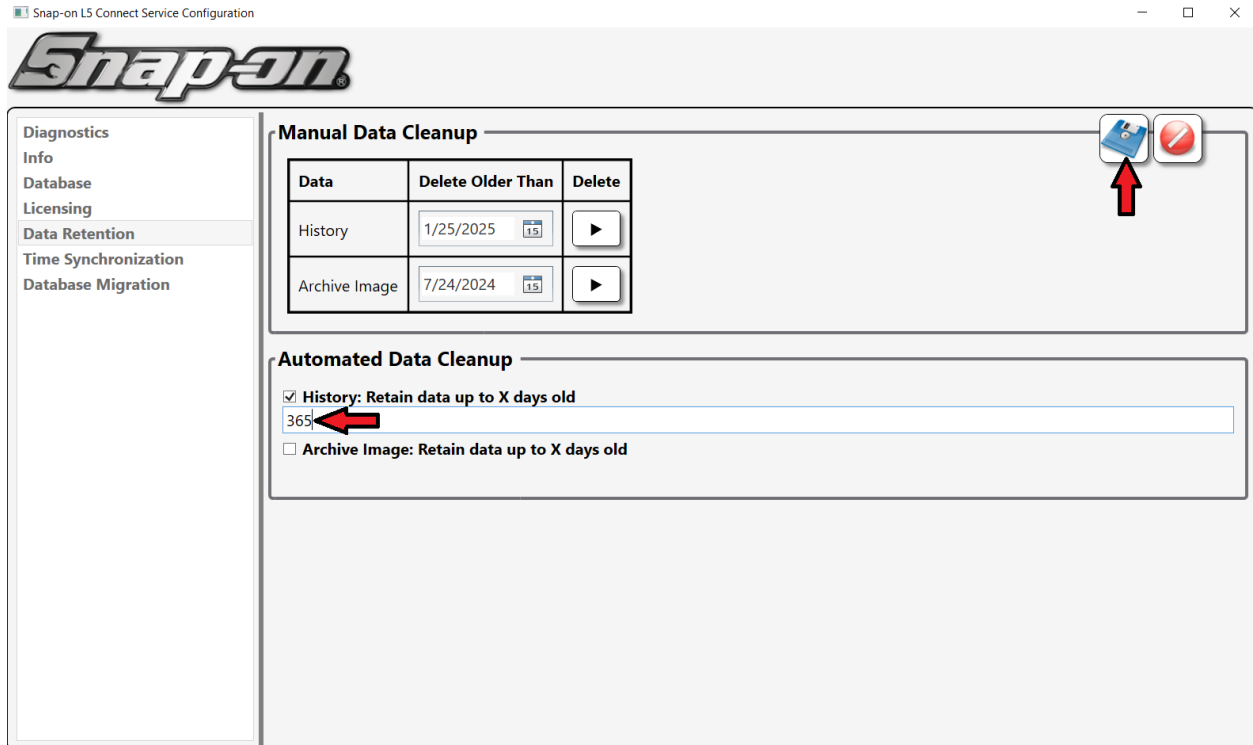
You will then see a warning that enabling automated data cleanup could potentially cause loss of data if not done properly. Click the continue button.





This will be followed by a message that tells you the service will need to be restarted before changes take effect. Click the **OK** button to continue.



You will now see a field that contains the maximum number of days data will be retained. The default value is 365 days. Set this number to the desired value and then click the save button.



The screenshot shows the 'Snap-on L5 Connect Service Configuration' window. On the left is a navigation menu with options: Diagnostics, Info, Database, Licensing, Data Retention (selected), Time Synchronization, and Database Migration. The main content area is titled 'Manual Data Cleanup' and contains a table with columns 'Data', 'Delete Older Than', and 'Delete'. The table has two rows: 'History' with a date of '1/25/2025' and a 'Delete' button, and 'Archive Image' with a date of '7/24/2024' and a 'Delete' button. To the right of the table are two icons: a blue floppy disk and a red circle with a white 'X', with a red arrow pointing to the floppy disk icon. Below the table is a section titled 'Automated Data Cleanup' which contains two checkboxes. The first checkbox is checked and labeled 'History: Retain data up to X days old', with a text input field containing '365' and a red arrow pointing to it. The second checkbox is unchecked and labeled 'Archive Image: Retain data up to X days old'.

Data	Delete Older Than	Delete
History	1/25/2025	
Archive Image	7/24/2024	

Automated Data Cleanup

☒ History: Retain data up to X days old
 365

☐ Archive Image: Retain data up to X days old

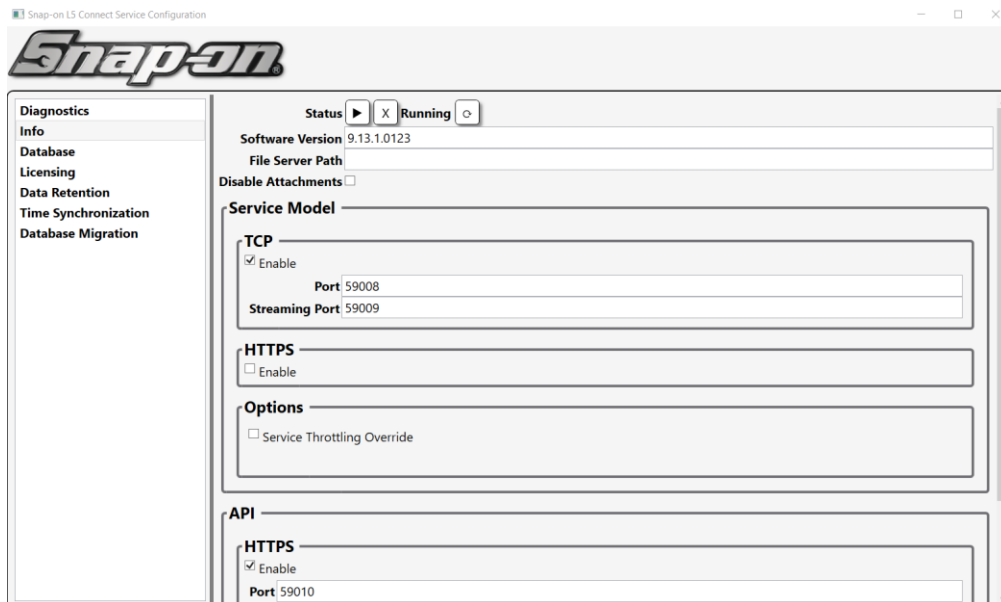
You can repeat this process to configure the archive image automated data retention as well.

Restarting the Service

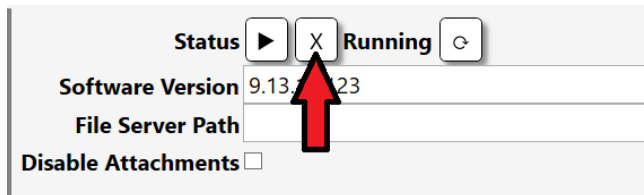
After you make changes to the automated data cleanup section you will need to restart the service.

NOTE: The service will begin purging data outside of the configured retention range immediately after restart. Verify your retention settings before restarting the service.

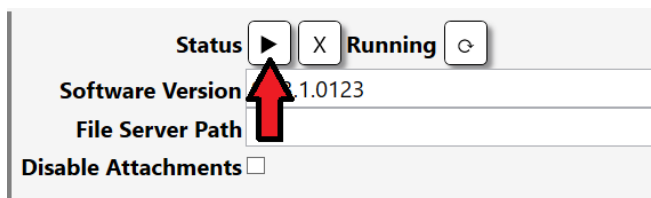
Switch to the **Info** tab of the service config application.



Click the X to stop the service.



Then click the **Start** button to restart the service.





L5 Connect User Manual

API Configuration

This document will detail the process for configuring the L5 Connect API. This allows customers to programmatically monitor and update their L5 Connect system through the API interface. This will require the customer to develop a custom middleware application to interface between their system and the L5 Connect system.

Licensing

You will need a license to use the API. Here is how to determine if your service license currently supports using the API. This check will need to be performed on the machine hosting the L5 Connect Service.

1. Click the **Windows Start** button, then select the **Snap-on** folder, then select the **Service_Config** application.
2. Select the **Licensing** tab.
3. Make sure the **AllowCustomerApi** checkbox is checked for your license.
4. If your license does not currently support using the API contact Pro-Services for help getting and installing the proper license.
Email: INDPROSERVICES@snapon.com

Service Configuration

You will need to configure the PC hosting the L5 Connect Service to turn on the API.

1. Click the **Windows Start** button, then select the **Snap-on** folder, then select the **Service_Config** application.
2. Make sure the **Info** tab is selected.
3. In the API groupbox click the **Enable** checkbox of either the HTTP or HTTPS communication type to enable the desired communication type.
4. Set the port to the desired value. Snap-on recommends using port 443 if using HTTPS communication. This port is typically open and should cause less firewall issues. You will need to ensure whatever port you select has appropriate firewall configurations as well.
5. Click the **Save** button to save your changes.
6. Click the **X** button to stop the service, then click the **Start** button to restart the service.

Setting up HTTPS Certificate

To ensure a secure connection between the API and your system you will need to configure the communication port with an HTTPS certificate. See the document in the following link for the process on how to do this. This only needs to be done if the port on which you configured the API was not already bound to the certificate in that process.
Connecting to a L5 Connect™ Service (Binding an HTTPS Certificate to the Port)



L5 Connect User Manual

Bearer Token Generation

When attempting to access the API, any requests will need to have a valid bearer token embedded in them. These tokens are attached to employees in the system. You can either add a token to an existing employee or create an employee specifically for API requests. Given that the permissions and logged in employee of all API requests will use the employee info and profile of the employee attached to the token, you may want to create an "API Employee". Here is how to create a valid token for an employee.

1. On a PC that has the L5 Connect Admin application installed, click the **Windows Start** button, then select the **Snap-on** folder, then select the **L5 Connect Admin Client** application.
2. Select the **Settings** tab.
3. Expand the **Network Setup** item.
4. Select the **API Tokens** item.
5. Click the **Plus Icon** to add a token to a new employee.
6. Hover over the input box and then select the API employee
 - The "API Employee" can be either an existing employee or you can create a new employee dedicated for API access.
 - The API calls will use the selected employee for event logging and action permissions. Make sure the selected employee has the proper permission profile for your desired API functionality.
 - Reference the L5 Connect Employees document for Employee creation/editing instructions.
7. Set the dates for which the token will be valid, then click the **Green Checkmark** button to save.
8. Select the API user you just added and then click the *Eye Icon* to view the token. You can copy this token and paste it into where you need it for use in making requests from the API.

NOTE: You can delete/revoke the token by clicking the **Red X** button next to the employee to which the token is assigned.

How to Use the API

At this point the L5 Connect system API should be ready for use. For more information about how to use the actual API itself, see the links below.

[L5 Connect API Demo Website](#)
[Introduction to the L5 Connect API](#)



L5 Connect User Manual

Software Features



L5 Connect User Manual

Locations

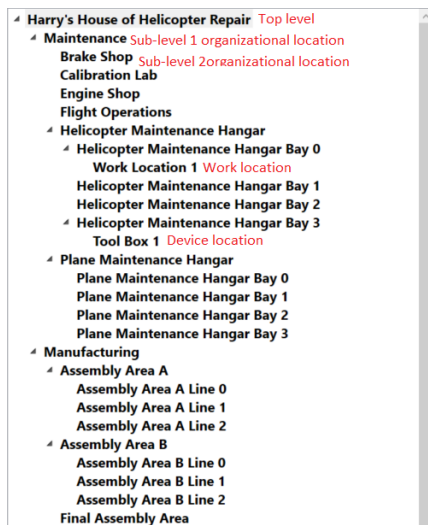
The goal of this article is to document the purpose of, configuration, and use of locations in the L5 Connect™ system.

One of the most critical concepts in the L5 Connect™ system is **Locations**. Everything within L5 Connect™ (**Employees**, **Devices**, **Work Locations**, etc.) are placed and managed in a **Location**. Without locations, it would be challenging to manage all these elements.

So, what is a **Location** regarding L5 Connect™? A **Location** is a logical representation of a physical space or organizational Unit within a building or organization. These locations can be nested within other locations to create a hierarchy known as the **Location Tree**.

To help understand this concept, please look at the figure below. The figure is an example of the **Locations Tree** on the **Locations** tab of the admin application. The top level is the highest **Location** in the tree. This **Location** represents the customer organization.

NOTE: You can only have one top level location in an organization.



You have two sub-levels under the top level: **Maintenance** and **Manufacturing**. These sub-levels are nested within the Top Level. They are called organizational locations can represent either a department or a physical location.

As you can see, there can be multiple levels of nested sub-levels. All of these sub-levels inherit the properties and permissions from their "parent" **Location**. Therefore, with a setting defined at the top level, all sub-levels will automatically have that setting.

You can use the **Location Tree** to organize your employees and devices based on where they perform their duties or reside. For example, if EmployeeA works on assembling new parts in **Assembly Area A Line 0** you could assign their home location to that location. If they also sometimes worked on Line 1 or Line 2 you might want to assign their home location to **Assembly Area A** so they would have access to all three lines in that area.



L5 Connect User Manual

NOTE: When someone is assigned to a Location, (If given permissions), they gain access to any resources within that location or any Child-Locations under it.

EmployeeB is currently training two new employees on **Assembly Area A Line 1** and **Line 2**. To give them access to resources in both locations, you must assign them to the Parent Location, the **Assembly Area A** location. At this Location, EmployeeB will gain access to resources in both **Line 1** and **Line 2**. Suppose your organization is large with several employees. In that case, you can delegate management tasks of specific sub-locations to managers of those locations. For more information about setting up an employee as an admin, please see the **Employees** section of this guide.

Admin Setup

The **Location Tree** for your L5 Connect™ is managed and configured through the Admin application. This section will cover how to use the admin app to configure your **Location Tree** to suit your organization's needs.

Creating a Location

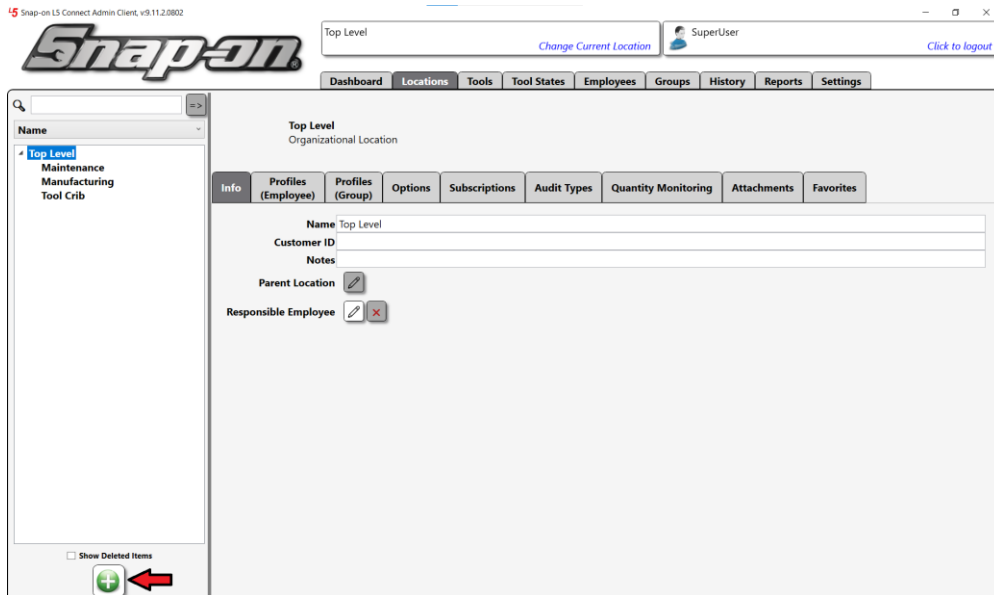
To build your organization structure in L5 Connect™, you must create location objects. These can be either:

Organizational Location – This type of Location represents a logical place to organize your company. It could be a building or a department, or a team.

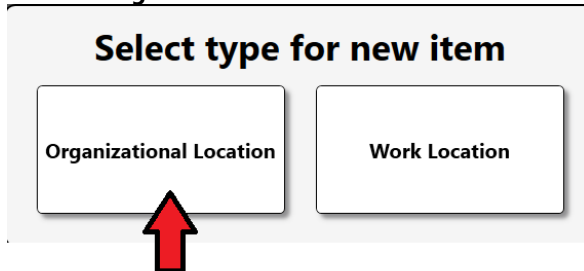
Work Location – This type represents where work occurs and where the tool is. It can be a bay or a specific object. See L5 Connect™ Work Locations and Work Orders for more information.

Create a new Organizational Location to represent an R&D Lab. Place a Work Location within it to describe a prototype part called Prototype 0001.

1. To create either of these objects, click on the **Green NEW icon** button at the bottom left of the Locations Tab.



2. Click the **Organizational Location** button.



NOTE: When you create a new location object, the parent location of that object will default to your current selection. In this case, Top Level is selected, so any new Location Objects will be created with it as the default Parent Location.

After clicking on the **Organizational Location** you are presented with the location properties of this new location object:

Name – The name of the Location.

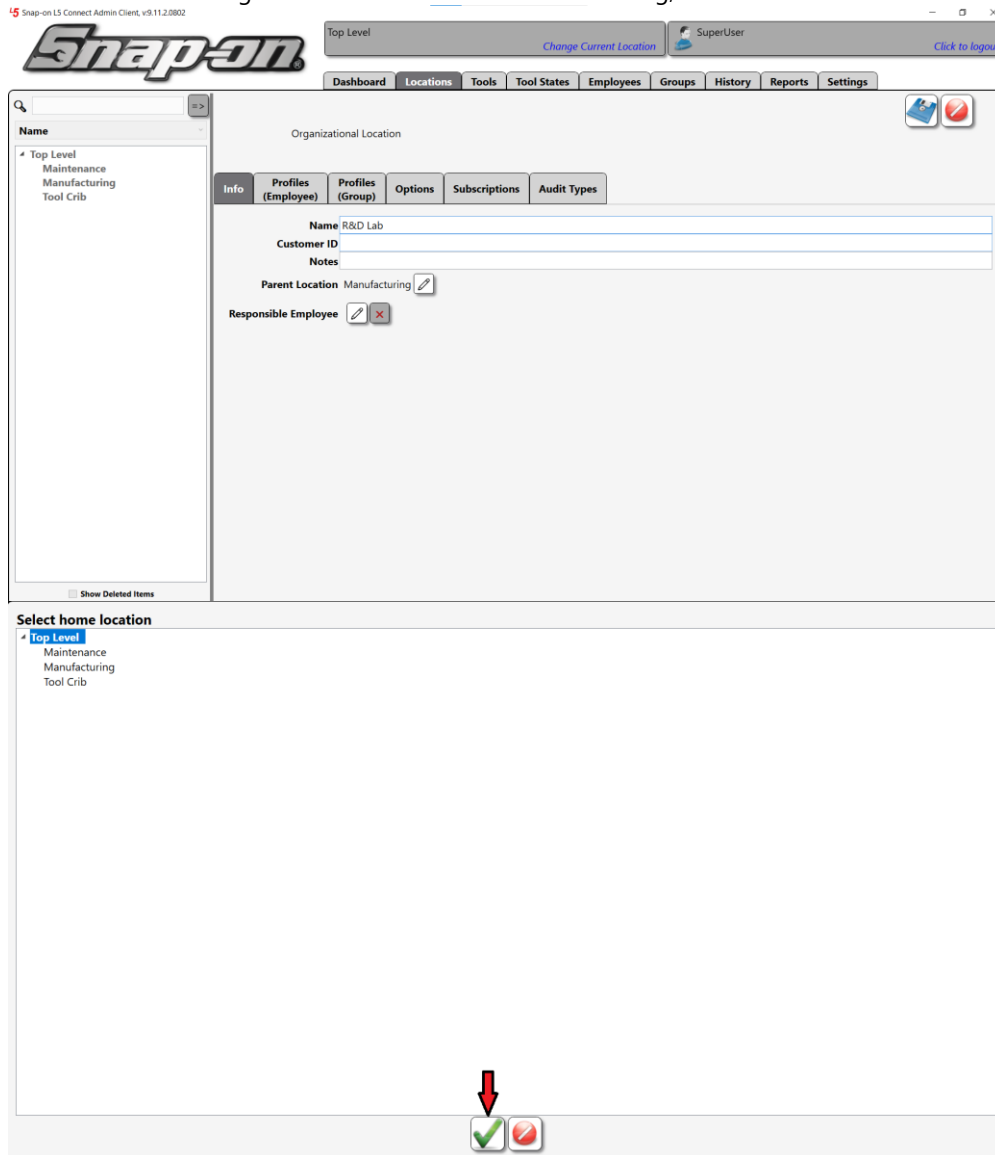
Customer ID – A unique identifier that can be any combination of numbers and letters. Locations cannot share the same Customer ID.

Notes – A custom note that describes the Location.

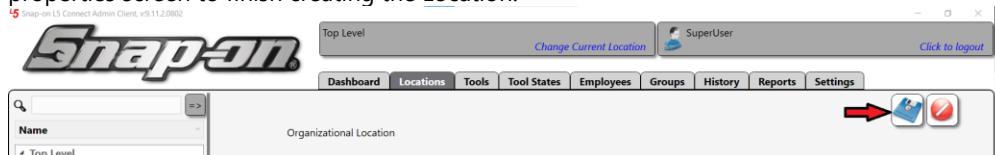
Parent Location – Designates which Location Object is the Parent of this Location.

Responsible Employee – Designates which Employee account is the primary contact for the Location. This Employee will receive alerts for all devices within this Location.

- Set the **Name** to **R&D Lab**.
- This Location doesn't go under Maintenance or Manufacturing, so set its **Parent Location** to **Top Level**.

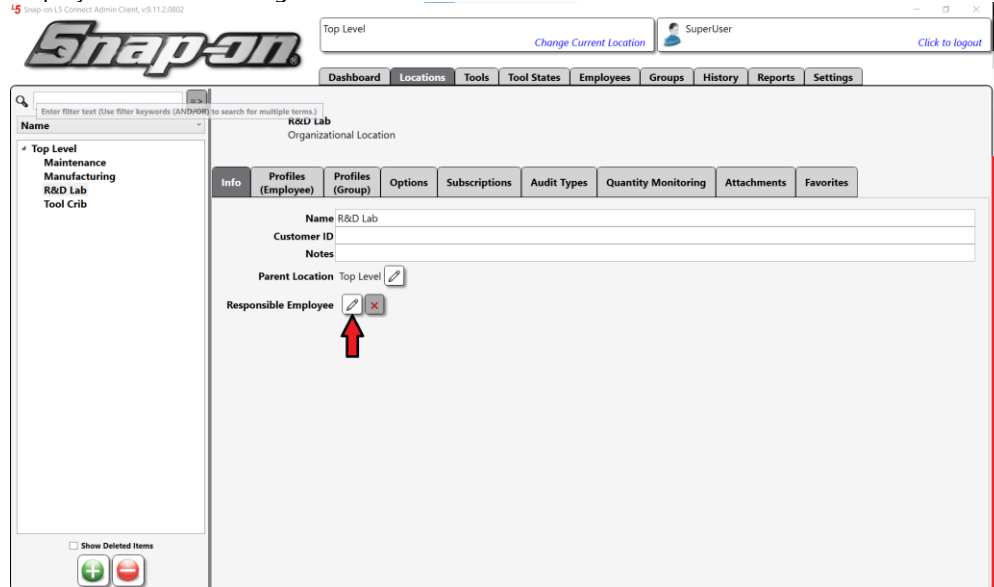


- Once you have set the **Name** and **Parent Location**, click the blue Save icon at the top of the location properties screen to finish creating the Location.

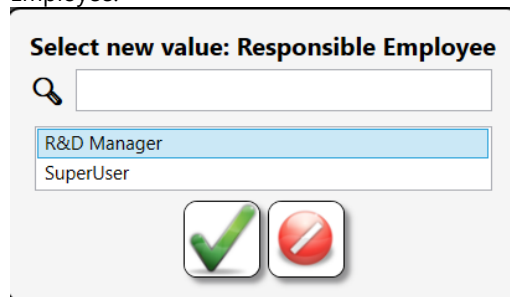


- Now that you have created the location object set the **Responsible Employee** to **R&D Manager**. If the user doesn't exist, you will need to make it on the **Employees** tab. Click on the **pencil** icon to bring up the

Employee Selection dialog.



7. Click on **R&D Manager** to select it, and then click on the ✓ check button to set it as the responsible Employee.



NOTE: You will only see employees who have a profile assigned to the location or its parent. More information on how to assign a profile to an employee can be found here [Default and Custom Profiles and Permissions](#).

8. Once again, click on the **blue Save** button in the upper right-hand corner of the screen to apply your changes.
9. With the new Organizational Location added, it is time to add the prototype Work Location. Use the [L5 Connect™ Work Locations and Work Orders](#) article to create and learn more about Work Locations.

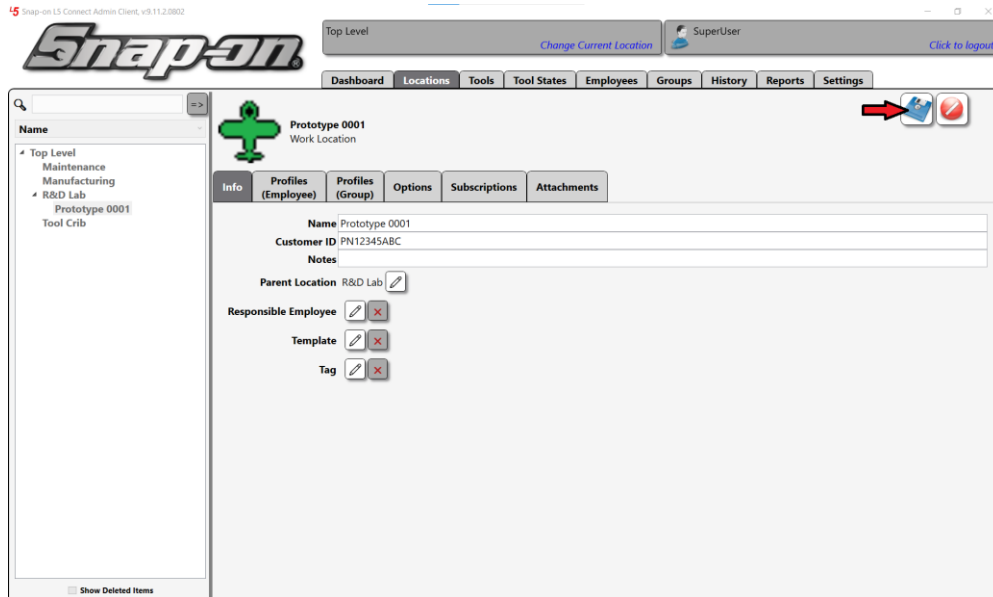
Editing a Location

Sometimes you need to make a change to a Location. This can be done simply by selecting that object in the Location Tree on the left side of the Locations tab. Once you select the object, you will see its current attributes. Next, change an attribute, and then save.

NOTE: Until a change is made, the Save and Cancel buttons will not be visible.

1. Select the **Prototype 0001** location and then set the **Customer ID** to **PN12345ABC**.

- Click the **blue Save** button.

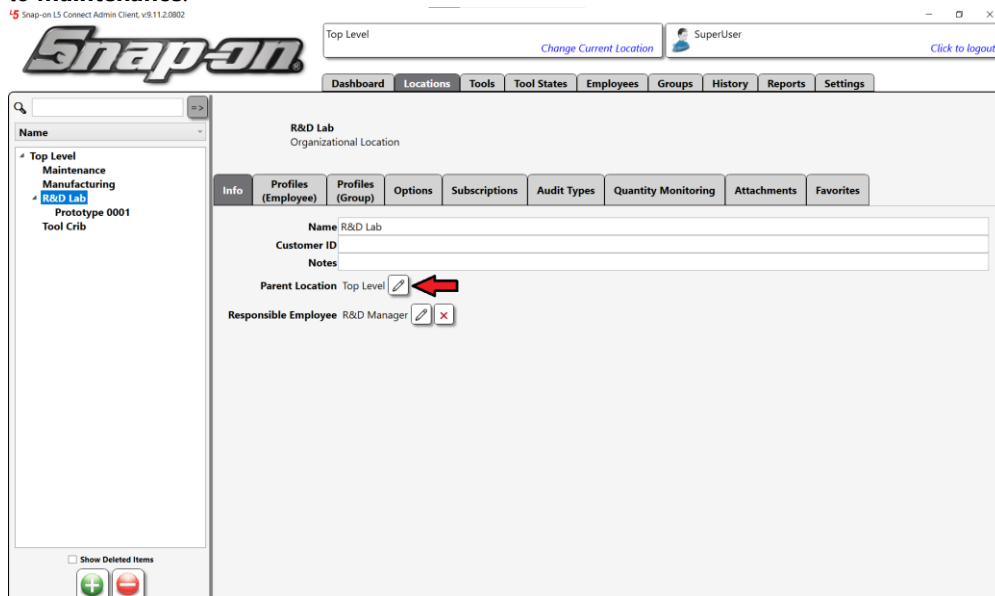


Moving a Location

Sometimes the layout of your company may change. L5 Connect™ allows you to modify your Location Tree when these changes are needed. For example, a company needs to reclaim some space for another project and decides to move their R&D Lab to Maintenance Bay. For this example, you would move the **R&D Lab** under the **Maintenance** location.

NOTE: When moving a Location Object, all Child objects will be moved along with the Parent. Also, if the inheritance option is enabled, the Location Object will assume all the settings of its new Parent. See inheritance and permissions later in the guide for more information.

1. Click the **Pencil** button to edit home location of the R&D Lab and change its parent location from **Top Level** to **Maintenance**.







Snap-on L5 Connect Admin Client, v9.11.2.0802

Top Level [Change Current Location](#) SuperUser [Click to logout](#)



Dashboard Locations Tools Tool States Employees Groups History Reports Settings

R&D Lab
Organizational Location

Info Profiles (Employee) Profiles (Group) Options Subscriptions Audit Types Quantity Monitoring Attachments Favorites

Name: R&D Lab
Customer ID:
Notes:
Parent Location: Top Level  
Responsible Employee: R&D Manager  

☐ Show Deleted Items

2. Select the **Maintenance** location and then click the **Green Checkmark** button.

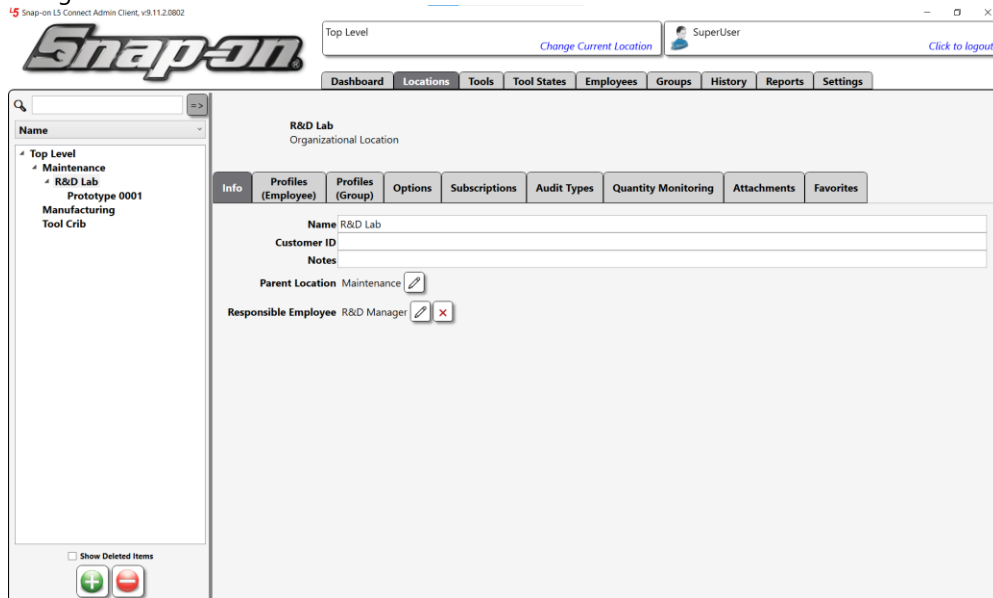


Select home location

Top Level
Maintenance
Manufacturing
Tool Crib

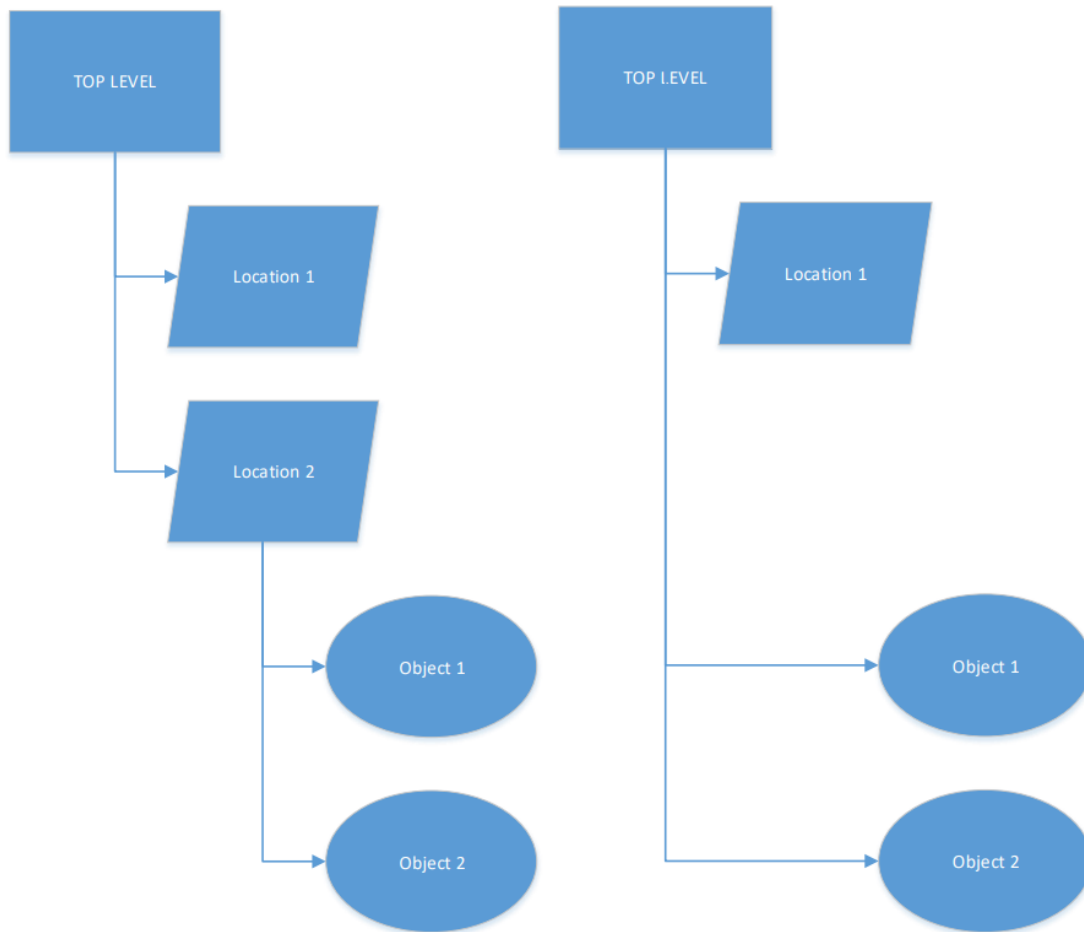
- Click the **Blue Save** button. Once you save the change you will see the Location Tree update to reflect the change.



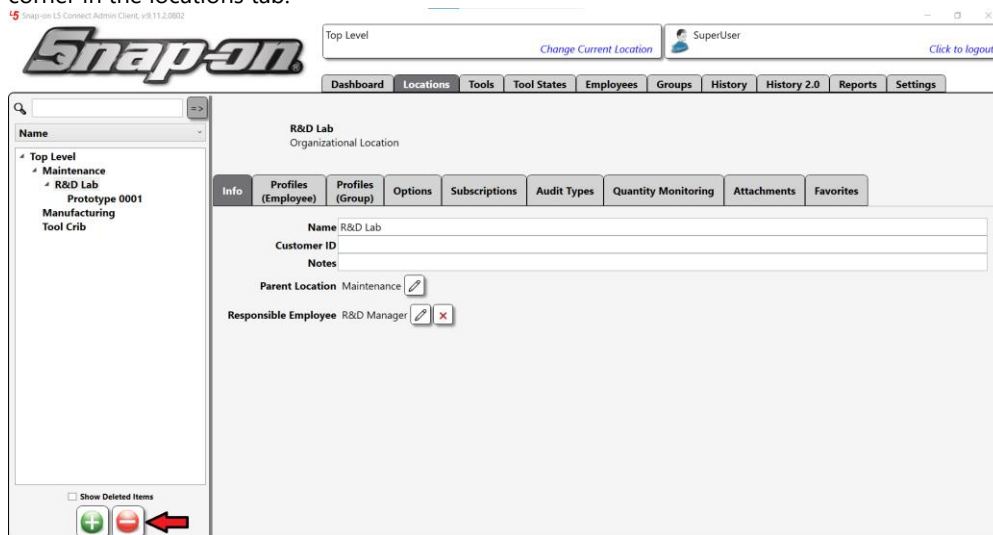
Deleting a Location

If you have a location object that is no longer needed, you can delete that object.

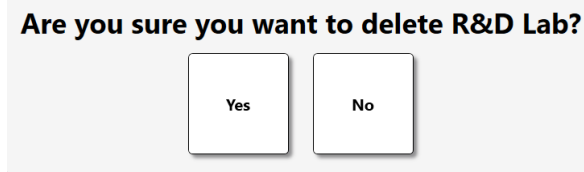
When deleting a Location Object, all child objects will be moved up one level and become child objects of deleted object's parent. For example, in the figure below, when deleting Location 2. Object 1 and Object 2 become child objects of TOP LEVEL.



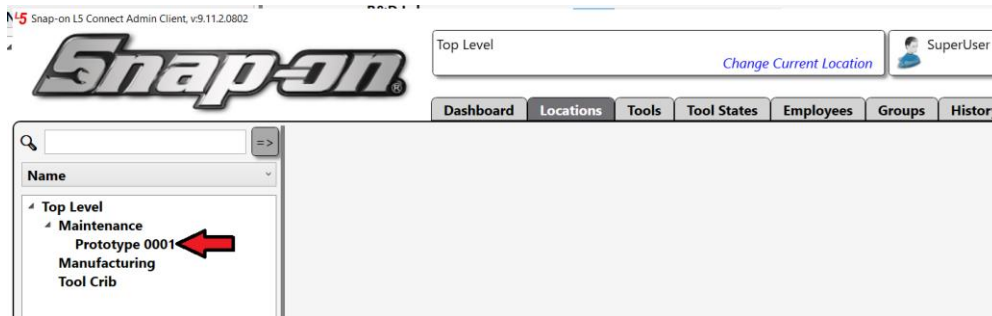
1. Select the **R&D Lab** location from the location tree. Then click on the Red Delete button on the lower-left corner in the locations tab.



- You are presented with a verification dialog box. Click **Yes** to proceed or **No** to cancel. In this case, you want to continue, so you need to click **Yes**.



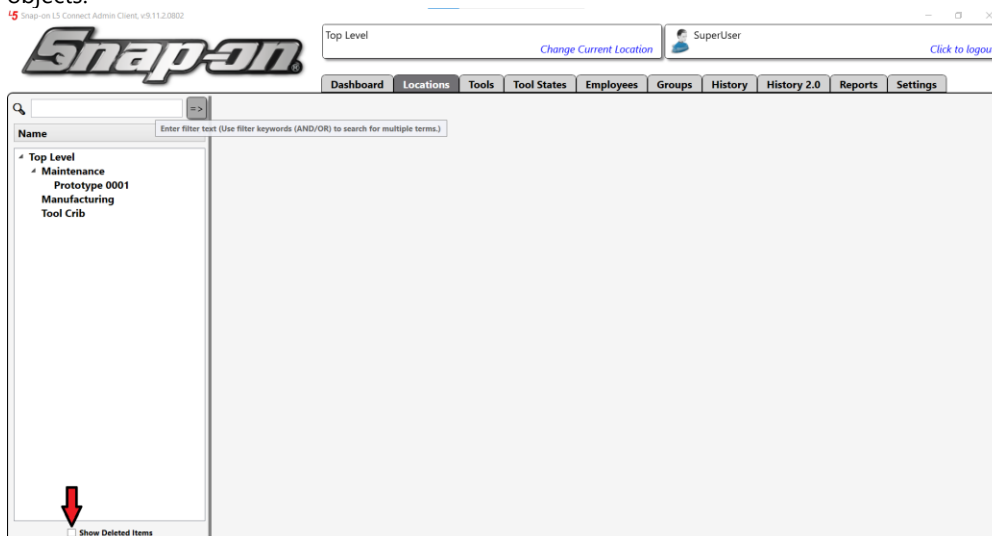
- Once you click **Yes**, the Location **R&D Lab** will be removed, and **Prototype 0001** will be moved up one level in the **Location Tree** and become a child of **Maintenance**.



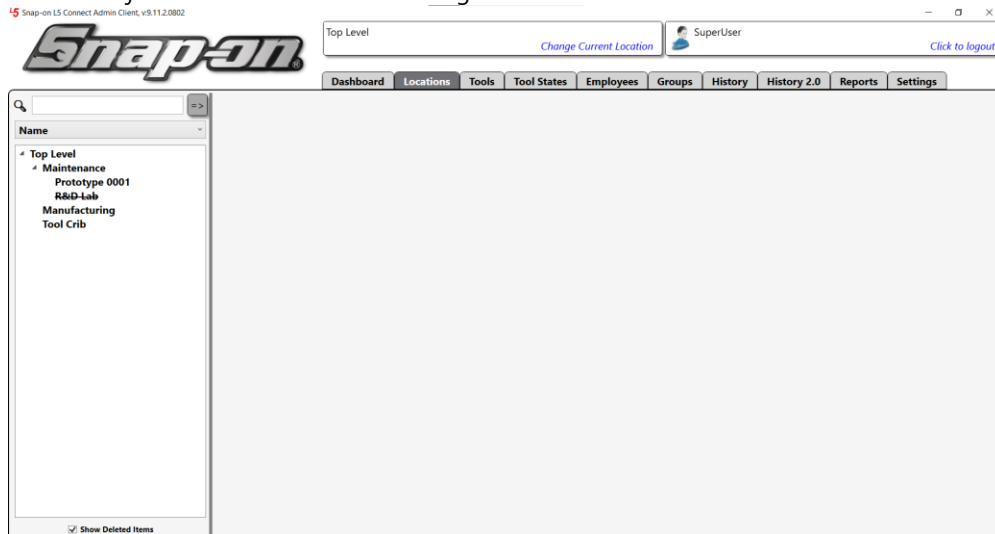
Restoring a Location

You can **Restore** a deleted location if you find it was deleted in error or if the Location is to be reinstated due to process changes or restructuring.

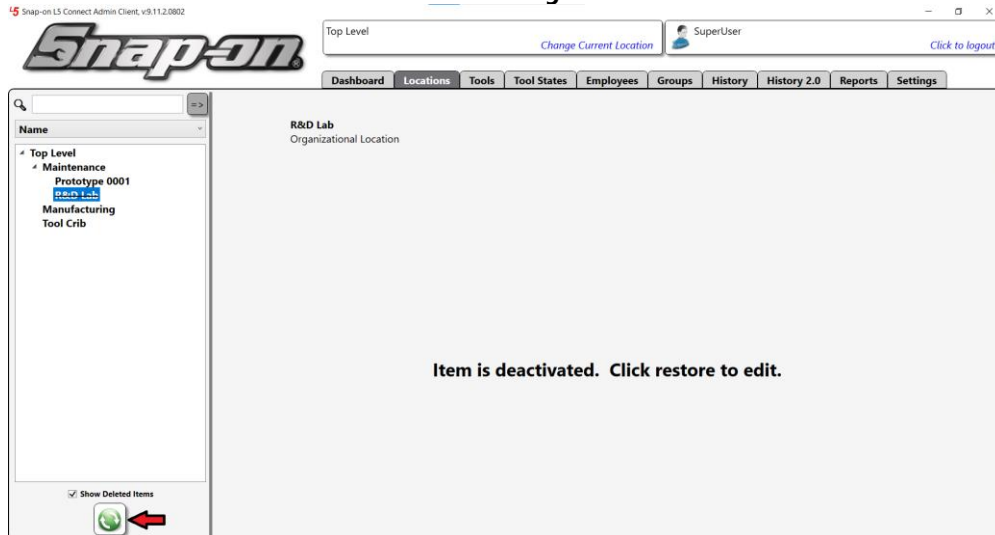
- Select the **Show Deleted Items** checkbox at the bottom of the **Location Tree** to display all deleted location objects.



- Now you can see the deleted **R&D LAB** and its position in the **Location Tree** when deleted. All deleted location objects are listed with a line through the name.

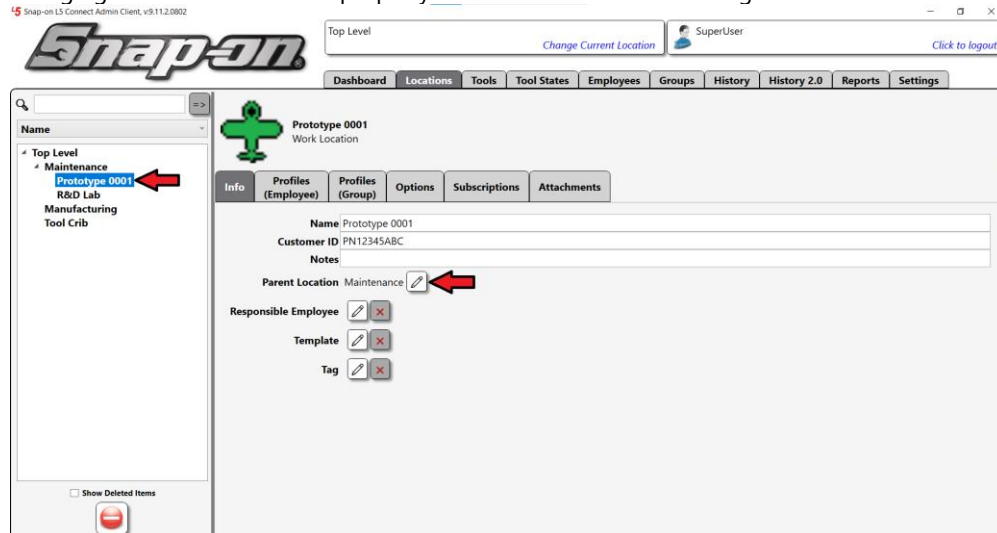


- Select the **R&D Lab** location and then click on the **green Restore** button to restore the Location.



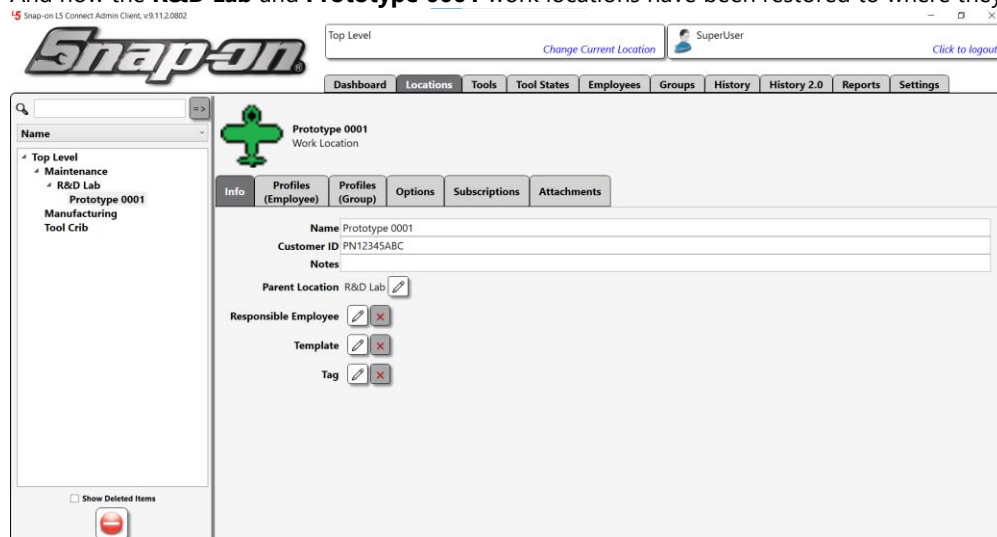
- Next, uncheck the **Show Deleted Items** checkbox.
- The Location is restored, but as you can see, **Prototype 0001** is still a child of **Maintenance** and not the **R&D Lab** because it was moved when **R&D Lab** was deleted. So all you need to do is move it back by

changing the **Parent Location** property to **R&D Lab** and then clicking the **Save** button.



The screenshot shows the Snap-on L5 Connect Admin Client interface. The left sidebar displays a tree view with 'Top Level' expanded, showing 'Maintenance', 'R&D Lab', 'Prototype 0001', 'Manufacturing', and 'Tool Crib'. The main content area shows the configuration for 'Prototype 0001' (Work Location). The 'Parent Location' is currently set to 'Maintenance'. A red arrow points to the 'Parent Location' dropdown menu.

6. And now the **R&D Lab** and **Prototype 0001** work locations have been restored to where they were before.

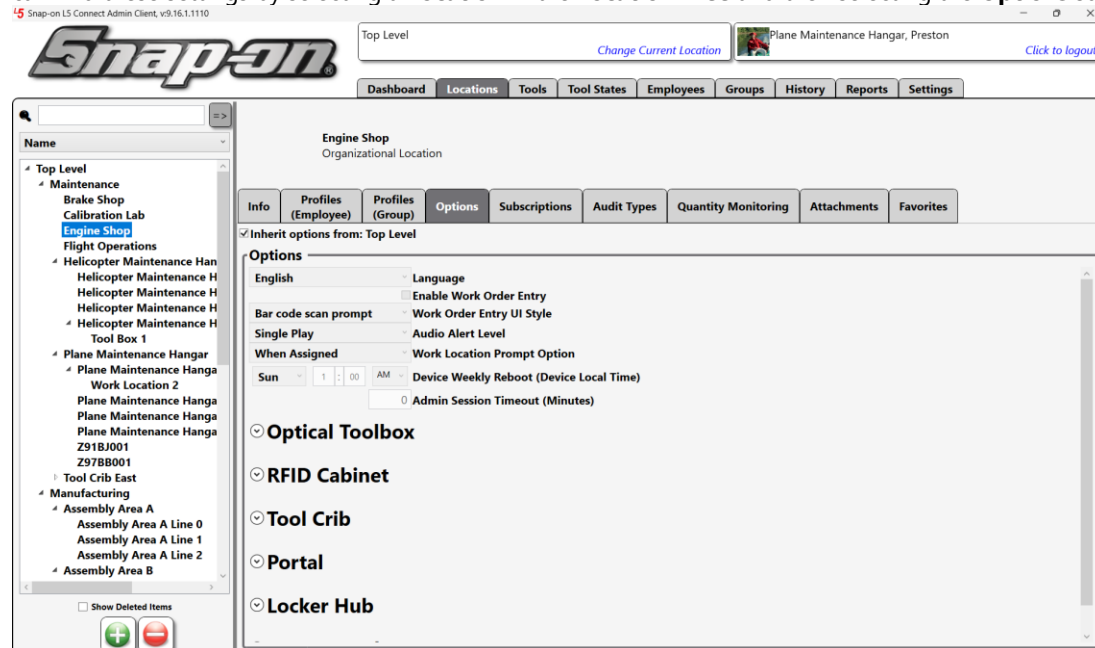


The screenshot shows the Snap-on L5 Connect Admin Client interface. The left sidebar displays a tree view with 'Top Level' expanded, showing 'Maintenance', 'R&D Lab', 'Prototype 0001', 'Manufacturing', and 'Tool Crib'. The main content area shows the configuration for 'Prototype 0001' (Work Location). The 'Parent Location' is now set to 'R&D Lab'. A red arrow points to the 'Parent Location' dropdown menu.

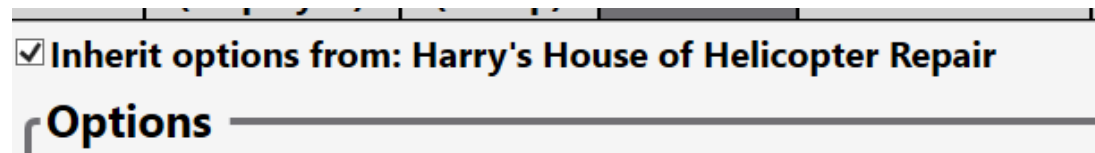
NOTE: When restoring a location, all **Profiles** and **Permissions** are cleared when it was deleted and must be reset.

Options

Every location object has a set of options used to customize the behavior of ATC Devices within that Location. You can find these settings by selecting a **Location** in the **Location Tree** and then selecting the **Options** sub-tab.



By default, all child objects inherit their settings from their parent. So initially, all locations would inherit their options from the top level. But you can change these settings if you need to. To disable inheritance for a sub-set of **Locations**, uncheck the box at the top of the Options List.



Universal Options

- **Language** - This drop down determines what language, from the list of supported languages, will be used for display of text and playing of sounds for the device.
- **Enable Work Order Entry** - This check box determines if a user will be required to provide a work order while logging into the device. See the L5 Connect™ Work Locations and Work Orders document for more information.
- **Work Order Entry UI Style** - This drop down determines the type of work order. See the L5 Connect™ Work Locations and Work Orders document for more information.
 - **Bar code scan prompt** - Scan or input by keyboard any text string work order



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- **Touch screen 10 key** - On screen keyboard to input a numeric work order on a whitelist of approved work orders
 - **Touch screen full keyboard** - On screen keyboard to input a alpha-numeric work order on a whitelist of approved work orders
- **Audio Alert Level** - This drop down sets how often devices will verbally alert users of important events such as a door/drawer left open
- **Work Location Prompt Option** - This pulldown menu on the Location Options tab can be set to configure how Work Location prompts are displayed. See the L5 Connect™ Work Locations and Work Orders document for more information.
 - **When Assigned** - A work location must be selected if the user has work locations assigned anywhere in the system
 - **When Assigned -Local Only** - A work location must be selected if there are work locations in the device's home location assigned to the user
 - **Always Prompt** - This setting will require the user to have a work location assigned or work order enabled. Otherwise, they are denied access.
 - **Always Prompt - Local Only** - This setting will require the user to have a work location assigned at the home location of the device or work orders enabled. Otherwise, they are denied access.
 - **Never Prompt** - This setting will disable the use of work locations; however, it does not affect work order entry.
- **Device Weekly Reboot (Device Local Time)** - This sets the time and day of the week that the device will be rebooted
- **Admin Session Timeout (Minutes)** - This sets time before an admin session will be ended (0 for off)

Optical Toolbox Options

- **Drawer Open Timeout (Seconds)** - How long a drawer can be open before a verbal alert is played
- **Require drawers opened completely** - Determines if the drawers must be opened completely to be considered a good drawer scan
- **Archive Image Quality** - A percentage between 0 and 100 with 100 being maximum quality but at a cost of larger file size
- **Save drawer open archive images** - Determines whether open drawer images should be recorded and saved
- **Save drawer closed archive images** - Determines whether closed drawer images should be recorded and saved
- **Block access when tools issued from another toolbox** - Normal - allow access when offline, High - block access when offline, Off - don't block access
- **Inactivity Timeout (Seconds)** - The time before a device session will be ended
- **Prompt to check in another user's tools** - This determines whether a user will be prompted to make sure they really intended to return another user's tools
- **Logout alert warning** - This determines whether a user will be warned that he's logging out with unresolved alerts from his session such as a bad drawer scan



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- **ZoomID Enabled** - Determines whether toolboxes will detect ZoomID tags. See the ZoomID document for more information.

RFID Cabinet Options

- **Drawer Open Timeout (Seconds)** - This is managed by the same value in the optical toolbox options
- **Inactivity Timeout (Seconds)** - This is managed by the same value in the optical toolbox options

Tool Crib Options

- **Require Employee Signature** - Determines if the employee will need to use the optional signature pad when completing a session
- **Require Kit Location Inspection** - Determines if kit inspections are required at issue/return
- **Tool Crib Session Timeout (Seconds)** - Sets the time before an employee session will be automatically ended (0 for off)
- **Logout and start a new tool crib session with badge scan** - Determines if a different employee's badge scan will automatically log off the current session and start a new one for the badge just scanned
- **Tool Crib No Attendant Required** - Determines if a tool crib attendant is required for a session
- **Auto-prompt to Transfer Tool on Tag Scan** - If active and a tool from another device is scanned, the process to transfer the home location of that tool to the crib will be prompted

Portal Options

- **Portal Session Timeout (Seconds)** - Sets the time before an employee will be logged out of the portal due to inactivity (0 for off)
- **Prompt to check in another user's tools** - This is managed by the same value in the optical toolbox options
- **Require Kit Location Inspection** - This is managed by the same value in the tool crib options

Locker Hub Options

- **Locker Hub Allow Multi-Select Return** - Determines whether tools must be returned one at a time or not
- **Auto-prompt to Transfer Tool on Tag Scan** - If active and a tool from another device is scanned, the process to transfer the home location of that tool to the crib will be prompted
- **Auto-start Tool Return Process on Tag Scan** - If active and a tool issued from this device is scanned, the tool return process will be initiated automatically
- **Auto-start Tool Issue Process on Tag Scan** - If active and a tool compartment tag from this device that contains a tool is scanned, the tool issue process will be initiated automatically
- **Require Tag Scan on Tool Return** - Determines if the tool tag must be scanned during the tool return process
- **Require Tag Scan on Tool Issue** - Determines if the tool tag must be scanned during the tool issue process

NOTE: More information on the other tabs of the location object can be found in the different articles based on the topics in their sub-item title.



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Work Locations and Work Orders

The goal of this article is to document the purpose of, configuration, and use of work locations and work orders in the L5 Connect™ system.

Work Locations

NOTE: Review the L5 Connect™ Locations article for pre-requisite knowledge before proceeding.

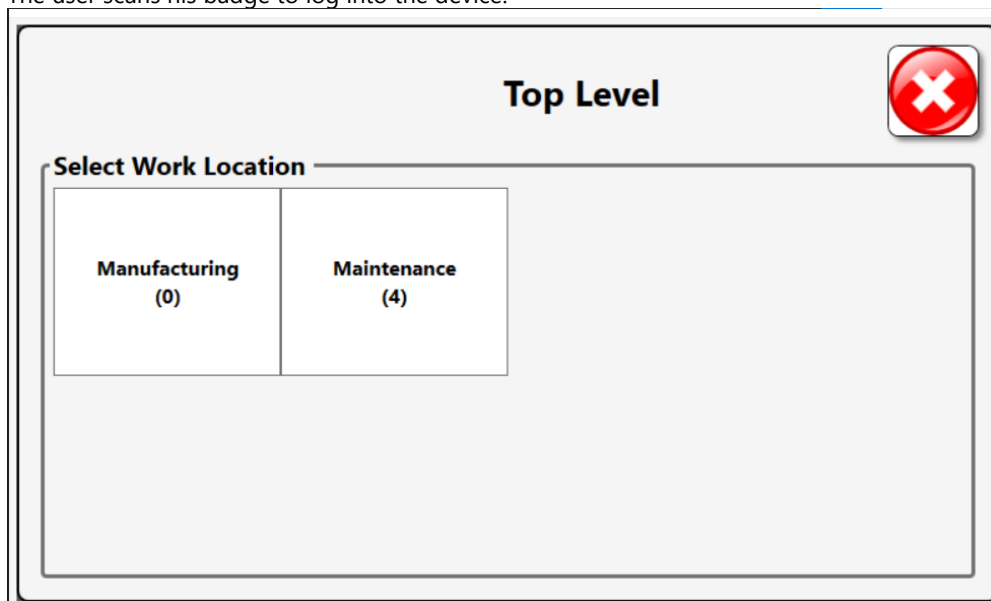
Device Usage

When Work locations are turned on for the location which hosts a device, a user will be required to select a work location to successfully log into the device. This work location will be assigned to any tools he issues from the box during this session. This can be helpful, if a tool is lost, to know where to start looking for the tool.

When the user is presented with the work location selection screen all of the organizational nodes will be represented, and he will have to navigate through the organizational tree. Work locations must always be under an organizational node, but an organizational node does not have to have work locations under it.

Here is an example of what it might look like logging into an L5 Connect device with work locations turned on.


1. The user scans his badge to log into the device.



2. He is prompted with the initial screen from which to select a work location. The screen contains **three types of locations**. The first type listed is all the work locations that have been marked as **favorites**. The star at the beginning denotes that it is a favorite and the blue color and the check under the text show that it is a work location. The second type of location is the **organizational locations** directly under the top level. Notice that there is a number in parentheses on these buttons. That is the number of work locations that exist under that organizational location. The third type of location listed is any **work locations at the top level of the**

tree that are not favorites.



Top Level




Select Work Location

★ Helicopter Maintenance Hangar Bay 3 ✓	Manufacturing (0)	Maintenance (4)	A Top Level Work Loc ✓
--	----------------------	--------------------	---------------------------

3. Let's say that the goal is to select the **Helicopter Maintenance Hangar Bay 3** work location. Because that work location has been marked as a favorite the user could easily click that button and with one click, he would have chosen a work location and logged into the box. For purposes of illustration, we will show the alternate path to select this work location if it has not been marked as a favorite. The next step would be to select the **Maintenance** button. This screen shows all the organizational locations below the **Maintenance** location and then any work locations assigned to the **Maintenance** location.

Maintenance

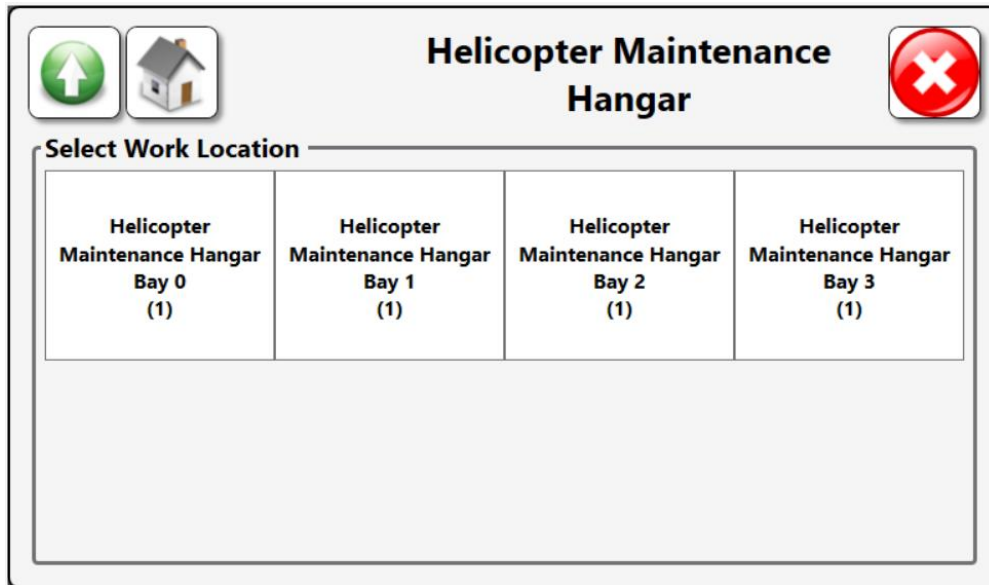


Select Work Location

Helicopter Maintenance Hangar (4)	Plane Maintenance Hangar (0)	Engine Shop (0)	Brake Shop (0)
Calibration Lab (0)	Flight Operations (0)		

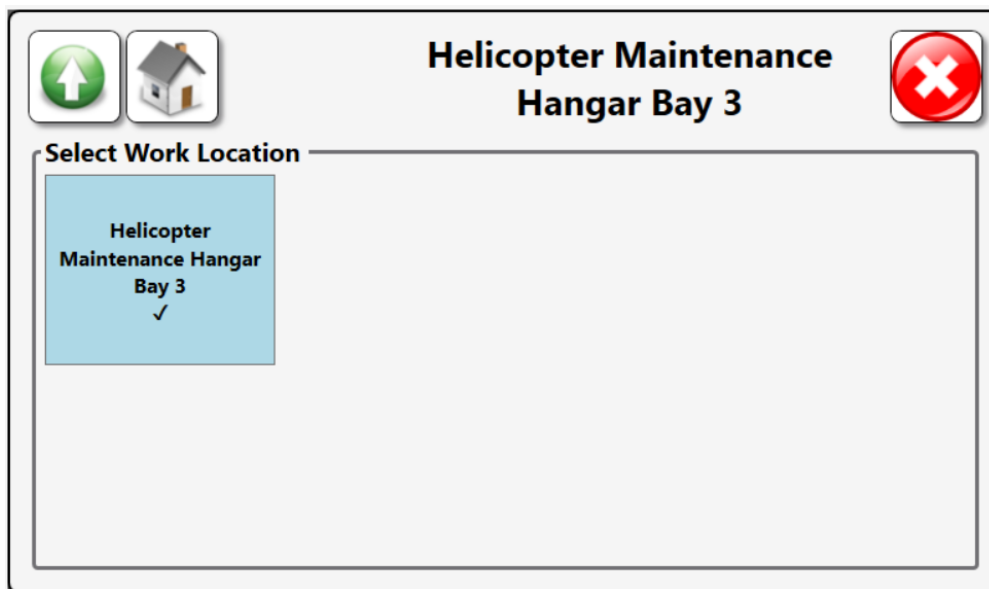
4. Now the user would select the **Helicopter Maintenance Hangar** button. This screen once again shows all organizational locations followed by any work locations assigned to the **Helicopter Maintenance Hangar**

location.



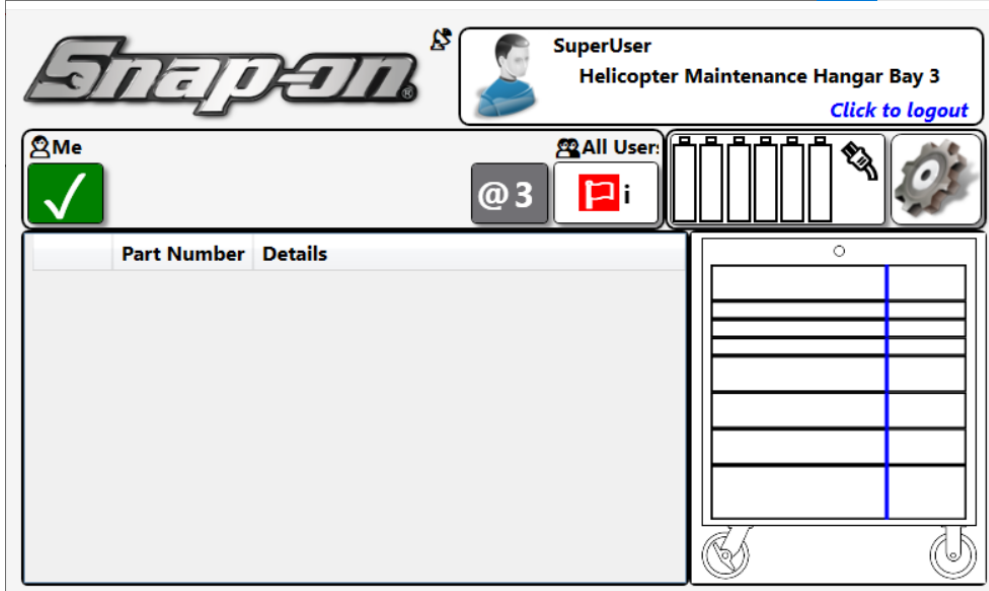
Helicopter Maintenance Hangar			
Helicopter Maintenance Hangar Bay 0 (1)	Helicopter Maintenance Hangar Bay 1 (1)	Helicopter Maintenance Hangar Bay 2 (1)	Helicopter Maintenance Hangar Bay 3 (1)

- Next the user would select the **Helicopter Maintenance Hangar Bay 3** button. Finally, he has worked his way through the Location Tree to the work location he wishes to select. **Notice the two buttons in the top left corner. The back button will take the user back to the previous screen. The home button will take the user back to the first screen.**



Helicopter Maintenance Hangar Bay 3
✓

6. He would now press the button for the **Helicopter Maintenance Hangar Bay 3** work location.



7. The user has now successfully selected a work location and completed logging into the device. You can see the work location listed under his name.

NOTE: Barcode or RFID tags can be assigned to work locations and scanned at the device to shortcut the button selection process. See the Tags on Locations section of this document for more information.

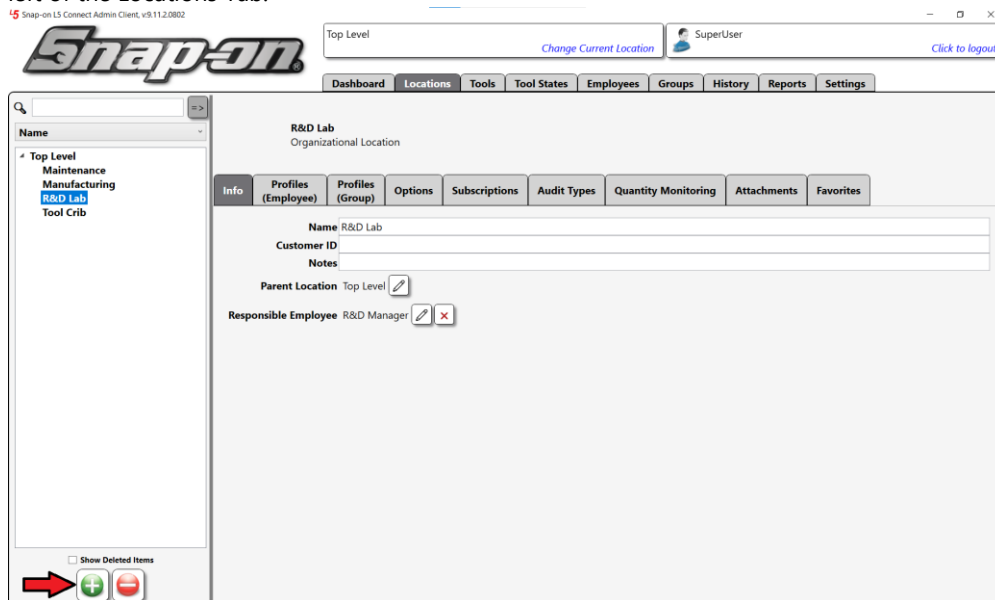
Admin Setup

L5 Connect™ **Work Locations** are managed and configured through the Admin application. This section will cover how to use the admin app to configure your **Work Locations** to suit your organization's needs.

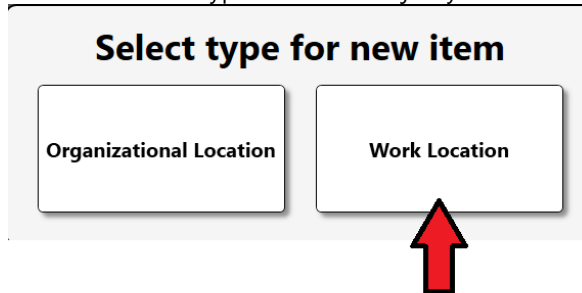
Creating a Work Location

This process will create a new Work Location that is placed within the R&D Organizational Location created in the L5 Connect™ Locations article.

1. Begin by selecting the **R&D Lab** location and then clicking on the **Green NEW icon** button at the bottom left of the Locations Tab.

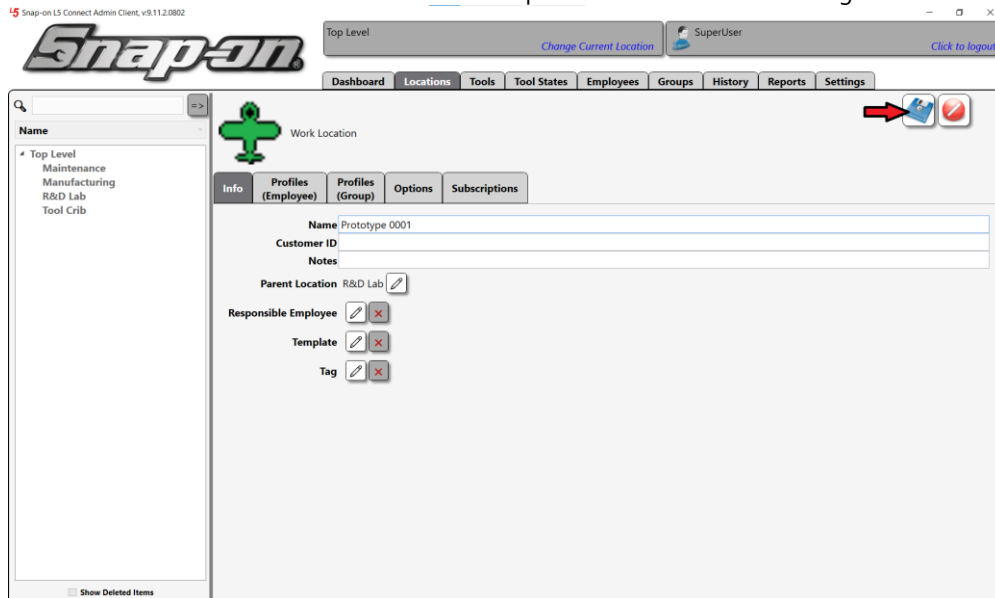


2. When asked what type of location object you want to create, click the **Work Location** button.



3. Set the **Name** to **Prototype 0001**.
4. Configure the other desired attributes. A Work Location object has the same properties as an Organizational Location object with two additional properties.
 - **Template** – A set of sub-divisions for the **Work Location**. Templates break up a large work location into sub-locations. You can create a single template and then apply them to as many Work Locations as you want. (see more information below)
 - **Tag** – A RFID or Barcode tag used to identify the Work Location. **NOTE: You will need a badge or barcode scanner to set the TAG attribute.**

- Once all the desired attributes are set, click on the Blue save icon in the upper right. The Work Location is now created. You will then see the work location placed under the R&D Lab Org location.



Editing/Moving/Restoring Work Locations

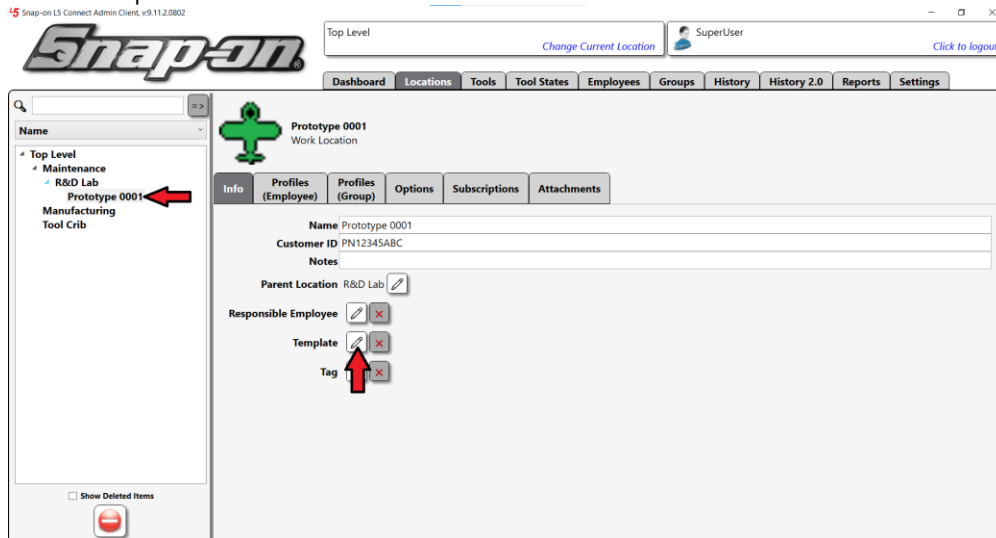
A Work Location can be edited, moved, and restored just like any other Location. See the L5 Connect™ Locations article for more information.

Work Location Templates

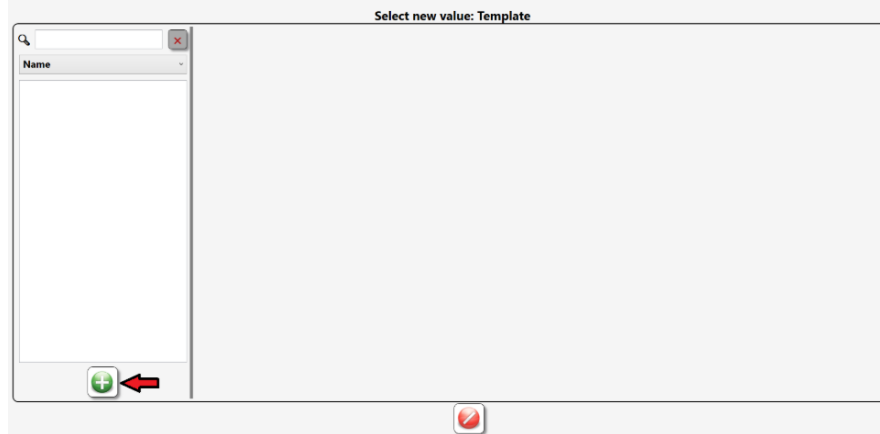
Templates are used to divide large **Work Locations** into sub-locations. For example, you have a large vehicle as a Work Location. Just assigning a tool to the **Work Location** doesn't help if you need to know where the tool was used on that vehicle. By using templates, you can set a sub-location to help you narrow down the exact Location that tool was used.

All **Templates** are global and, once created, can be used with any **Work Location** in the system. You can view all **Work Location Templates** from the Settings tab -> System Configuration Menu.

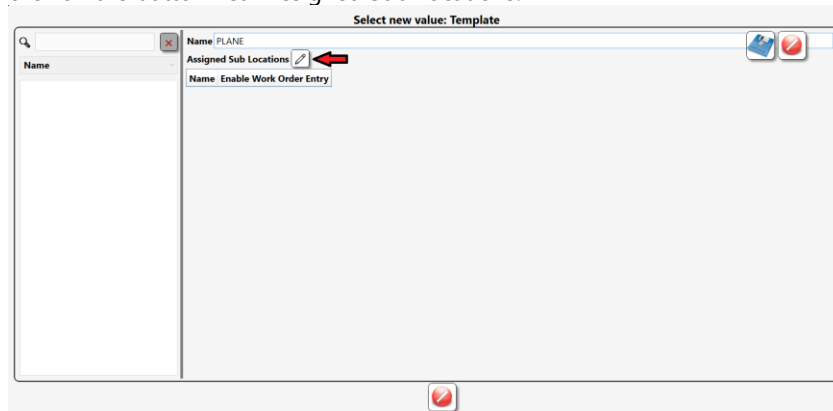
1. To create a **Work Location Template**, select a **Work Location**. From the properties, click on the **Pencil** icon next to Template.



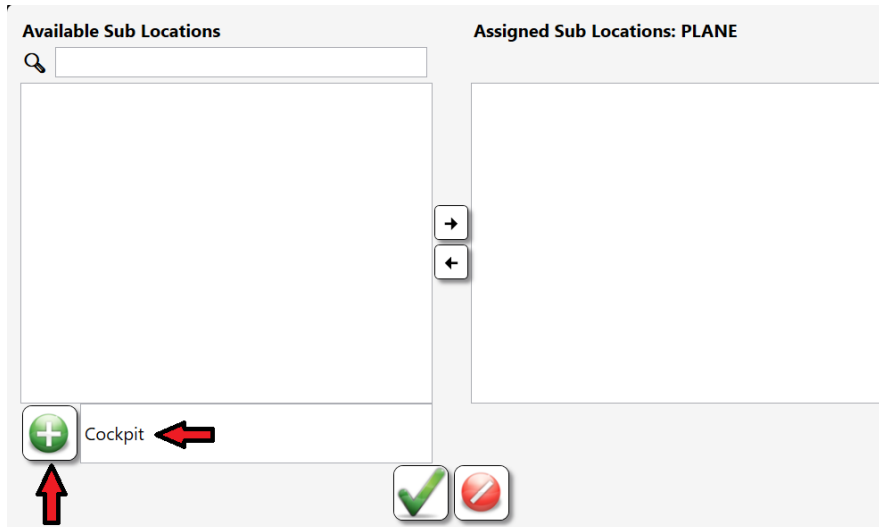
2. This will display the Template selection screen. Click on the button to create a new template.



3. You will then need to name the Template and assign Sub-Locations to it. Type PLANE in the name field, then click on the button near Assigned Sub Locations.

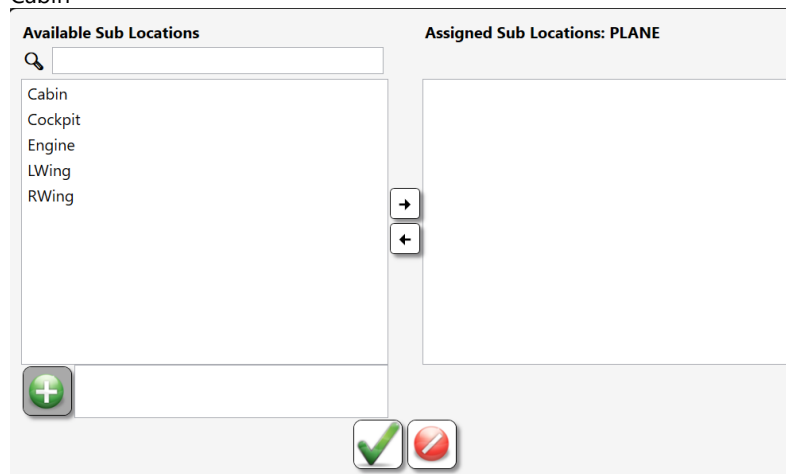


4. When you click on this button, you will see the sub-locations screen. If you do not have any sub-locations, you will need to create them. Like Templates, Sub-Locations are global and can be used in multiple templates. To create a sub-location, Type the name of the Sub-Location and press the **green Plus New** button.



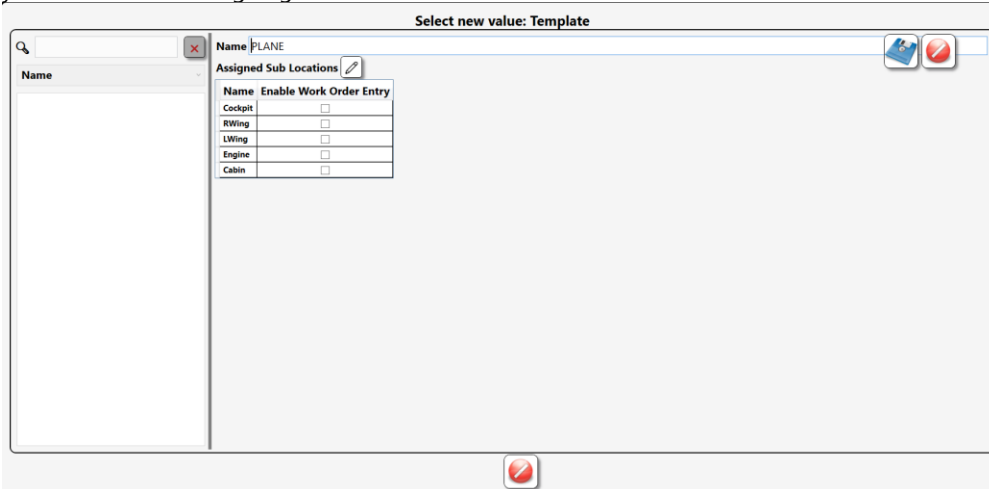
5. For the PLANE Template, you will add the following sub-locations:

- Cockpit
- RWing
- LWing
- Engine
- Cabin



6. Once you have added all the sub-locations, you will see them in the list of Available Sub Locations. To assign a Sub-Location to the **Template**, select it from the list, then click the -> button. Again, all Sub-Locations are available for assignment throughout the system. You can also assign it to several different Templates simultaneously. Set all the Sub-Locations to the template PLANE. Remember, when assigning sub-locations, you do not need to assign all of them to a Template. Only assign what you need. Click the ✓ button when

you have finished assigning all the sub-locations.



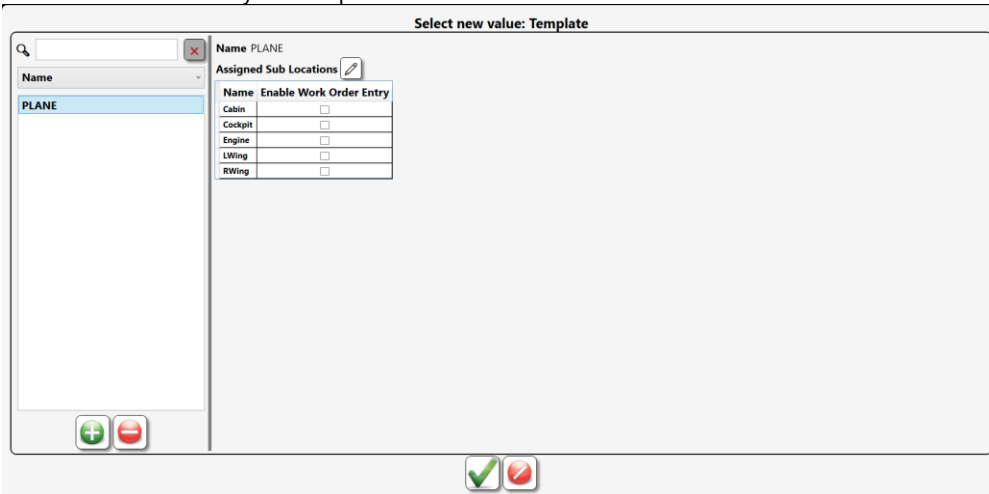
Select new value: Template

Name PLANE

Assigned Sub Locations

Name	Enable Work Order Entry
Cockpit	<input type="checkbox"/>
RWing	<input type="checkbox"/>
LWing	<input type="checkbox"/>
Engine	<input type="checkbox"/>
Cabin	<input type="checkbox"/>

7. Notice that there is a checkbox on each sub location to enable work order entry. If this is checked and that sub-location is selected the user will also be forced to input a work order as well. See the section below on work orders for more information about how they work.
8. You now have created your template with sub-locations. Click the blue **Save** button to save it.



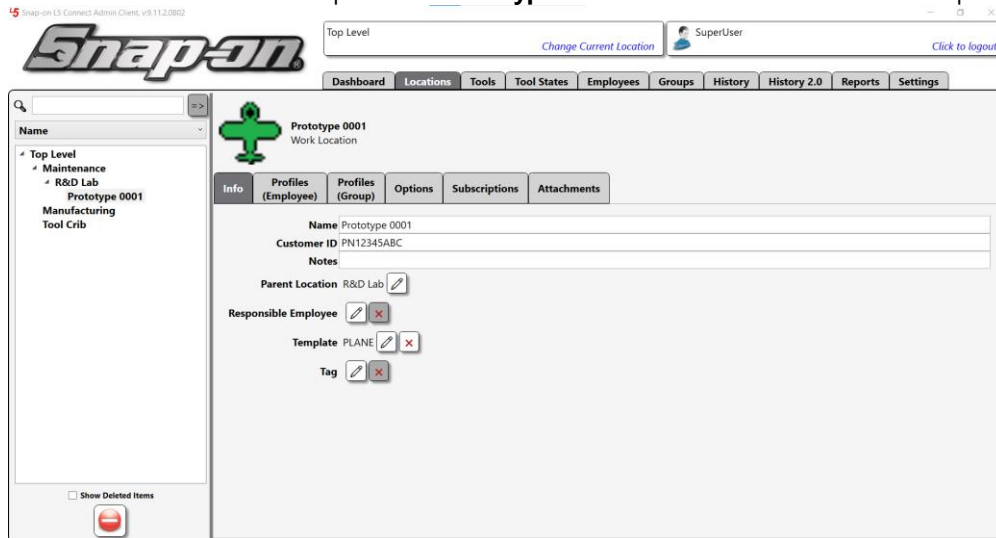
Select new value: Template

Name PLANE

Assigned Sub Locations

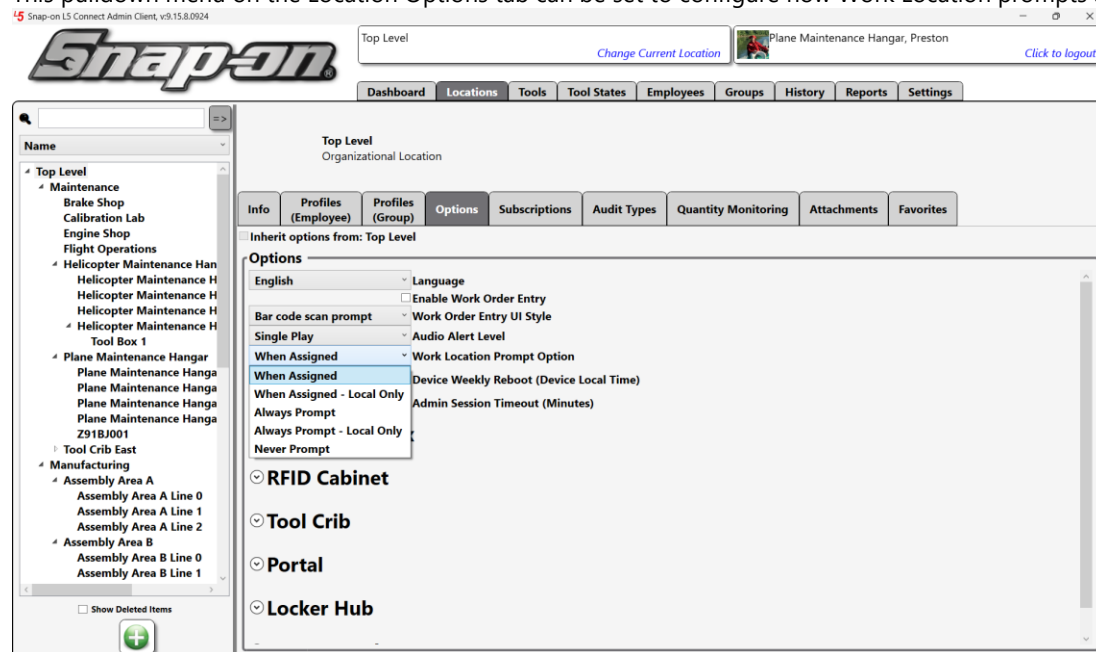
Name	Enable Work Order Entry
Cabin	<input type="checkbox"/>
Cockpit	<input type="checkbox"/>
Engine	<input type="checkbox"/>
LWing	<input type="checkbox"/>
RWing	<input type="checkbox"/>

- Click the green **Checkmark** button to assign the template to the **Prototype 0001** work location and then click the blue **Save** button to update the **Prototype 0001** work location with the new template.



Work Location Prompt Option

This pulldown menu on the Location Options tab can be set to configure how Work Location prompts are displayed.



- When Assigned** - A work location must be selected if the user has work locations assigned anywhere in the system
- When Assigned -Local Only** - A work location must be selected if there are work locations in the device's home location assigned to the user



L5 Connect User Manual

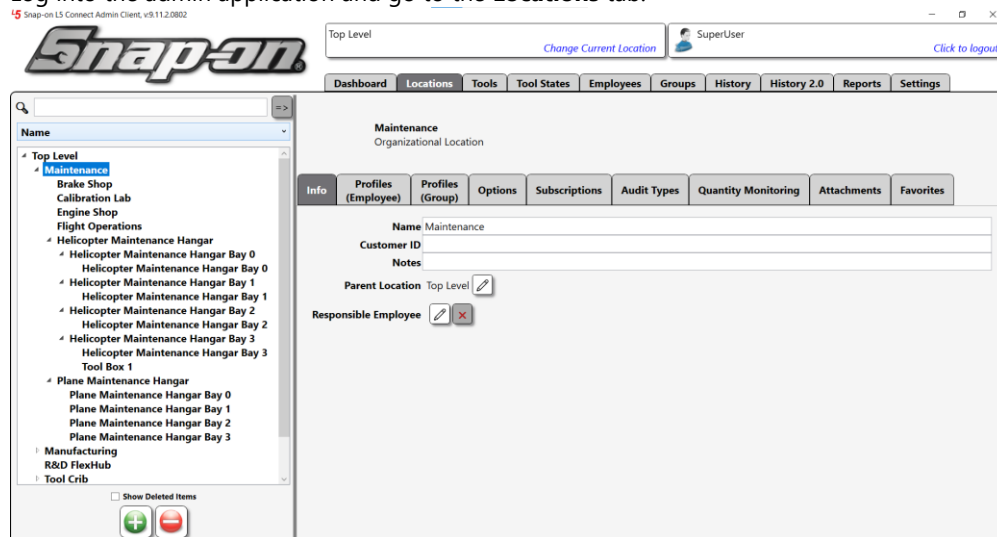
- **Always Prompt** - This setting will require the user to have a work location assigned or work order enabled. Otherwise, they are denied access.
- **Always Prompt - Local Only** - This setting will require the user to have a work location assigned at the home location of the device or work orders enabled. Otherwise, they are denied access.
- **Never Prompt** - This setting will disable the use of work locations; however, it does not affect work order entry.

NOTE: More information on Location options can be found in the **L5 Connect™ Locations** article.

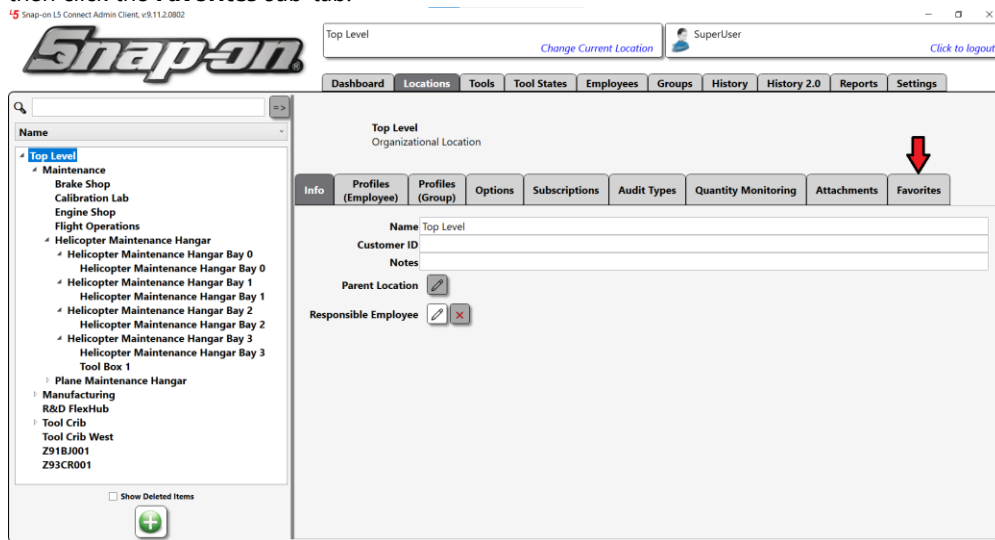
Favorites

Sometimes in large L5 Connect systems, there can be many layers of organizational locations to navigate or so many work locations that the devices can't display them all on one screen. This can take multiple touches or scrolling to find a work location. Frequently used work locations can be designated as favorites and will always appear at the top of the list. Here is how to configure a work location as a favorite.

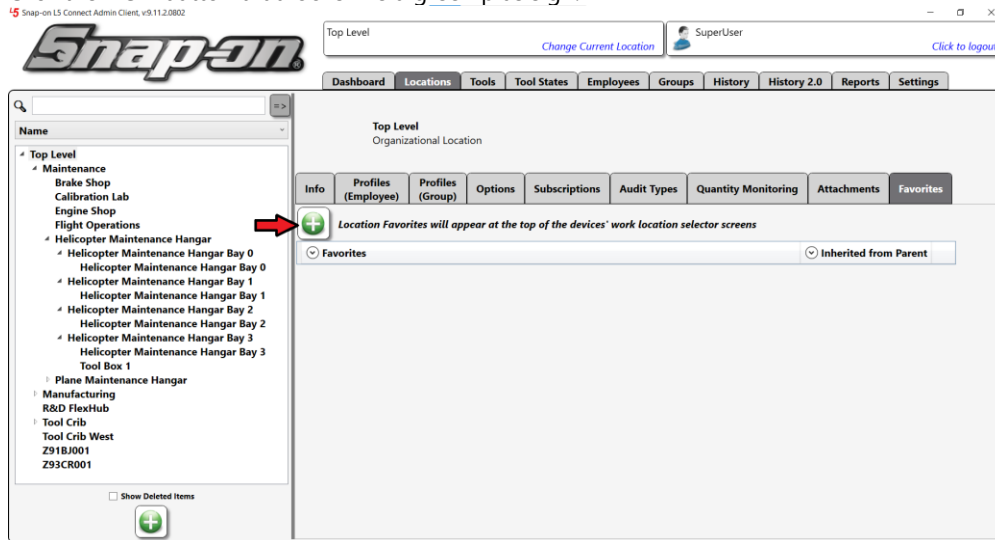
1. Log into the admin application and go to the **Locations** tab.



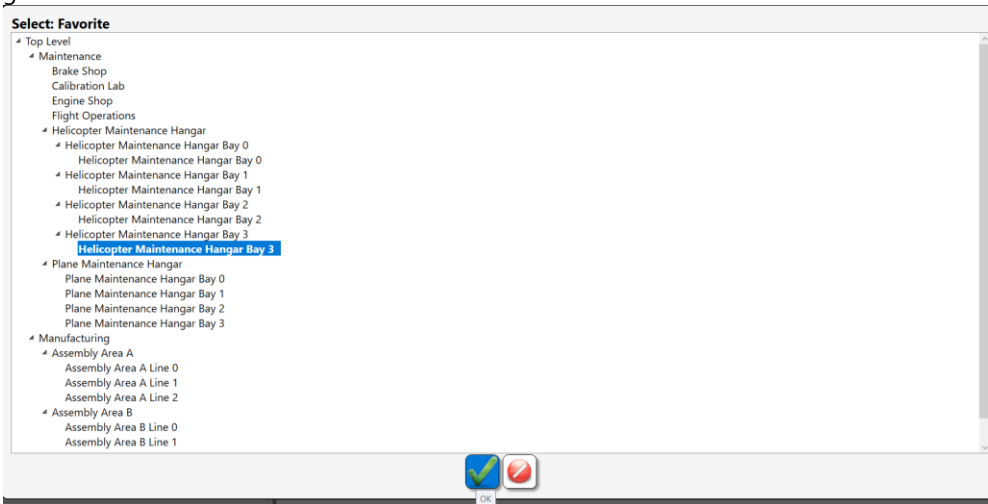
2. Select the organizational location that contains the device for which you would like to make a favorite and then click the **Favorites** sub-tab.



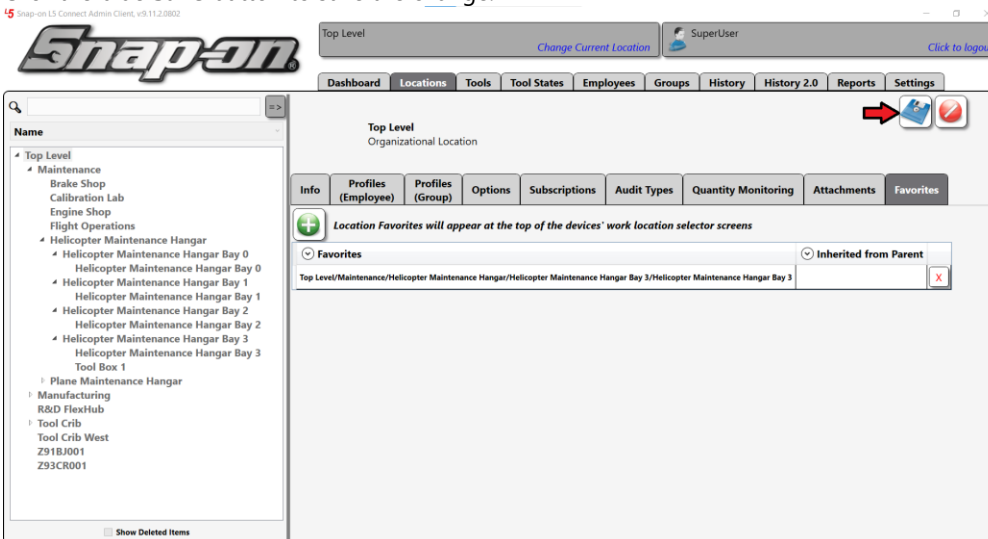
3. Click the **New** button that looks like a green plus sign.



- Select the work location that you would like to make a favorite, and then click the **OK** button that looks like a green checkmark.



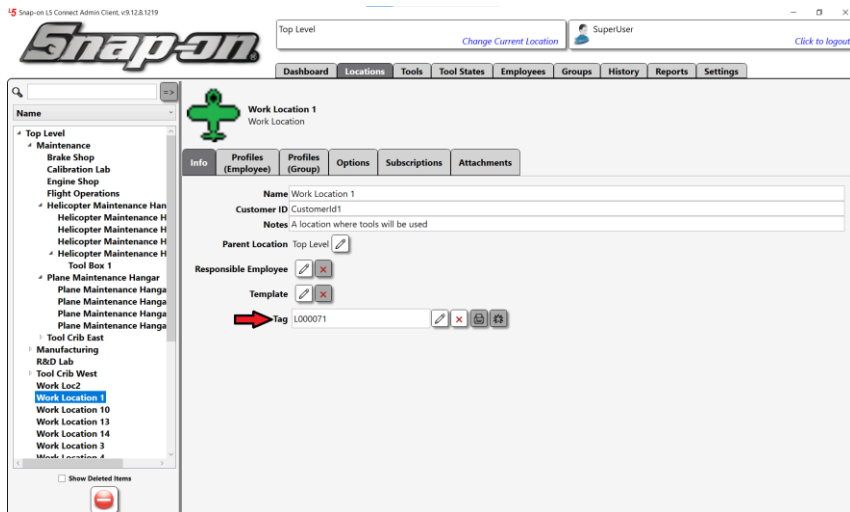
- Click the blue **Save** button to save the change.



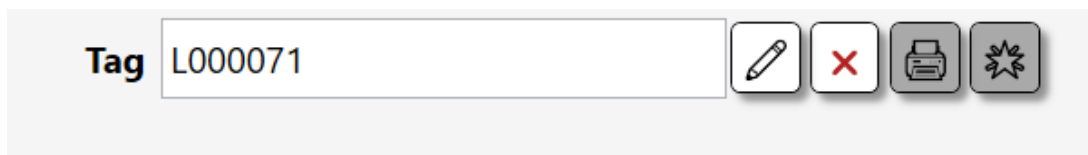
- You have now created a favorite work location that will show up on the first work location screen when a user attempts to log into one of the devices whose home location is the **Top Level**.

Tags on Locations

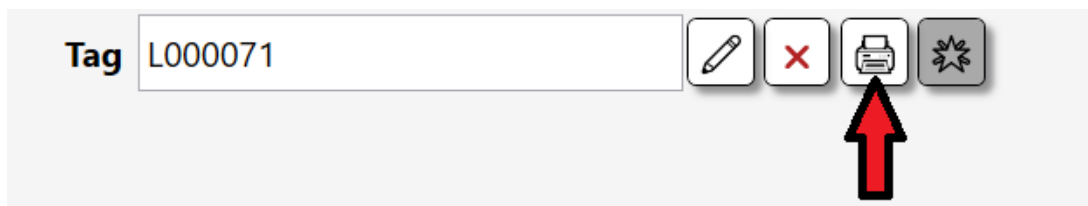
Work locations can have tags assigned to them. The tag is either a 1D or 2D barcode, or it can also be an RFID tag. This can be helpful when logging into an L5 Connect device that has a supported tag scanner attached. Instead of clicking the work location button on the screen, you can simply scan a tag of the work location instead.



You can manually enter a tag value by typing it into the text box. This value must be unique in the system. You could also click the **Pencil** button and then scan the tag, using a supported tag scanner to import the tag value. Alternatively, you can click the **Auto generate value** button to have the system assign a generated tag value. Then you will need to click the blue **Save** button to save the change.



Once you have a valid tag created, you can then use the print button to print that tag. This requires that you have previously installed and configured an L5 approved barcode printer for your system. Otherwise, the print button will not be enabled.



Work Orders

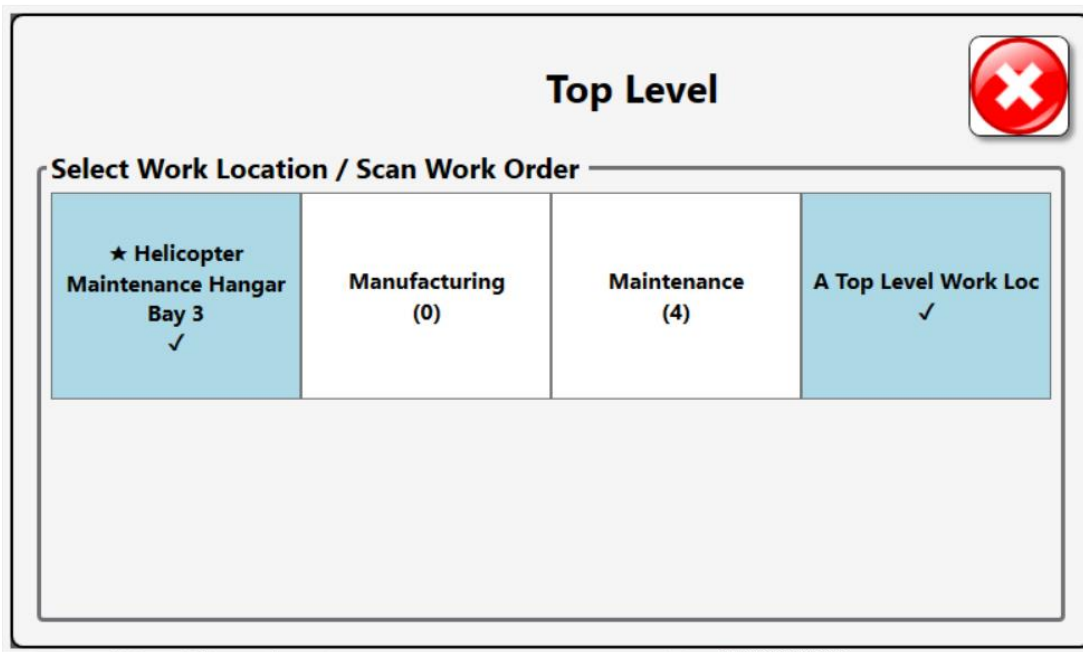
Enabling work orders will require a user to either scan or manually input a text string that corresponds to a work order when logging into an L5 Connect device. This can be in addition to or in place of selecting a work location. There is also an option to create a specific "whitelist" of acceptable work order entries that the system will accept.

Device Usage

In this section we will show some examples of work order entry for the different **Work Order Entry UI Style** option values.

Bar Code Scan Prompt

This is the original version of work order support in the system. In this instance the user will be prompted to either select a work location or scan a work order. The work order can be of an alphanumeric format. Either selecting the work location or scanning a work order will satisfy the requirement and allow the user to complete the login process.

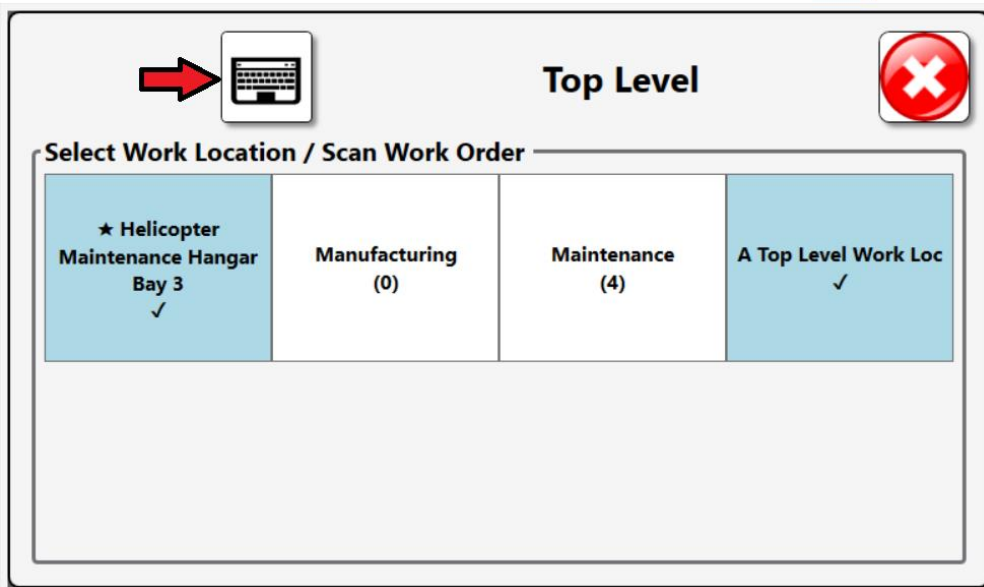


Top Level			
Select Work Location / Scan Work Order			
★ Helicopter Maintenance Hangar Bay 3 ✓	Manufacturing (0)	Maintenance (4)	A Top Level Work Loc ✓

Touch Screen 10 Key

This version of work order entry will provide an on screen 10 key numeric keyboard and require that all work order values are numeric.

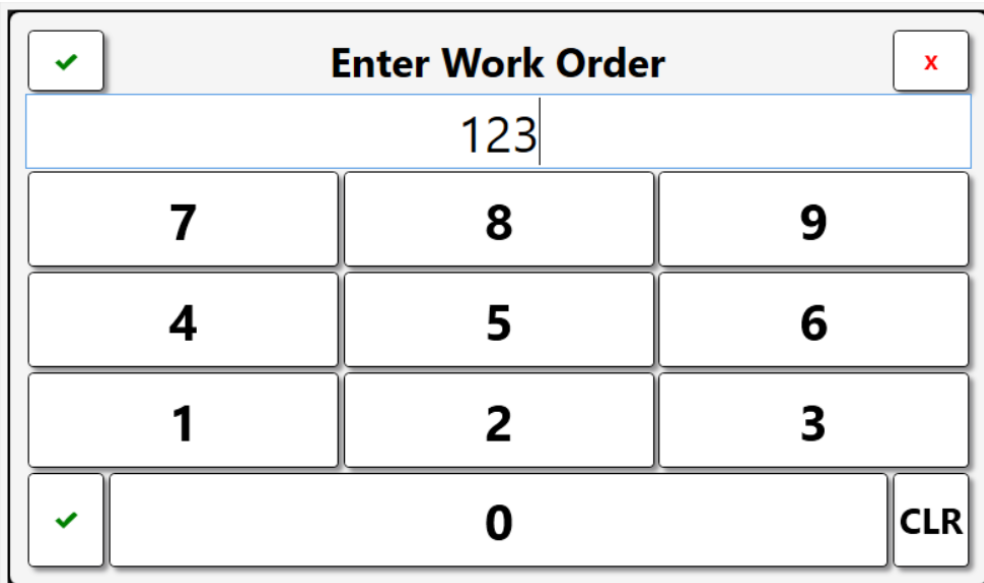
1. When prompted to enter a work location or work order, you can open the keyboard by pressing the button that looks like a keyboard.



The screenshot shows a software interface titled "Top Level" with a red close button in the top right. A red arrow points to a keyboard icon in the top left. Below the title bar is a section labeled "Select Work Location / Scan Work Order" containing a grid of four buttons:

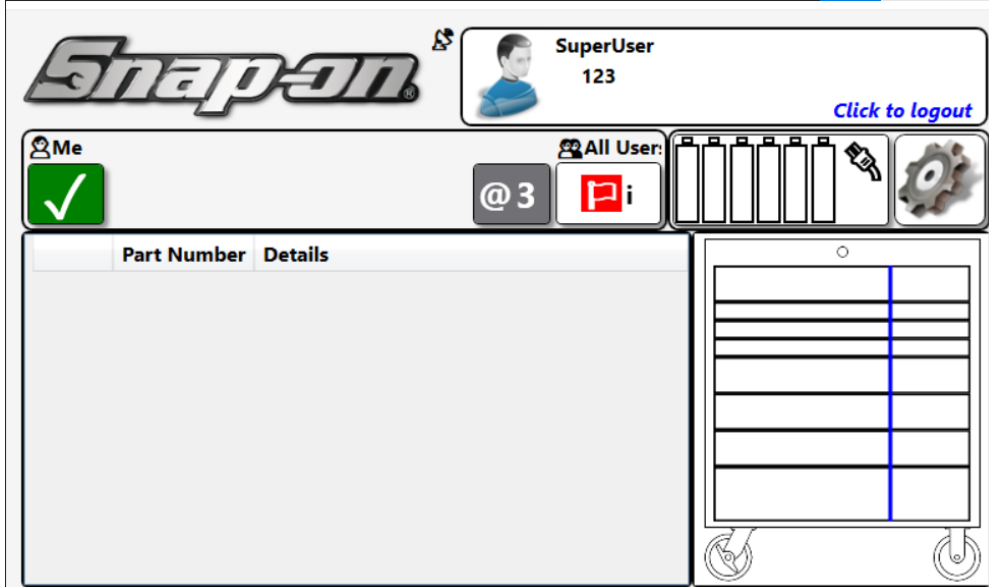
★ Helicopter Maintenance Hangar Bay 3 ✓	Manufacturing (0)	Maintenance (4)	A Top Level Work Loc ✓
--	----------------------	--------------------	---------------------------

2. They would then enter work order value with the keyboard and press the **OK** button that looks like a green checkmark.



The screenshot shows a software interface titled "Enter Work Order" with a green checkmark button in the top left and a red close button in the top right. A text input field at the top contains the value "123". Below it is a numeric keypad with buttons for digits 0-9 and a "CLR" button. A green checkmark button is located at the bottom left of the keypad area.

3. Assuming the whitelist feature is enabled and that value was on our list, the user was logged into the device.




4. If the whitelist feature was enabled and a value was entered that was not on the whitelist, the user will be warned of the invalid work order.




Touch Screen Full Keyboard

This version of work order entry supports full alphanumeric work orders like the with the addition of an alphanumeric keyboard for input.




Top Level




Select Work Location / Scan Work Order


★ Helicopter Maintenance Hangar Bay 3 ✓	Manufacturing (0)	Maintenance (4)	A Top Level Work Loc ✓
--	----------------------	--------------------	---------------------------

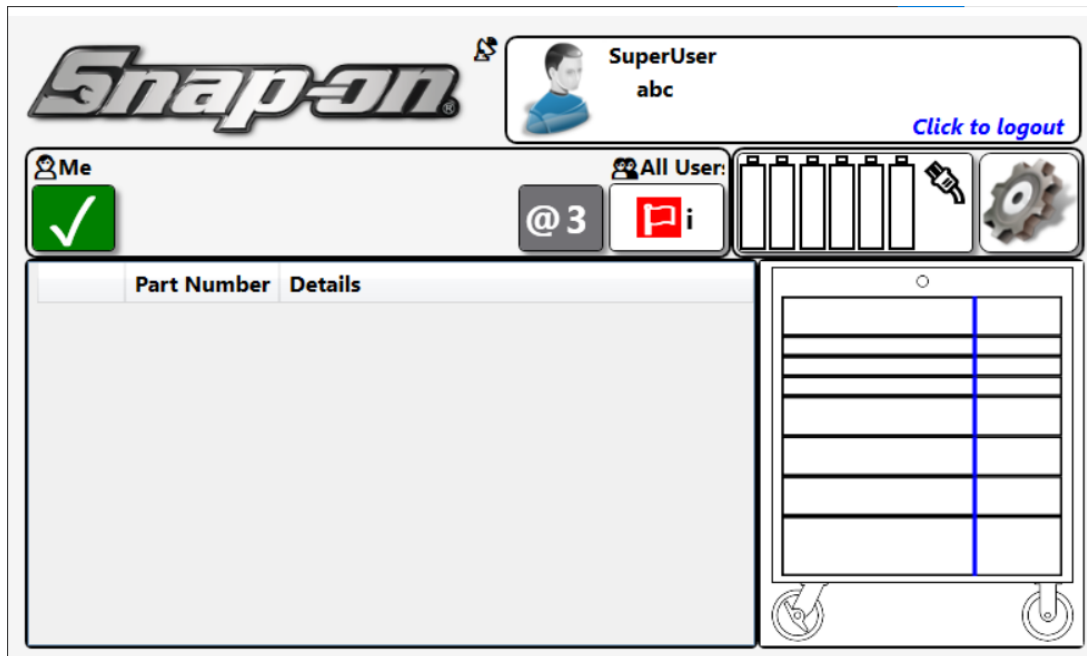


Enter Work Order



abc

1	2	3	4	5	6	7	8	9	0	
q	w	e	r	t	y	u	i	o	p	
ABC	a	s	d	f	g	h	j	k	l	
~	z	x	c	v	b	n	m	CLR		

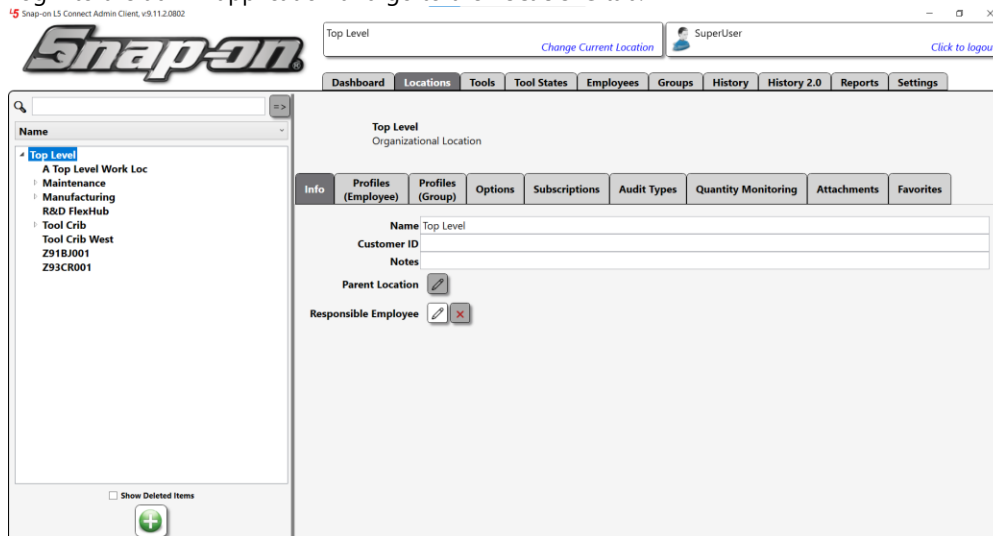


Admin Setup

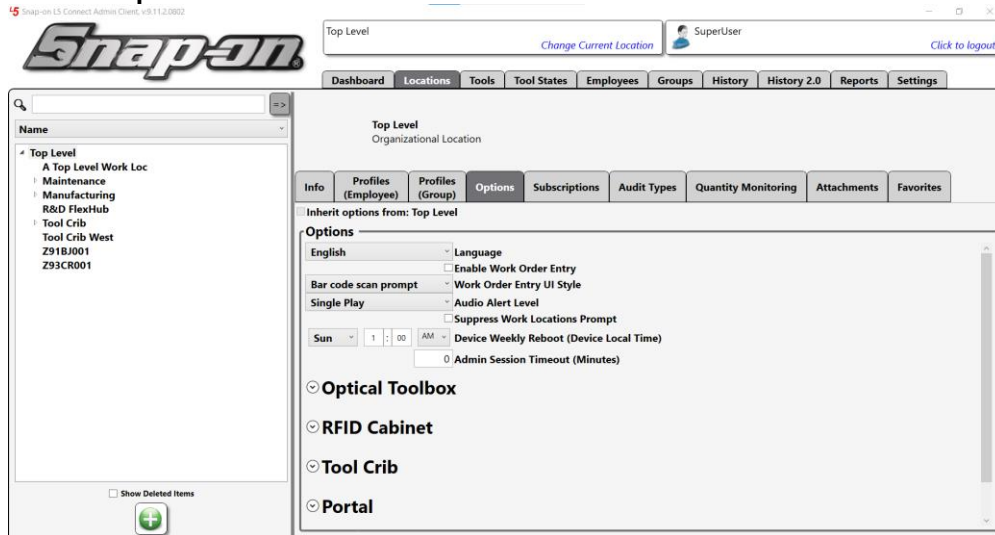
Configuring work orders for your L5 Connect system is done through the admin application.

Turning On Work Orders

1. Log into the admin application and go to the **Locations** tab.

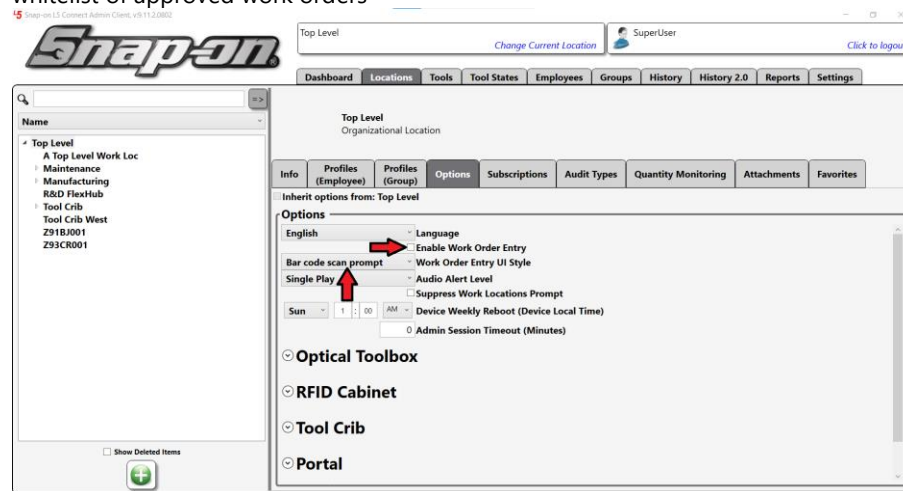


2. Select the **Options** sub-tab.



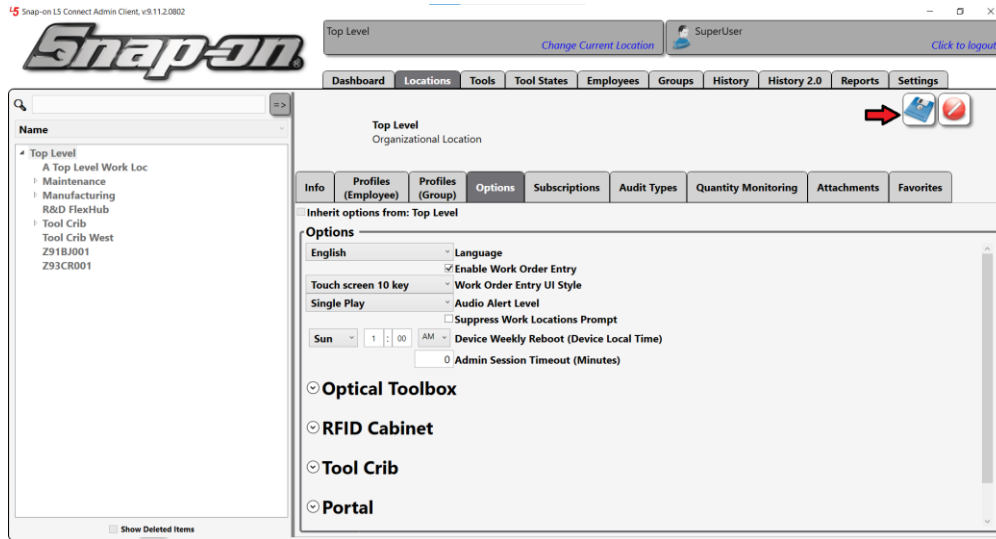
3. Check the **Enable Work Order Entry** checkbox and set the **Work Order Entry UI Style** pull down to the desired value.

- **Bar code scan prompt** - Scan or input by keyboard any text string work order
- **Touch screen 10 key** - On screen keyboard to input a numeric work order on a whitelist of approved work orders
- **Touch screen full keyboard** - On screen keyboard to input an alpha-numeric work order on a whitelist of approved work orders



NOTE: More information on Location options can be found in the L5 Connect™ Locations article.

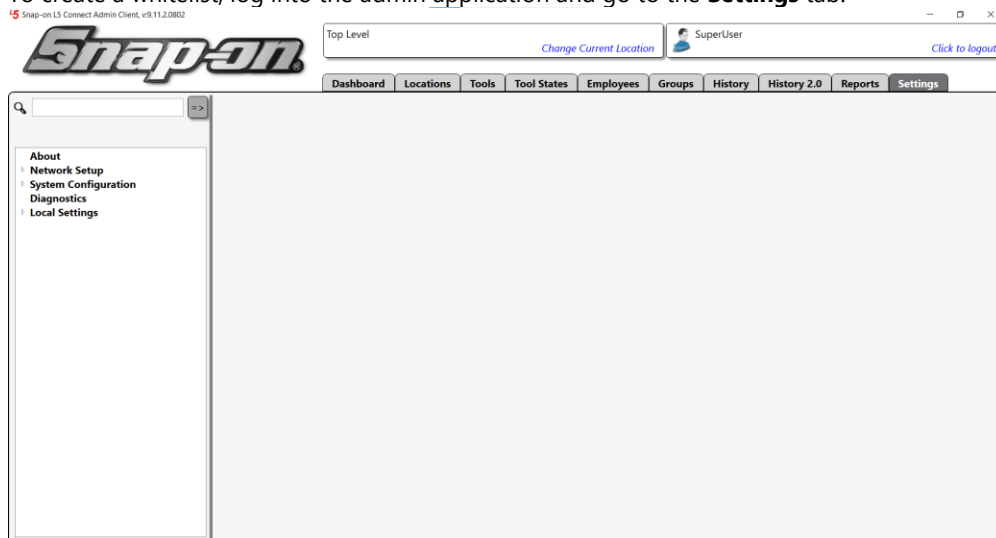
- Click the blue **Save** button.



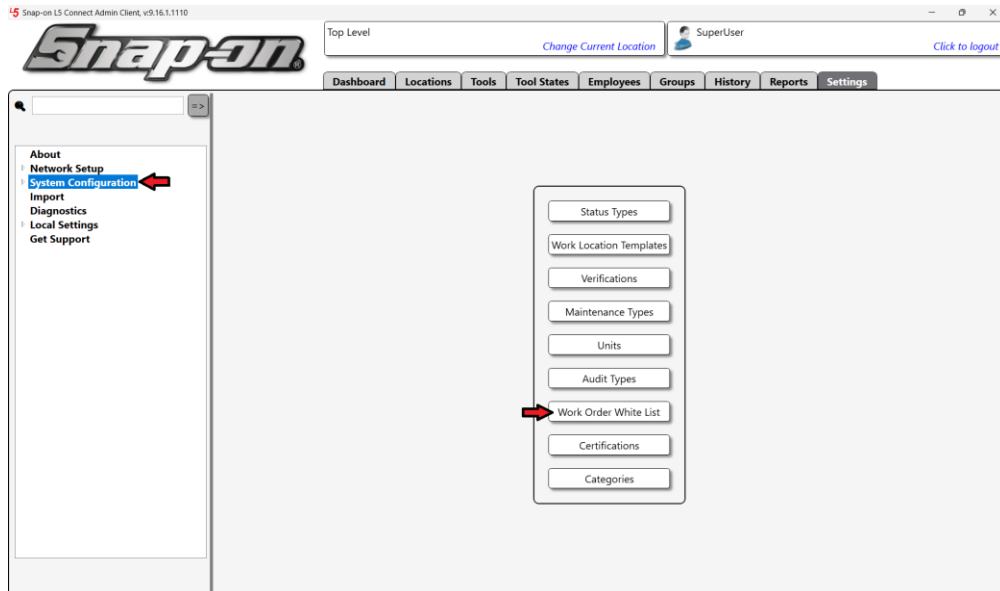
Creating a Whitelist

You can create a whitelist of a specific set of work orders that you would like any attempted work order entry checked against. If the attempted work order does not appear on the whitelist the user will receive a warning that the value was not valid and have to retry the work order entry or not be granted access to the device.

- To create a whitelist, log into the admin application and go to the **Settings** tab.



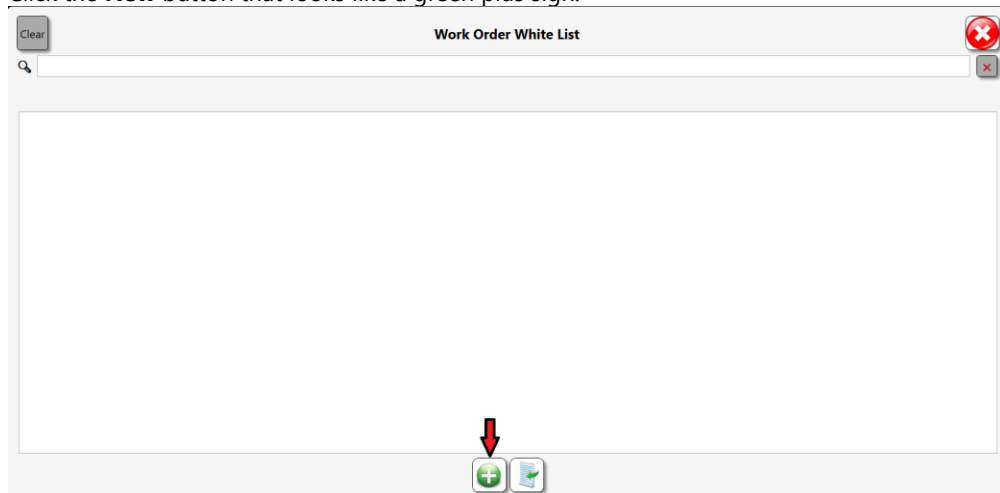
2. Select the **System Configuration** listbox item on the left side of the screen, then click the **Work Order White List** button.



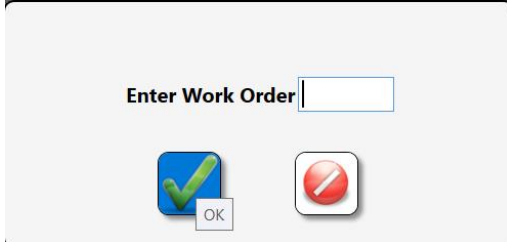
There are two options to add work orders to the whitelist at this point.

Manually Adding Work Orders to Whitelist

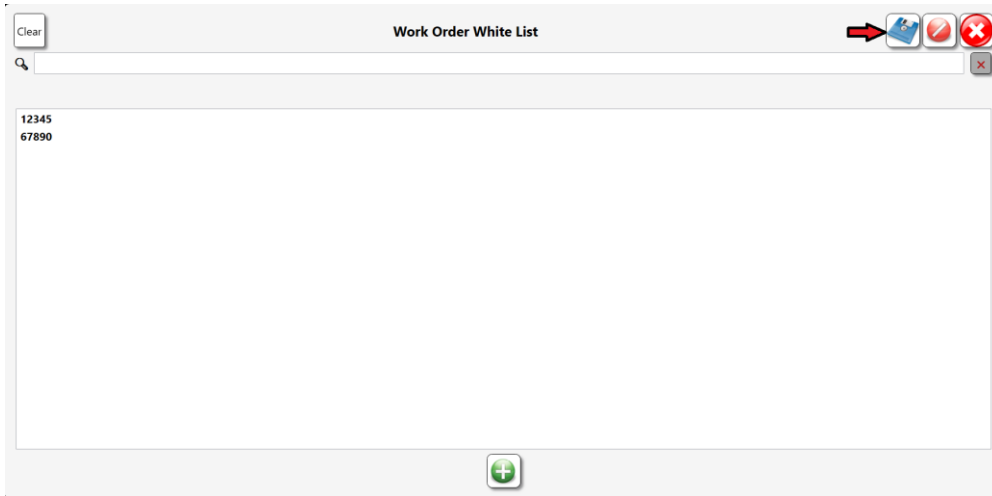
3. Click the **New** button that looks like a green plus sign.



4. Enter a work order in the box and then click the green checkmark **OK** button.



5. Repeat that process as many times as required to add all the desired work location values, then click the blue disk **Save** button.

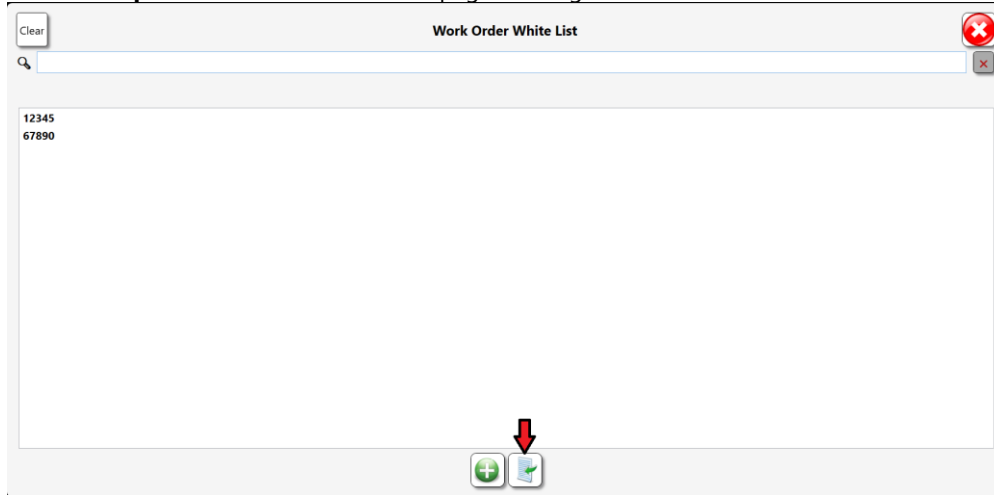


NOTE: You can remove a work order from the list by selecting it and clicking the red minus sign **Delete** button. You can also delete all the work orders currently shown in the window by clicking the **Clear** button and then clicking the **Clear** button on the window that asks you if you are sure you want to delete all shown work orders from the whitelist.

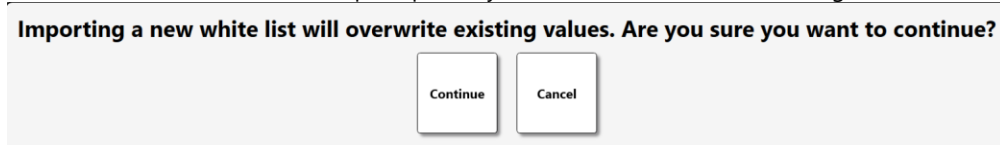
Importing a Whitelist of Work Orders

You can also import a whitelist from an Excel file. **NOTE:** This will replace the current whitelist.

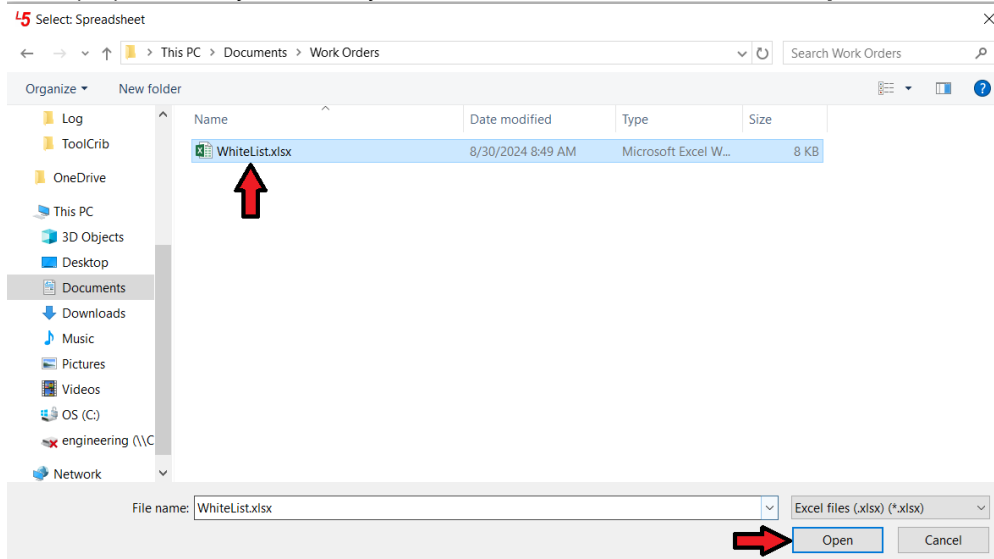
1. Click the **Import** button that looks like a page with a green arrow on it.



2. Click the **Continue** button when prompted if you want to overwrite the existing values.

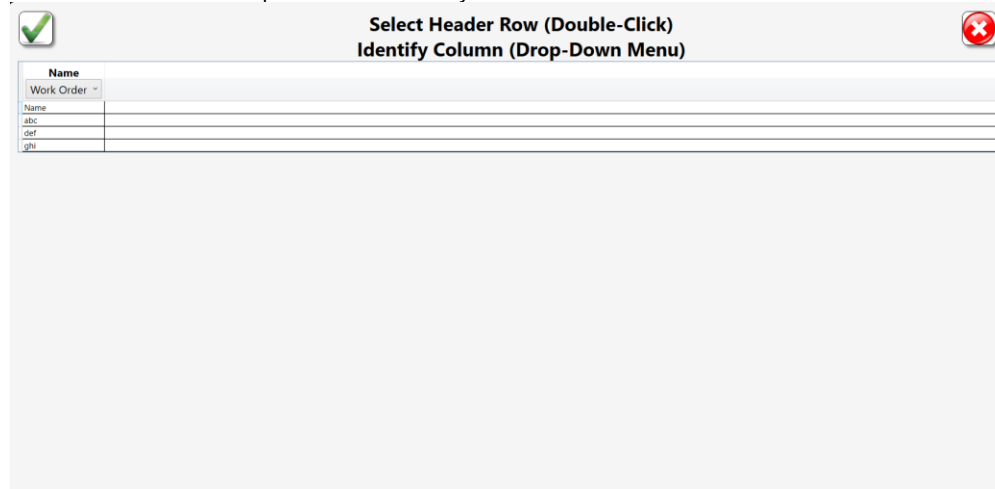


3. You will see a file dialog window looking for an .xlsx file containing the list of whitelist work orders. Navigate to the proper directory and select your whitelist Excel file and then click the **Open** button.



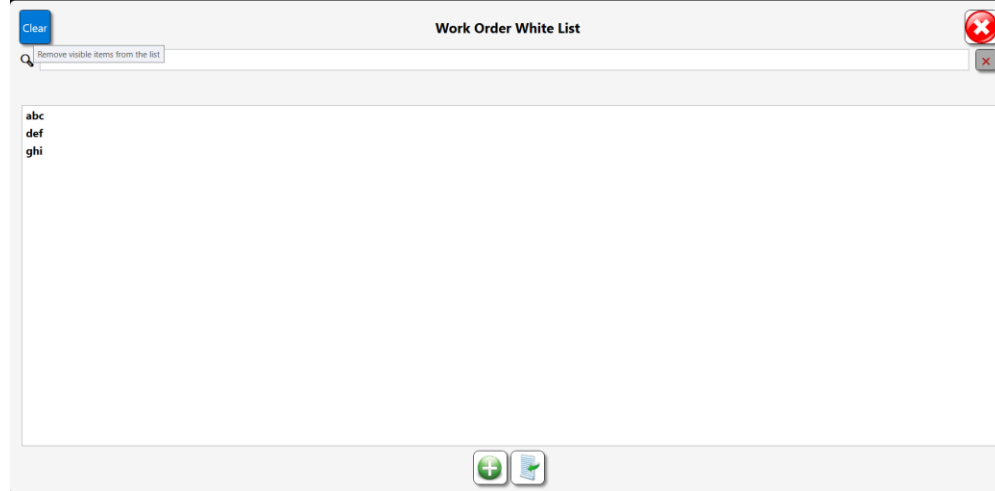
4. You will see a standard L5 Connect system data import window. Since there is only one column needed for the data, you will need to choose which column in your data represents the work order. Once you have selected the column that represents the work order fields, click the **OK** button that looks like a green

checkmark. In this example the dataset only had one column with a header of Name.



Name	
Work Order	
Name	
abc	
def	
ghi	

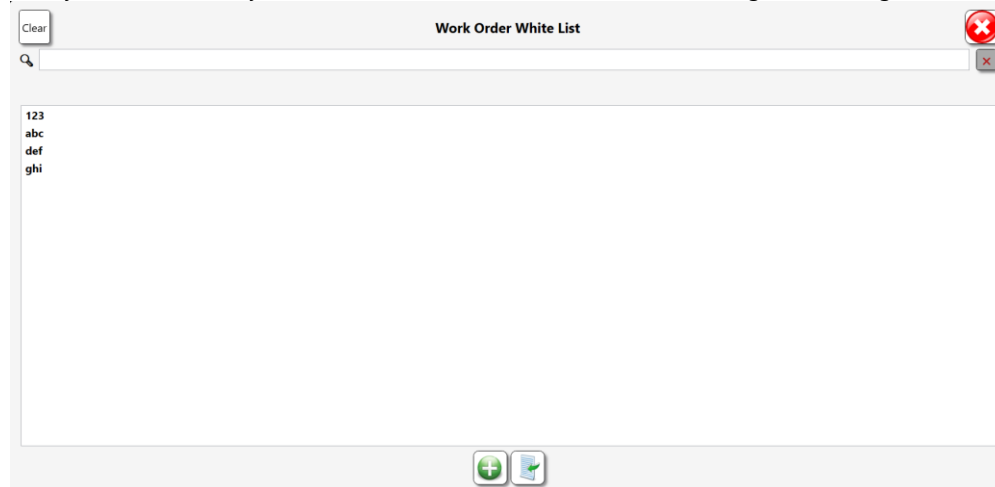
- As you can see, the old manually entered whitelist has been replaced with the data from the imported file.



Clear Remove visible items from the list

abc
def
ghi

- Finally, we will manually add a numeric value to this list before showing device usage.



Clear

123
abc
def
ghi



L5 Connect User Manual

User/Employee Configuration



L5 Connect User Manual

Employees

This document will cover managing employees in the L5 Connect system. Employees are the user accounts used to control the access and administration of the L5 Connect system. Each Employee should have a separate account within the system that is not shared. This method allows for more precise auditing of the system. An employee account can either be a standard account or an admin account.

Standard Account – Is used for regular access to the L5 Connect™ devices. Has no access to the Administrative Functions on any device and cannot log into the L5 Connect™ Admin Client.

Admin Account – Admin accounts are standard accounts with additional permissions and a username & password. Admin accounts can access administrative functions on devices and log into the Administrative Clients.

Employee attributes

Employee Attributes are the properties of an Employee Account and define who and what the Employee is and what they have access to. You can set all these attributes in the Info sub-tab of the Employee Tab.

The screenshot shows the Snap-on L5 Connect Admin Client interface. At the top, there's a navigation bar with tabs: Dashboard, Locations, Tools, Tool States, Employees, Groups, History, Reports, and Settings. The 'Employees' tab is selected. Below the navigation bar, there's a search bar and a list of employees. The 'SuperUser' employee is selected. The main content area shows the 'Info' sub-tab for 'SuperUser'. Fields include: Last Name (SuperUser), First Name, M. Initial, Title, Customer ID, Email, Cell Phone, Carrier (None), Home Location (Top Level), Language (Device Default), and Admin Login (User Name: superuser). There are also sections for Badge Info (Badge, Temp Badge) and Photo.

The attributes of the Employee are:

Last Name, First Name, and M. Initial – The name of the Employee. **NOTE: The Last name field is required.**

Title – The courtesy title of the Employee (Dr., Mr., Mrs., Ms., etc.)

Customer ID – A unique code assigned to the Employee (Bin number, Employee ID, etc.) This ID can differentiate Employees with the same name. **NOTE: No two employees can have the same Customer ID.**

E-mail – E-mail Address of the Employee. Used to send status notifications and reports (Subscriptions) to the



L5 Connect User Manual

Employee.

Cell Phone – Cellphone number of the Employee. Used to send status notifications and messages (Subscriptions) to the Employee. **NOTE: Due to cell carrier system changes, the text notifications feature is being sunset and may not function on current systems.**

Home Location – Employee's Location in the system. Please review the Locations section of this guide for more information.

Language – Set the text and audio language of the system for the Employee. When an employee logs into the machine, it will change the text and audio to match the currently selected language.

Admin Login – Set Employee as Administrator by creating a username and password. This setting is required if the Employee needs to access any administrative functions on any device or administrative clients. The username must be unique, and the password must be at least six characters long.

Badge – With an RFID badge scanner, assign a badge to the Employee for ATC Device access.

Temp Badge – With an RFID badge scanner, assign a badge that will expire based on your set time and date.

Photo – Set an image that will display on all devices when an employee logs in. This setting can act as an additional form of identification to verify that no one is using someone else's account. You should use a square photo (equal dimension for length and width) no bigger than 1MB.

Creating an employee

Creating an employee requires that the user account creating the new Employee is an admin and that they have permission to add employees to the location they are adding them.

To begin, launch the Administration Client if it is not already running. Log in with your administration credentials. Once you have logged in, you should be at the main Dashboard. Click on the Employees tab.

On the bottom left of the Employees screen, click on the **New** button that has a green + icon.

The screenshot shows the Snap-on L5 Connect Admin Client interface. At the top, there's a header with the Snap-on logo, a search bar, and a user profile for 'SuperUser' with a 'Click to logout' link. Below the header is a navigation bar with tabs: Dashboard, Locations, Tools, Tool States, Employees (selected), Groups, History, Reports, and Settings. The main content area is divided into a left sidebar and a right main panel. The sidebar contains a list of locations, with 'Assembly Area B Line 2, Kim' selected. The main panel shows the 'New Employee' form. It includes fields for Last Name, First Name, M. Initial, Title, Customer ID, Email, Cell Phone, and Carrier (set to None). There's a 'Home Location' dropdown set to 'Top Level' and a 'Language' dropdown set to 'Device Default'. Below these is the 'Admin Login' section with 'User Name' set to 'superuser' and buttons for 'Change Password' and 'Clear Login'. On the right side of the form, there's a 'Badge Info' section with checkboxes for 'Badge' and 'Temp Badge', and a 'Photo' section with a placeholder image and a 'Photo' label. At the bottom left of the sidebar, there's a red arrow pointing to a green '+' icon, which is the 'New' button.



L5 Connect User Manual

This button will open the New Employee Properties sub-tab.

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States **Employees** Groups History Reports Settings

Name

Assembly Area B Line 2, Bo
Assembly Area B Line 2, Kim
Helicopter Maintenance Hangar, Ali
Helicopter Maintenance Hangar, Ed
Helicopter Maintenance Hangar, Fre
Helicopter Maintenance Hangar, Ge
Helicopter Maintenance Hangar, Jer
Helicopter Maintenance Hangar, Ka
Helicopter Maintenance Hangar, Tec
Helicopter Maintenance Hangar, To
Plane Maintenance Hangar, Alice
Plane Maintenance Hangar, Gerald
Plane Maintenance Hangar, Gina
Plane Maintenance Hangar, Harold
Plane Maintenance Hangar, Harry
Plane Maintenance Hangar, Jerry
Plane Maintenance Hangar, Joe
Plane Maintenance Hangar, Preston
Plane Maintenance Hangar, Robin
SuperUser
SuperViewer
Supervisor Assembly Area A, Polly
Supervisor Assembly Area B, Rachel
Supervisor Helicopter Maintenance
Supervisor Plane Maintenance Hangar

Show Deleted Items

Info Profiles Memberships Subscriptions

Last Name
First Name
M. Initial
Title
Customer ID
Email
Cell Phone
Carrier: None

Home Location: Top Level [Change](#)

Language: Device Default

Admin Login [Create Login](#)

Badge Info
Badge [Edit](#) [Delete](#)
Temp Badge [Edit](#) [Delete](#)

Photo [Edit](#) [Delete](#)

You will need to fill out all the attributes for the user from here. The following is some sample information you can use to practice. The Employee's name is John J. Smith. He has no title. His Employee ID is 12345ABC. He has the e-mail address of jjsmith@contoso.com. His cellphone is 555-123-9876, and AT&T is his carrier. He uses the standard system language and does not need administrative access. The Employee's primary work location is R&D Lab.

To set his **Home Location**, click the **Change** button that looks like a pencil.

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States **Employees** Groups History Reports Settings

Name

Assembly Area B Line 2, Art
Assembly Area B Line 2, Bo
Assembly Area B Line 2, Kim
Helicopter Maintenance Hangar, Ali
Helicopter Maintenance Hangar, Ed
Helicopter Maintenance Hangar, Fre
Helicopter Maintenance Hangar, Ge
Helicopter Maintenance Hangar, Jer
Helicopter Maintenance Hangar, Ka
Helicopter Maintenance Hangar, Tec
Helicopter Maintenance Hangar, To
Plane Maintenance Hangar, Alice
Plane Maintenance Hangar, Gerald
Plane Maintenance Hangar, Gina
Plane Maintenance Hangar, Harold
Plane Maintenance Hangar, Harry
Plane Maintenance Hangar, Jerry
Plane Maintenance Hangar, Joe
Plane Maintenance Hangar, Preston
Plane Maintenance Hangar, Robin
Smith, John J.
SuperUser
SuperViewer
Supervisor Assembly Area A, Polly
Supervisor Assembly Area B, Rachel

Show Deleted Items

Info Profiles Memberships Subscriptions **Attachments**

Last Name: Smith
First Name: John
M. Initial: J
Title:
Customer ID: 12345ABC
Email: jjsmith@contoso.com
Cell Phone: 5551239876
Carrier: AT&T

Home Location: Top Level [Change](#)

Language: Device Default

Admin Login [Create Login](#)

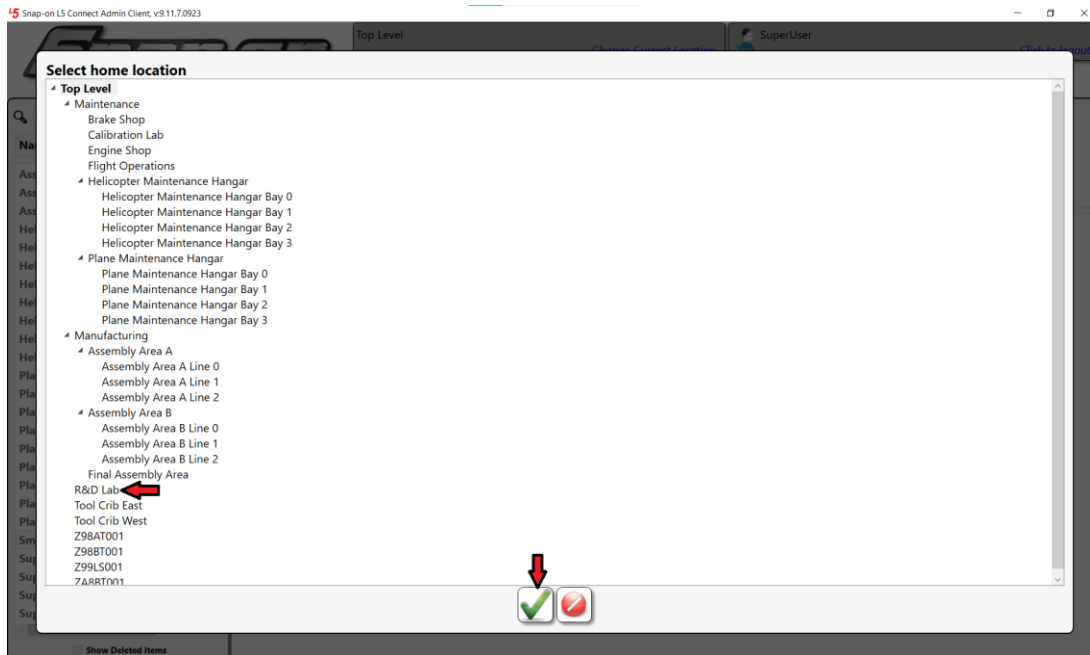
Badge Info
Badge [Edit](#) [Delete](#)
Temp Badge [Edit](#) [Delete](#)

Photo [Edit](#) [Delete](#)

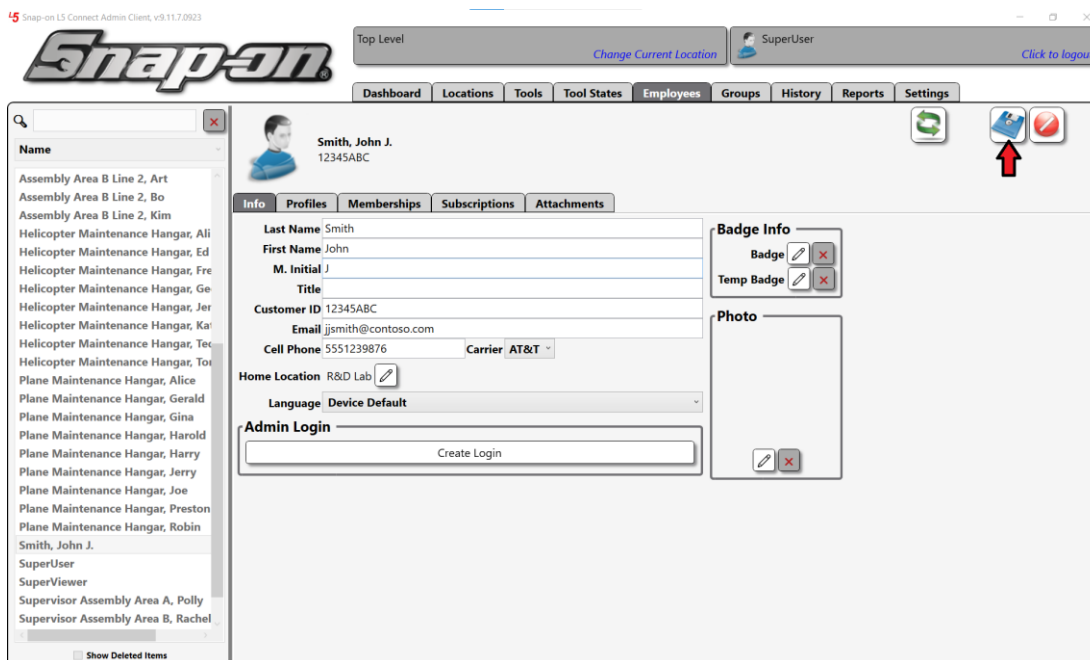


L5 Connect User Manual

This button will bring up the Location select screen. Select R&D Lab, then click on the ✓ button. **NOTE: The Home Location will default to the Current Location the Admin is working in. Please see the Locations section of this guide for more information.**



Perform one final check of the attribute data to ensure everything is correct. Once you are sure everything is right, click on the blue **Save** button in the top right of the screen.






L5 Connect User Manual

After you click save, the icons in the top right will disappear, and the Employee will show up in the list on the left.

5 Snap-on L5 Connect Admin Client, v9.11.7.0923



Top Level [Change Current Location](#) SuperUser [Click to logout](#)




Dashboard Locations Tools Tool States **Employees** Groups History Reports Settings


Q

Name

Assembly Area B Line 2, Art
Assembly Area B Line 2, Bo
Assembly Area B Line 2, Kim
Helicopter Maintenance Hangar, Ali
Helicopter Maintenance Hangar, Ed
Helicopter Maintenance Hangar, Fre
Helicopter Maintenance Hangar, Ge
Helicopter Maintenance Hangar, Jer
Helicopter Maintenance Hangar, Ka
Helicopter Maintenance Hangar, Tec
Helicopter Maintenance Hangar, Toi
Plane Maintenance Hangar, Alice
Plane Maintenance Hangar, Gerald
Plane Maintenance Hangar, Gina
Plane Maintenance Hangar, Harold
Plane Maintenance Hangar, Harry
Plane Maintenance Hangar, Jerry
Plane Maintenance Hangar, Joe
Plane Maintenance Hangar, Preston
Plane Maintenance Hangar, Robin
Smith, John J.
SuperUser
SuperViewer

☐ Show Deleted Items









Smith, John J.
12345ABC



Info Profiles Memberships Subscriptions Attachments

Last Name: Smith
First Name: John
M. Initial: J
Title:
Customer ID: 12345ABC
Email: jsmith@contoso.com
Cell Phone: 5551239876 Carrier: AT&T
Home Location: R&D Lab
Language: Device Default

Badge Info

Badge  
Temp Badge  

Photo

Admin Login

Create Login

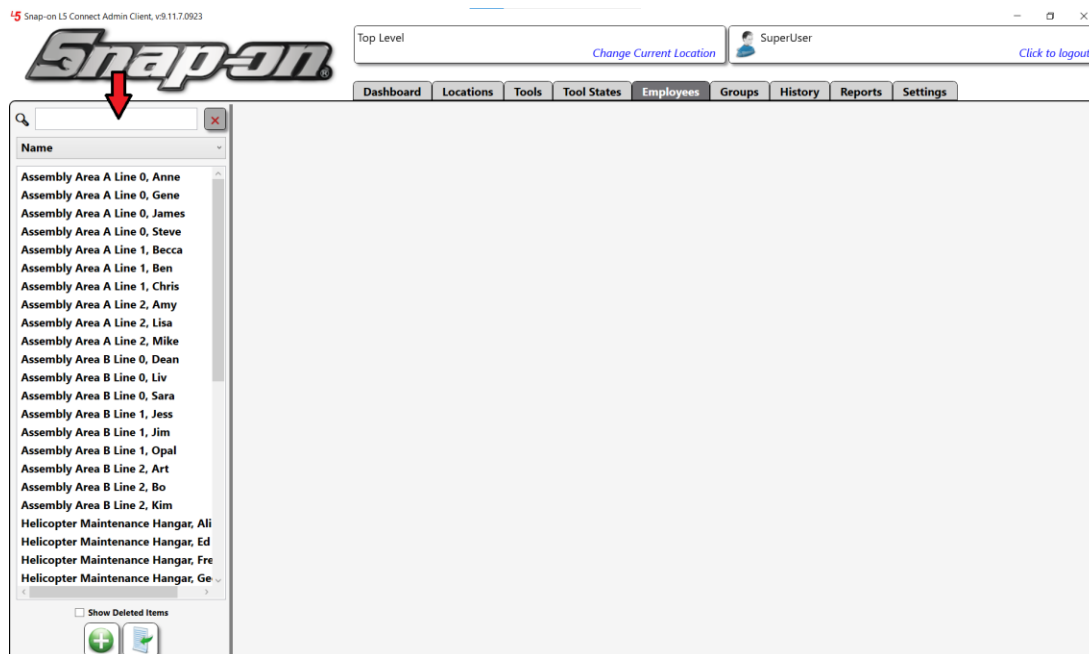
For Support/Service: INDPROSERVICES@snapon.com
Copyright © 2025 Snap-on Industrial. All Rights Reserved

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5 December 2025

Searching for an employee

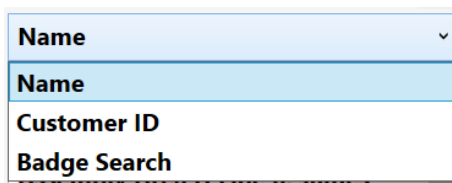
If you have many employees in the system, L5 Connect™ provides a quick and easy way to search and filter the list of employees. By utilizing the search function, you can quickly locate and administer employees. **NOTE: You will only be able to search for employees assigned to your current location and any sub-locations under it. If you attempt to search for an employee outside of your current location, you will not get any results for your search.**

First, log into the Admin Client and go to the **Employees** tab to start a search. To quickly find the user you are looking for, you can use the search bar above the list of employees.



Below the Search Bar is a pull-down. This pull-down will allow you to search for an employee using three different methods. These methods are:

- **Name** – The name of the Employee can use first and last name to filter.
- **Customer ID** – The Customer ID value of the Employee.
- **Badge Search** – Scan a badge, and the Employee assigned to it will be the result.

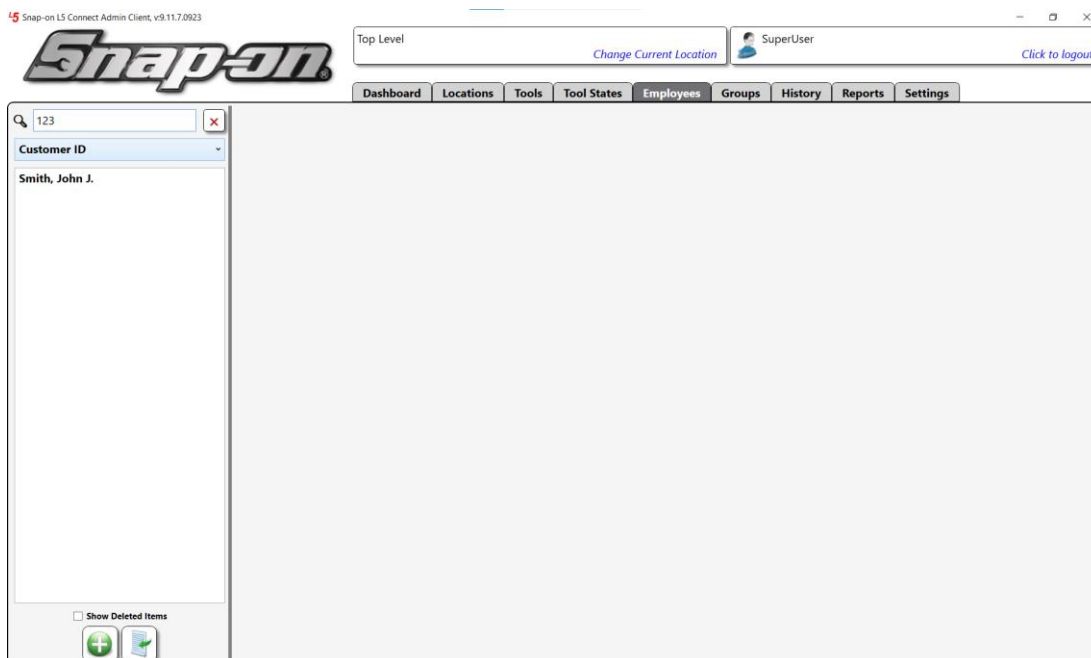
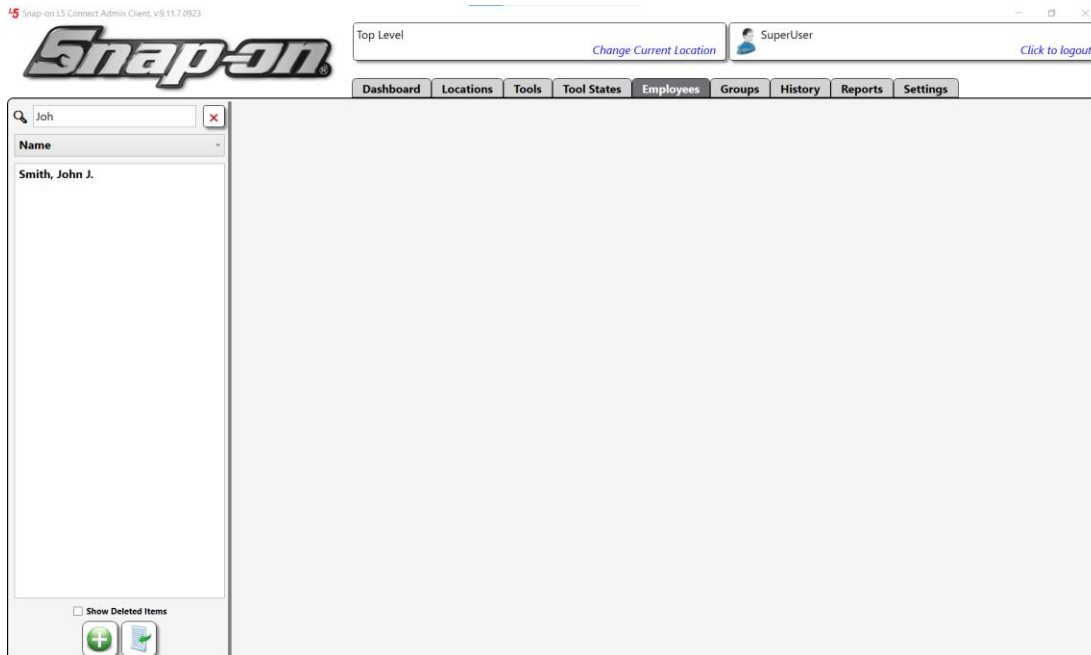




L5 Connect User Manual

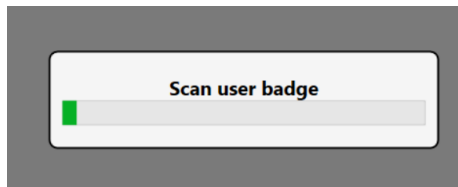
Name and customer ID search

Go to the search bar, make sure the Name is selected and start typing the name. As you type the name John, the list will filter. Customer ID search works just like Name search, except you type in the Customer ID value instead of the name. The search bar is an active search, meaning that the list will filter as you type. Therefore, you do not need to type the full name or Customer ID of the Employee to get a result.



Badge search

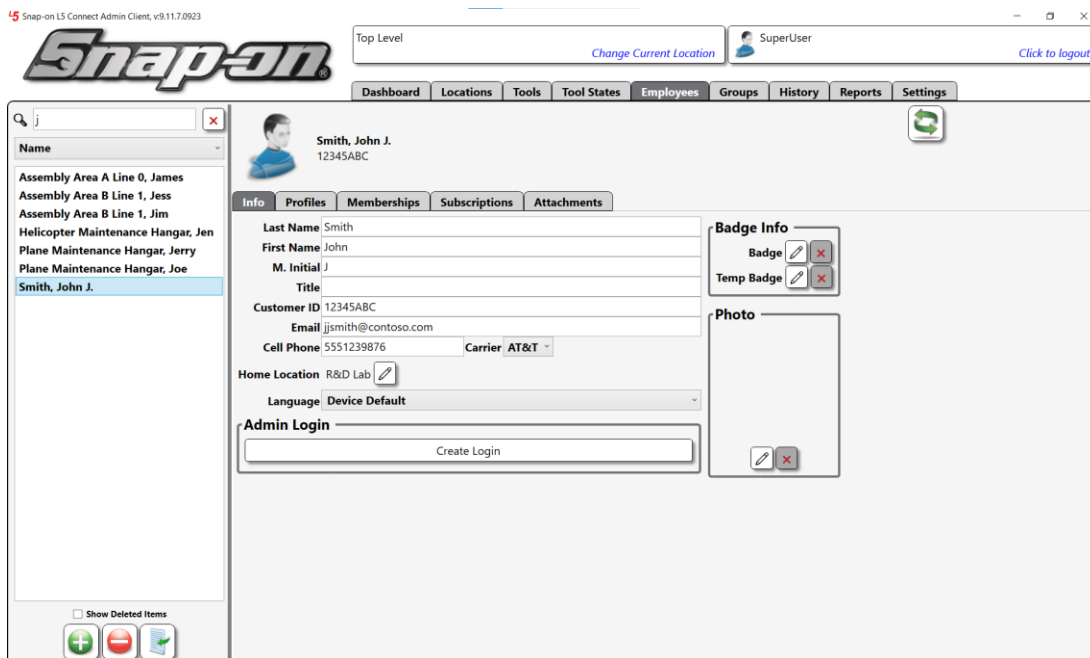
Badge Search requires that you have a compatible card reader to scan the user's Badge. Selecting **Badge Search** from the pull-down menu will cause a window to appear prompting you to scan the employee's badge. Upon completion of the scan, the user's information is displayed.



Editing an Employee

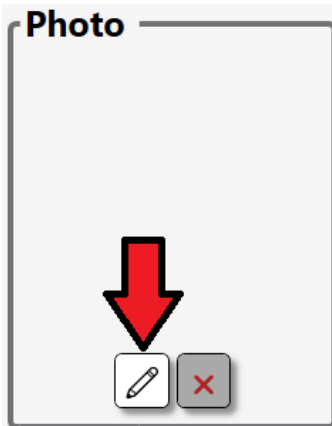
When you need to make a change to an employee, you must edit the user account. To edit the employee, the admin must have permission to the employee's home location. For this example, we will add a photo to the user account with your sample employee. For information about managing badges on an employee see the Managing Employee Badges document.

First, log into the Admin Client and go to the **Employees** tab. Find the Employee by searching for it and click on the name to bring up the employee properties.

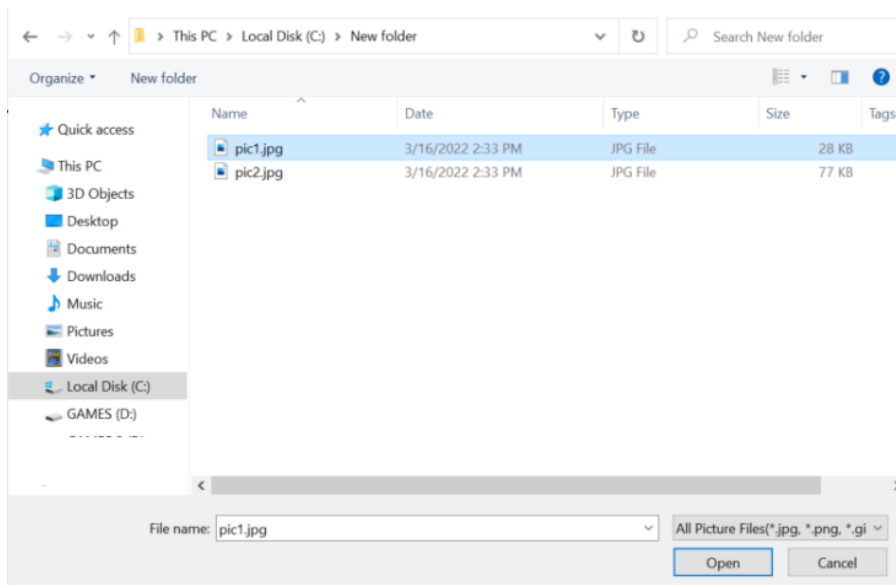


Once you have the Employee displayed, you can make any changes needed. Once done, make sure to **SAVE** the changes by clicking on the Save icon in the upper right of the screen. **NOTE: Until a change is made, you are not in edit mode and the SAVE and CLEAR buttons are visible.**

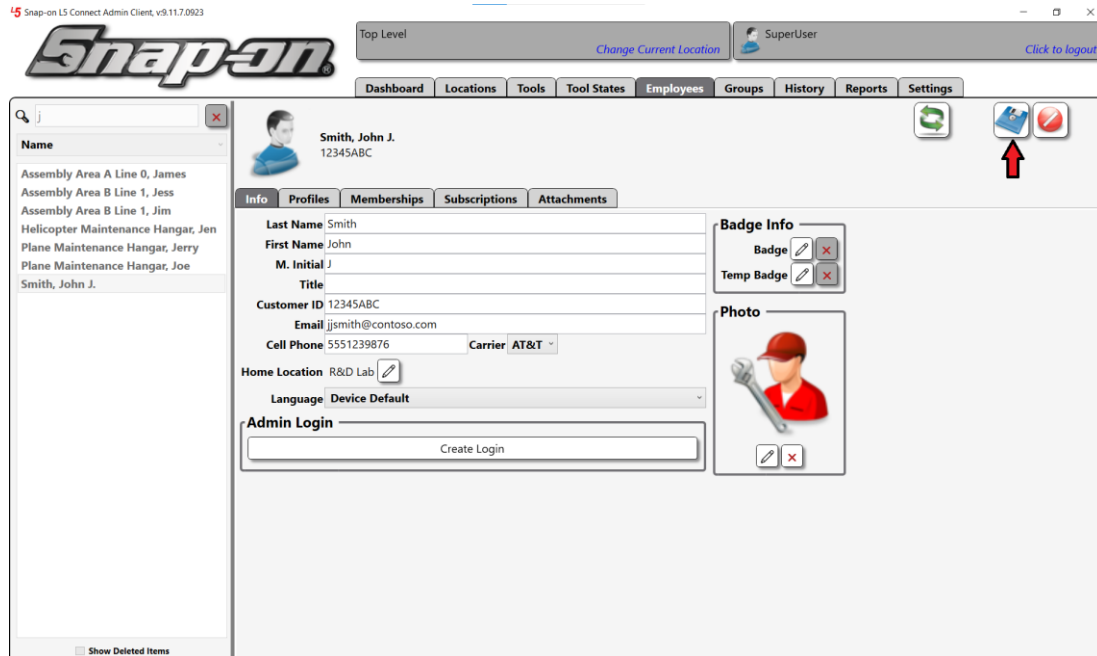
You can add a photo to an Employee to better identify the user when they log into any device. Once added, this photo will show up anywhere in the system when that user logs in. Click on the **Change** button that looks like a pencil in the Photo box on the right side of the screen. **NOTE: It is recommended to use an image with a square aspect ratio (Same Dimensions for both Length and Width). Also, it is recommended to keep the file size of the image below 1MB.**



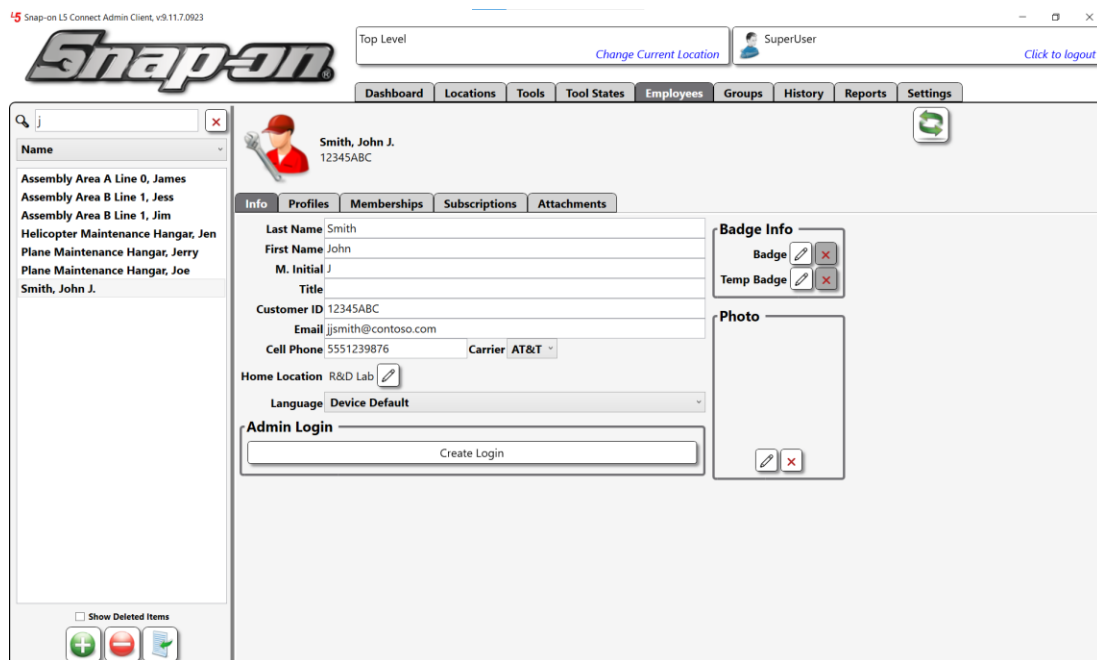
When you click on the button, a file selection window will open. This file selection window is automatically filtered to file extensions supported by the system.



Select the file you want to use as your picture and click open. You will now see the picture displayed in the **Photo** group box. Click the blue **Save** button to commit the change.



You will notice the generic picture on the employee ID card changes to the new one you just added when you save.



To remove the picture, click on the red **X** in the Photo box, then SAVE. The employee picture will revert to the generic one.



Remember, the employee picture will display when this user logs into the system on any client or device.

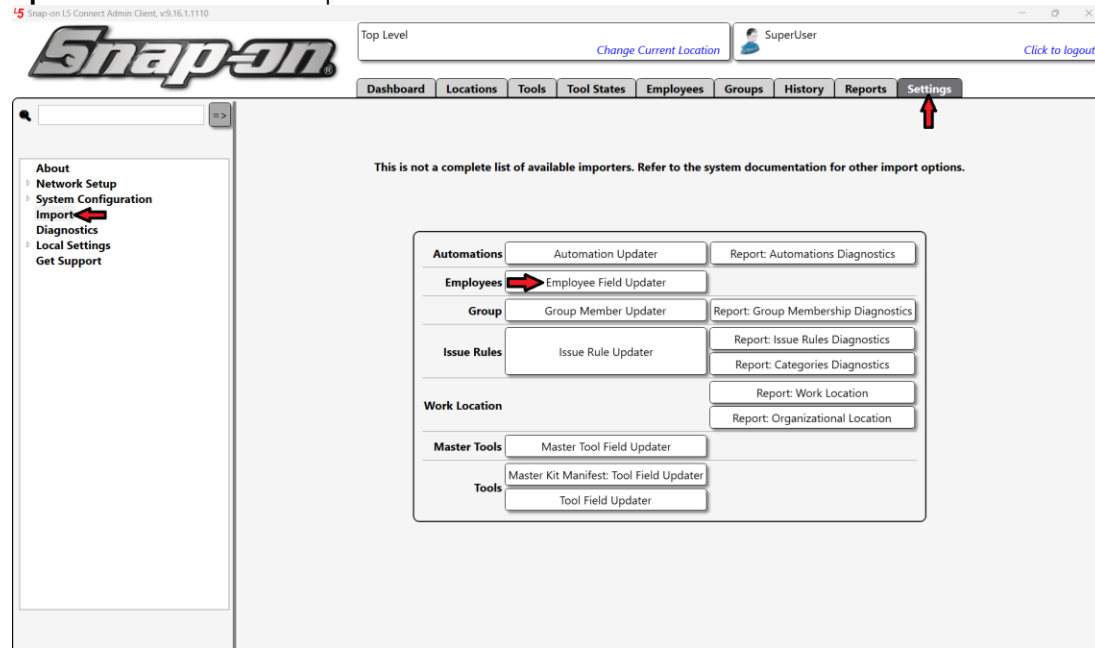
Bulk Updating Employees

The L5 Connect system allows the update of employee fields for multiple previously existing employees at once from an Excel file. Before starting the update, you will need an Excel spreadsheet with your desired updated employee fields. A good way to start that process is by running an employee report and exporting it to Excel. For more information on reports see L5 Connect Reports. Here is a list of the employee fields which can be updated in this manner.

- Badge
- Customer ID
- Email
- First Name
- Last Name
- M. Initial
- Title
- User Name

The Employee ID, which can be easily found by running a custom employee report where this field is included, is required in any updated spreadsheet as it is used to map the employee data to the proper employee in the L5 Connect system. At least one of the other columns must also be included so there is actually something to update.

Open the Admin application, switch to the **Settings** tab and then click the **Import** Item. Click the **Employee Field Updater** button to start the update.



You will then be prompted by a warning to make sure that you really want to do this. It will also remind you to make a backup of the current employee data by running an employee report. This will allow you to restore the data if something goes wrong during the update. Click the **Employee Field Updater** button to continue the update process.

ATTENTION

The requested importer will update fields on EMPLOYEES.

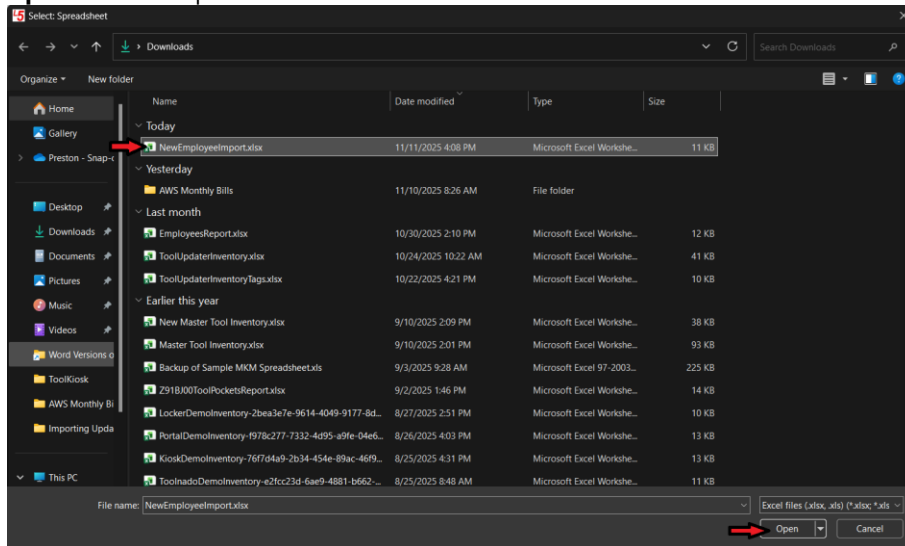
Make sure that you are following the documented procedure for this feature and have made a backup report of the existing information before proceeding.



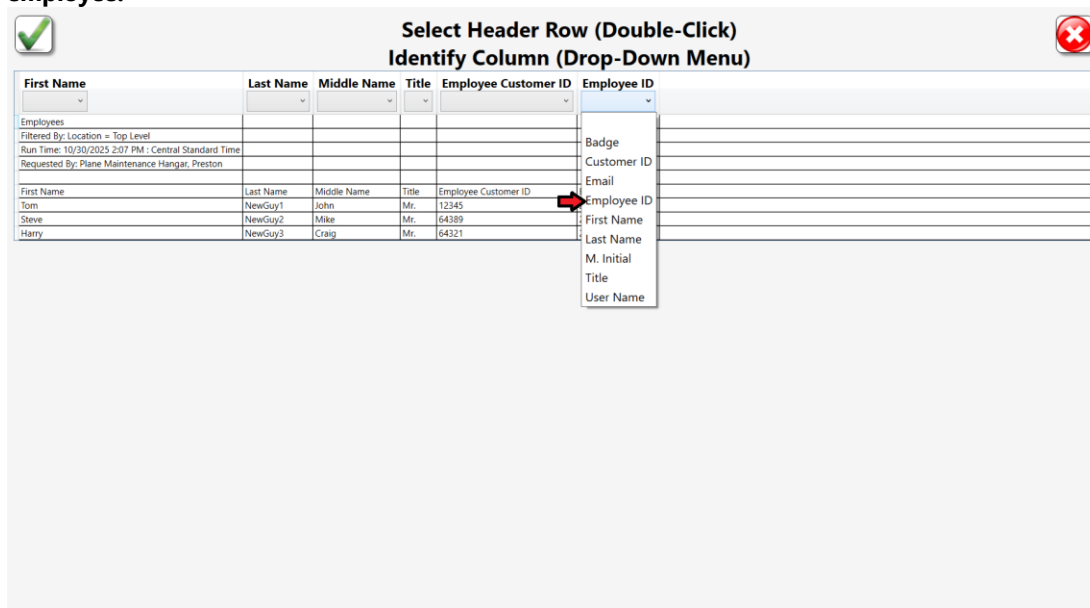


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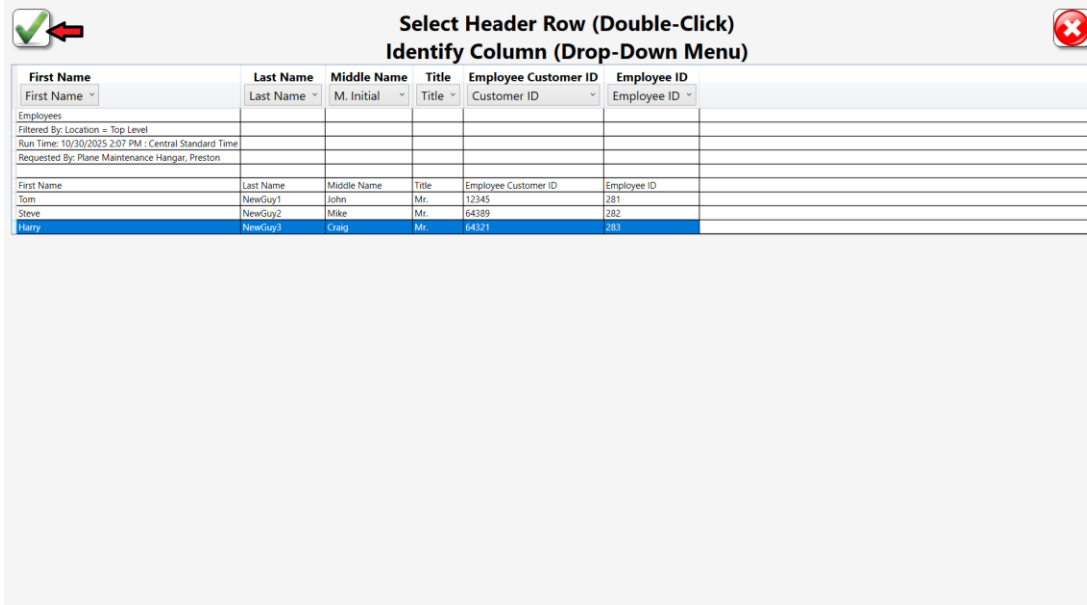
You will now see a file dialog window. Navigate to where your Excel file is located and select that file. Then click the **Open** button to open it.



Now you will need to map the data from your spreadsheet to the employee field to which it should be added by selecting an employee field from the pull-down list boxes about the data columns. **NOTE: Make sure to map the EmployeeID field to the employee IDs or the import will not be able to assign the data to the proper employee.**



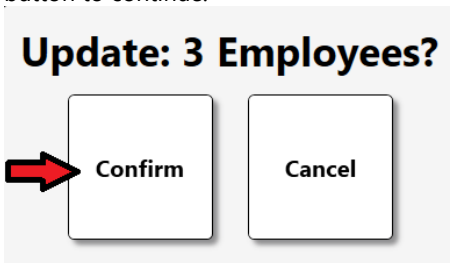
Once you have mapped all the columns you wish to import plus the **Employee ID** column, click the **OK** button, which looks like a green checkmark to initiate the actual updating process.



Select Header Row (Double-Click)
Identify Column (Drop-Down Menu)

First Name	Last Name	Middle Name	Title	Employee Customer ID	Employee ID
First Name -	Last Name -	M. Initial -	Title -	Customer ID -	Employee ID -
Employees					
Filtered By Location = Top Level					
Run Time: 10/30/2025 2:07 PM - Central Standard Time					
Requested By: Plane Maintenance Hangar, Preston					
First Name	Last Name	Middle Name	Title	Employee Customer ID	Employee ID
Tom	NewGuy1	John	Mr.	12345	281
Steve	NewGuy2	Mike	Mr.	64389	282
Harry	NewGuy3	Craig	Mr.	64321	283

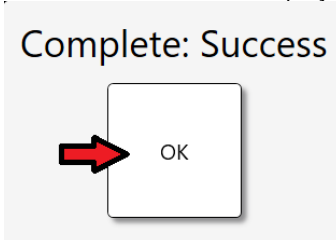
You will then be prompted to confirm that you wish to update the selected number of employees. Click the **Confirm** button to continue.



Update: 3 Employees?

Confirm **Cancel**

The employees will then be updated, and you should see window notifying you of a successful completion. Click the **OK** button to close the employee updater window.



Complete: Success

OK



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Setting an Employee as Admin

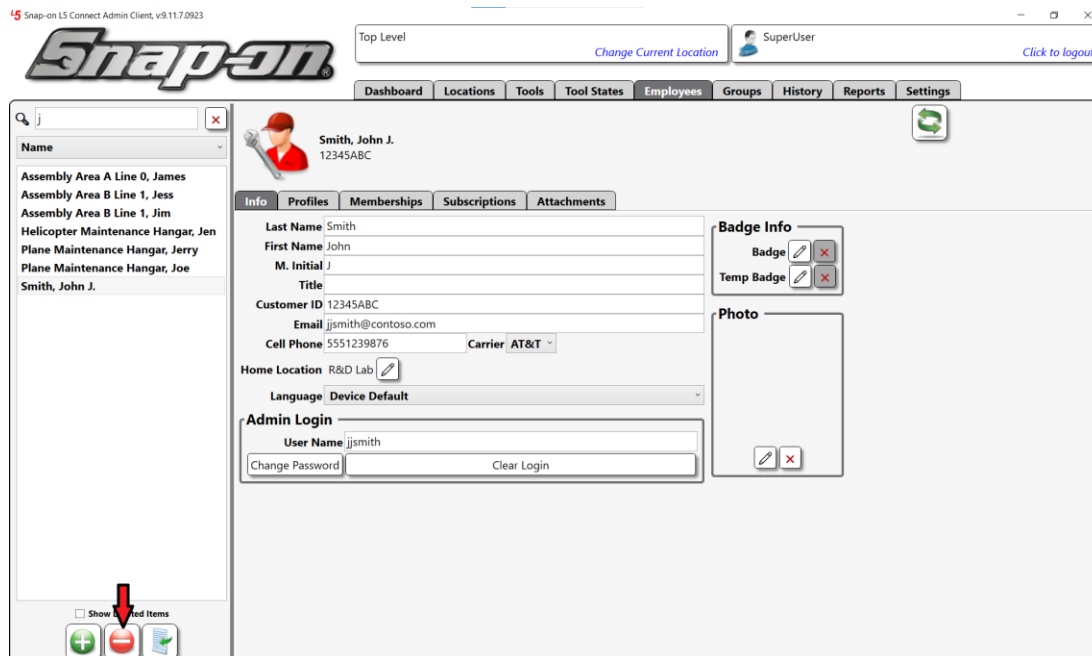
One person cannot do everything. For example, suppose you need to delegate administrative responsibilities to others. In that case, you can promote a standard account when you need more Admins. For more information on how to configure an employee as an admin, see the Authentication Configuration document.

Deleting an employee

You can delete an account when an employee no longer needs access to the L5 Connect™ system. When you delete the Employee, the system deactivates the user by clearing all permissions and badges assigned to that Employee. However, all other employee information remains for historical purposes. Also, if you decide to reactivate this user, it is easy to do so.

NOTE: Nothing in L5 Connect™ is deleted, it is just made inactive. This is to ensure all history is preserved for audit and reporting purposes.

To delete an employee, you must open the Employees tab and find them in the user list on the left. Once you have the Employee selected, click on the red **Delete** button.



Click **Yes** to continue with the deletion when you are prompted with the "Are you sure" window.



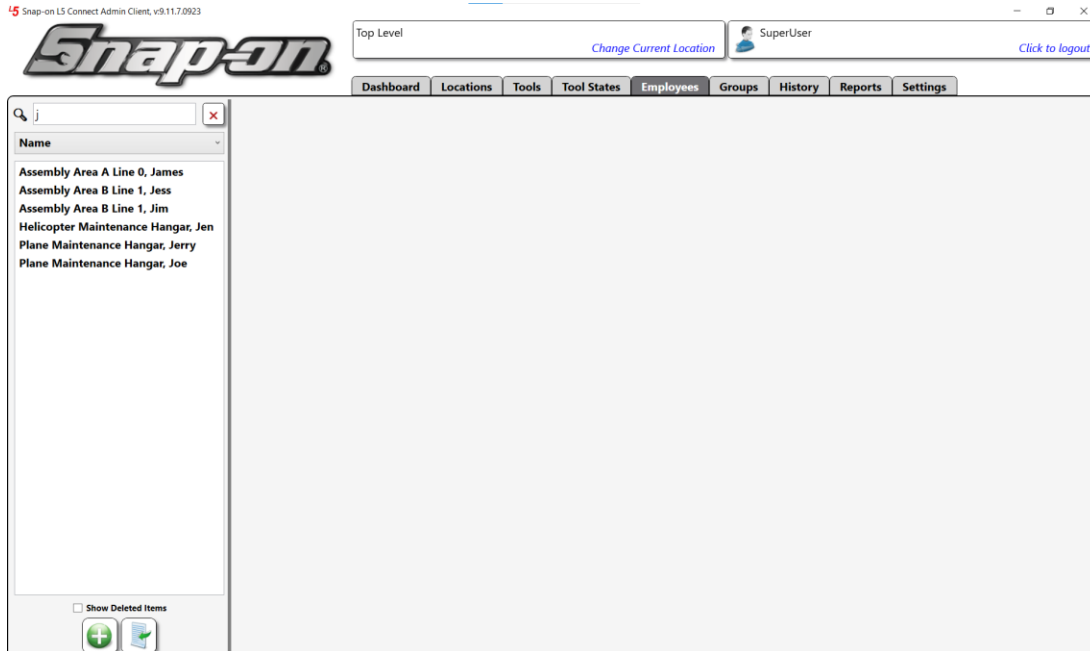
L5 Connect User Manual

Are you sure you want to delete Smith, John J. ?

Yes

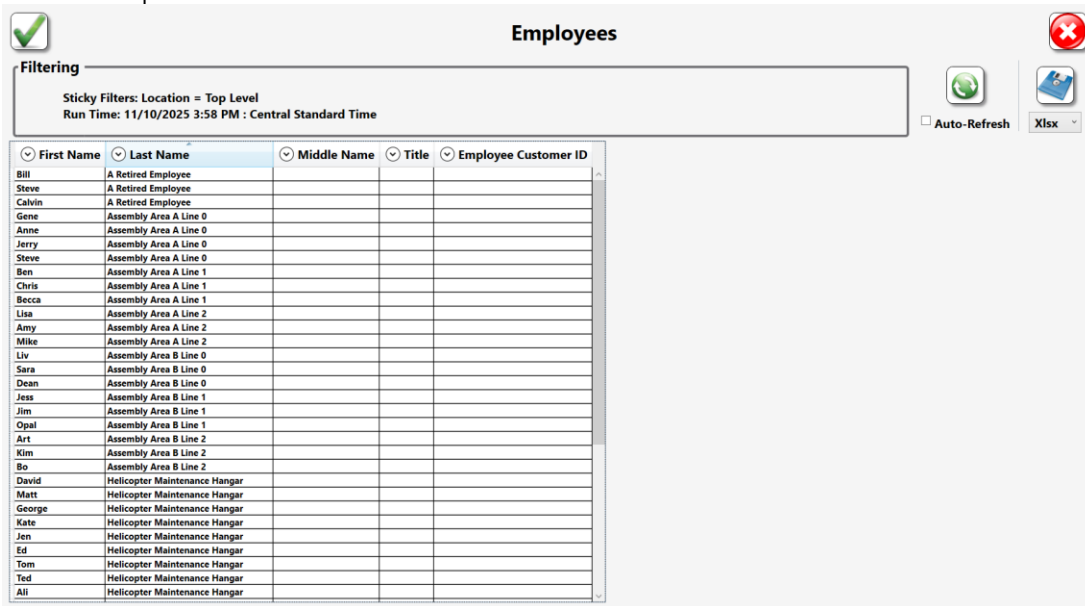
No

The employee now disappears from the list of employees.



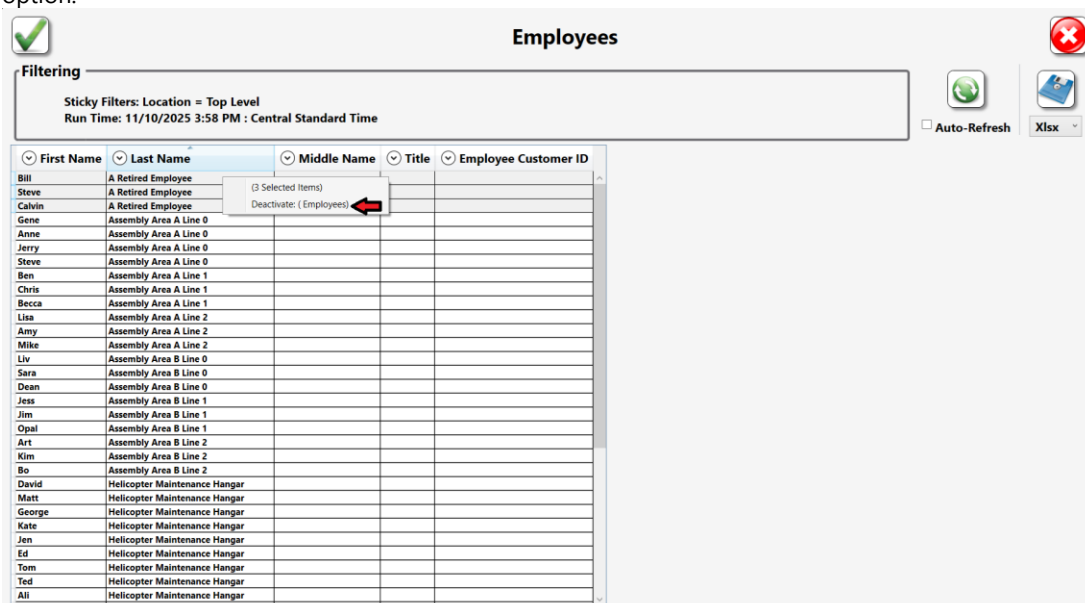
Mass Employee Deactivation

The L5 Connect system also supports deactivating multiple employees at once. Log into the Admin application and go to the **Reports** tab. Select the Employees report. You can customize the report in any manner that helps to isolate the employees you wish to deactivate and then run the report. For more information about creating a report see L5 Connect™ Reports - Overview.



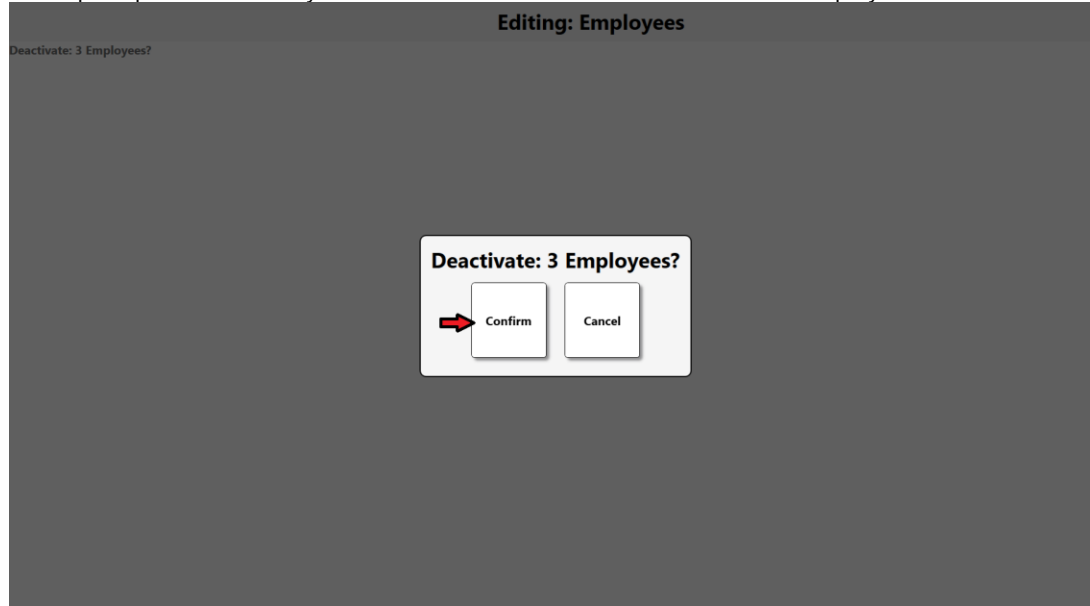
First Name	Last Name	Middle Name	Title	Employee Customer ID
Bill	A Retired Employee			
Steve	A Retired Employee			
Calvin	A Retired Employee			
Gene	Assembly Area A Line 0			
Anne	Assembly Area A Line 0			
Jerry	Assembly Area A Line 0			
Steve	Assembly Area A Line 0			
Ben	Assembly Area A Line 1			
Chris	Assembly Area A Line 1			
Becca	Assembly Area A Line 1			
Lisa	Assembly Area A Line 2			
Amy	Assembly Area A Line 2			
Mike	Assembly Area A Line 2			
Liv	Assembly Area B Line 0			
Sara	Assembly Area B Line 0			
Dean	Assembly Area B Line 0			
Jess	Assembly Area B Line 1			
Jim	Assembly Area B Line 1			
Opal	Assembly Area B Line 1			
Art	Assembly Area B Line 2			
Kim	Assembly Area B Line 2			
Bo	Assembly Area B Line 2			
David	Helicopter Maintenance Hangar			
Matt	Helicopter Maintenance Hangar			
George	Helicopter Maintenance Hangar			
Kate	Helicopter Maintenance Hangar			
Jen	Helicopter Maintenance Hangar			
Ed	Helicopter Maintenance Hangar			
Tom	Helicopter Maintenance Hangar			
Ted	Helicopter Maintenance Hangar			
All	Helicopter Maintenance Hangar			

Then select the employees you wish to deactivate by left-clicking and dragging for continuous employees or by left-clicking while holding down the **Ctrl** key for single separated employees. Once you have selected the employees you wish to deactivate, right click on one of them to open the context menu and click the **Deactivate: (Employees)** option.



First Name	Last Name	Middle Name	Title	Employee Customer ID
Bill	A Retired Employee			
Steve	A Retired Employee			
Calvin	A Retired Employee			
Gene	Assembly Area A Line 0			
Anne	Assembly Area A Line 0			
Jerry	Assembly Area A Line 0			
Steve	Assembly Area A Line 0			
Ben	Assembly Area A Line 1			
Chris	Assembly Area A Line 1			
Becca	Assembly Area A Line 1			
Lisa	Assembly Area A Line 2			
Amy	Assembly Area A Line 2			
Mike	Assembly Area A Line 2			
Liv	Assembly Area B Line 0			
Sara	Assembly Area B Line 0			
Dean	Assembly Area B Line 0			
Jess	Assembly Area B Line 1			
Jim	Assembly Area B Line 1			
Opal	Assembly Area B Line 1			
Art	Assembly Area B Line 2			
Kim	Assembly Area B Line 2			
Bo	Assembly Area B Line 2			
David	Helicopter Maintenance Hangar			
Matt	Helicopter Maintenance Hangar			
George	Helicopter Maintenance Hangar			
Kate	Helicopter Maintenance Hangar			
Jen	Helicopter Maintenance Hangar			
Ed	Helicopter Maintenance Hangar			
Tom	Helicopter Maintenance Hangar			
Ted	Helicopter Maintenance Hangar			
All	Helicopter Maintenance Hangar			

When prompted to confirm you wish to deactivate the selected number of employees, click the **Confirm** button.



Once the deactivation of the employees is complete click the **OK** button to close the **Editing: Employees** window.



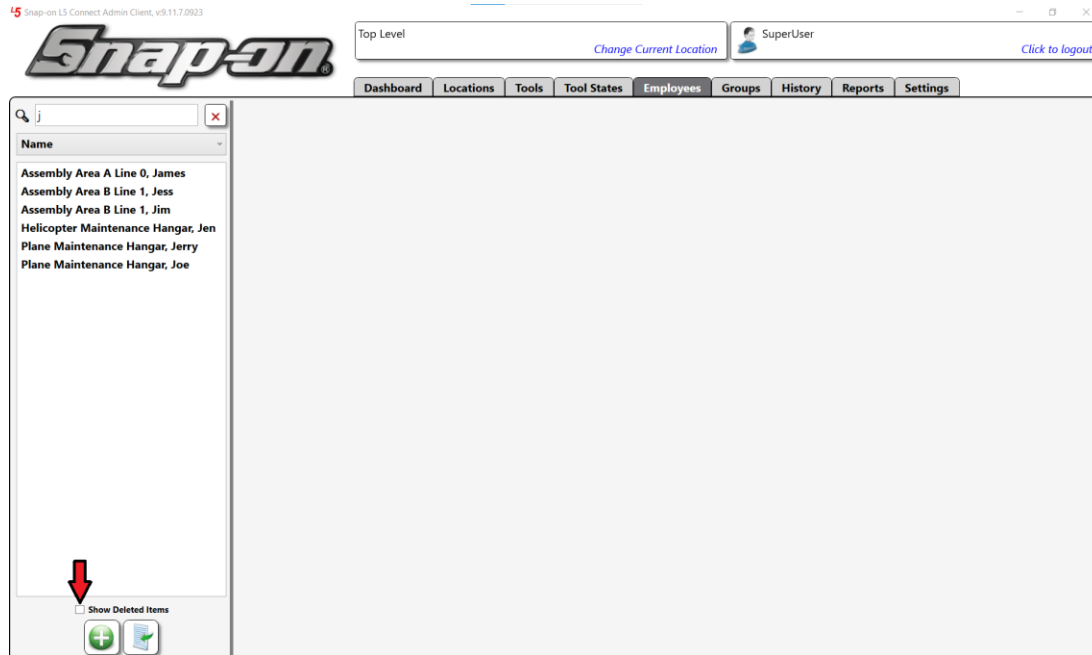


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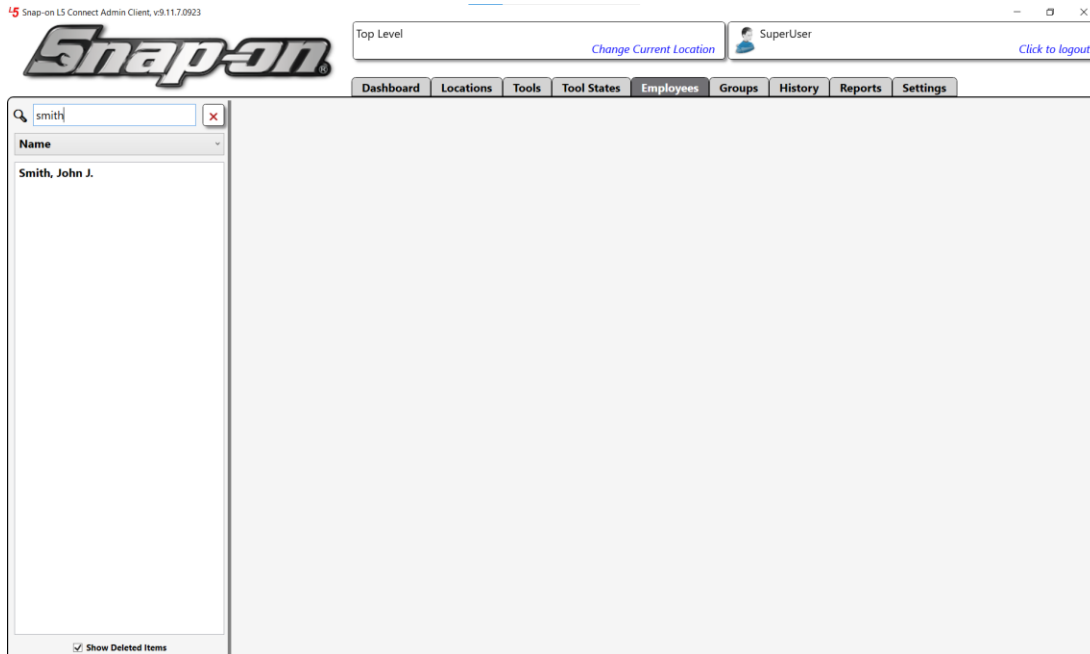
Restoring an employee

Suppose you have a returning user whose account has been deleted. In that case, you will need to restore the account.

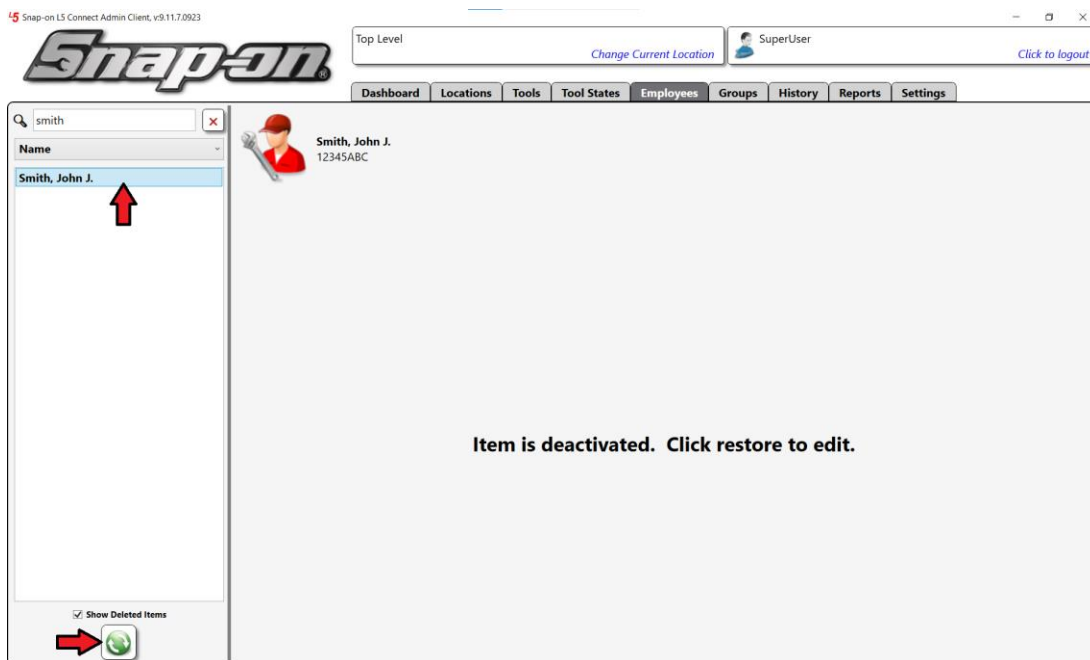
To restore the deleted account, you need to be on the Employees tab and click the **Show Deleted Items** checkbox.



Your employee list changes and shows all deleted accounts at your current location or any sub-locations below.



Select the user you wish to reactivate, then click the **Restore** button.



The user disappears from the list of deactivated employees. Now you need to uncheck the **Show Deleted Items** checkbox.



L5 Connect User Manual

5 Snap-on L5 Connect Admin Client, v9.11.7.0923

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

Name

Smith, John J.
12345ABC

Info Profiles Memberships Subscriptions Attachments

Last Name: Smith

First Name: John

M. Initial: J

Title:

Customer ID: 12345ABC

Email: jjsmith@contoso.com

Cell Phone: 5551239876

Carrier: AT&T

Home Location: R&D Lab

Language: Device Default

Admin Login

User Name: jjsmith

Badge Info

Badge ☒

Temp Badge ☒

Photo

☒ Show Deleted Items

The user has been reactivated. **NOTE: The user's permissions and badges are cleared when it is deleted. You will need to reassign permissions and badges to the user after you have completed the restoration.**



L5 Connect User Manual

Importing Employees from a Spreadsheet

If you have many users, adding them one-by-one can be time-consuming. To save time, L5 Connect™ can import a list of users into the system. By using an excel file (.xlsx), you can import all your users at once.

The tool properties that can be imported are:

Badge - The full hexadecimal value read from the HID badge of the employee

Customer ID - A unique customer supplied identifier for that employee

E-mail - E-mail address of the user to be used for system notifications

First Name - First name of the user

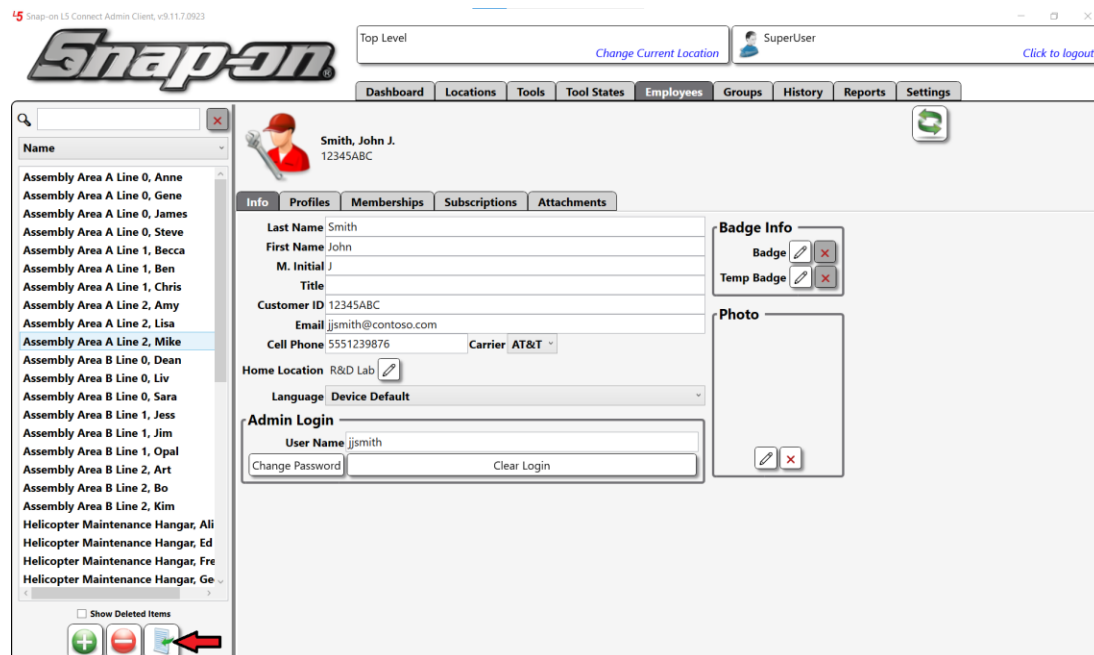
Last Name - Last name of the user (This field is required)

M. Initial - Middle initial of the user

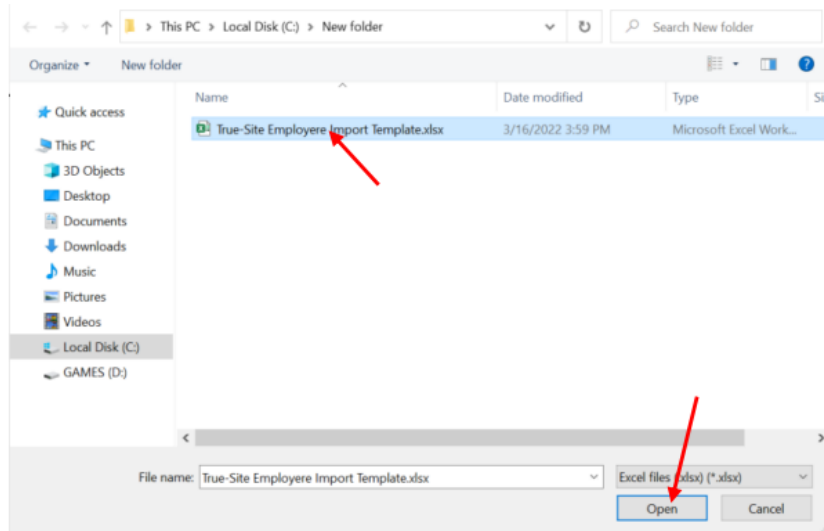
Title - Title of the user

Username - username of user (if he is an Admin)

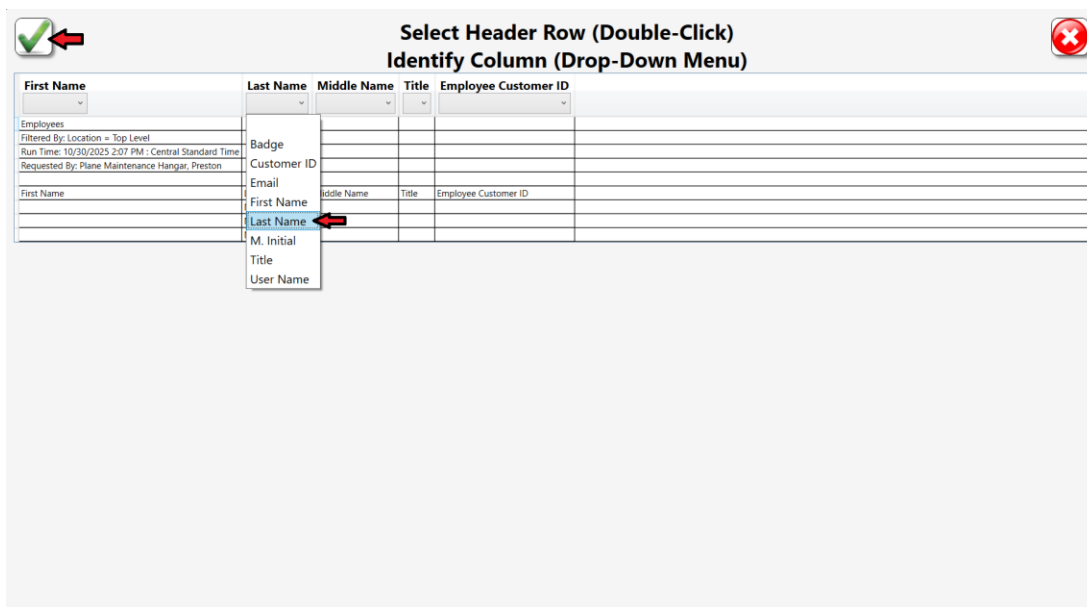
Once you have your file of employees ready, click on the **Import** button at the bottom left of the Employees tab.



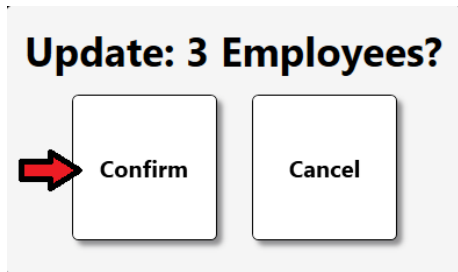
This will open a file dialog window. Browse to the location of the file. Once you have selected it, click Open.



Once open, the import window will display. Use the pull-downs to match the data in the columns with the Employee attribute to which it needs to be assigned.



Once you have matched all the columns with an attribute, click the ✓ button in the top left to start the import. You will then be prompted to confirm that you really want to import the specified number of employees. Click the **Confirm** button to continue the import.



Click the **OK** button to acknowledge the completion of the import and close the **Editing: Employees** window. If there were any errors, they will be reported here.

Upon successful completion, the users will be in the system. **NOTE: You will still need to assign these employees profiles at appropriate locations in the L5 Connect system as needed.**



L5 Connect User Manual

E-mail and text

For the L5 Connect™ service to send out any messages, you must configure L5 Connect™ to use a valid e-mail server and texting service. L5 Connect™ uses SMTP for e-mail and text. For more information on configuring SMTP in L5 Connect™ use the How to Setup SMTP Configuration document.

Configuring E-mail

You need to add at least one e-mail to the Employee so they can receive the notifications. You can set an Employee to have multiple e-mails separated by semi-colons.

Configuring text messaging

Text Messaging is configured on a per-employee basis and defined in the employee **Info** Sub-tab. First, input the number, including area code and without dashes (ex.5555555555), and select the carrier to which the number belongs. **NOTE: Due to cell carrier system changes, the text notifications feature is being sunset and may not function on current systems.**

The screenshot displays the Snap-on L5 Connect Admin Client interface. At the top, the Snap-on logo is on the left, and the user 'SuperUser' is logged in on the right. Below the logo is a search bar and a list of employees. The main content area shows the configuration for 'Smith, John J.' (ID: 12345ABC). The 'Info' tab is selected, showing fields for Last Name, First Name, M. Initial, Title, Customer ID, Email, Cell Phone, and Carrier. Red arrows point to the 'Cell Phone' and 'Carrier' fields. The 'Badge Info' section shows 'Badge' and 'Temp Badge' fields. The 'Admin Login' section shows 'User Name' and 'Change Password' fields. The 'Photo' section is empty.

Groups

Groups allow an administrator to easily assign permissions to a set of Employees who are members of a group instead of setting those permissions on each Employee individually. This simplifies access management as you can move Employees out of a group if they no longer need the group's permissions. For example, an employee belongs to the Administrators group but is transferred to the Auditing team. Suppose you move that Employee out of the Administrators group and into the Auditors group. In that case, their permissions will be automatically changed to reflect their new role.

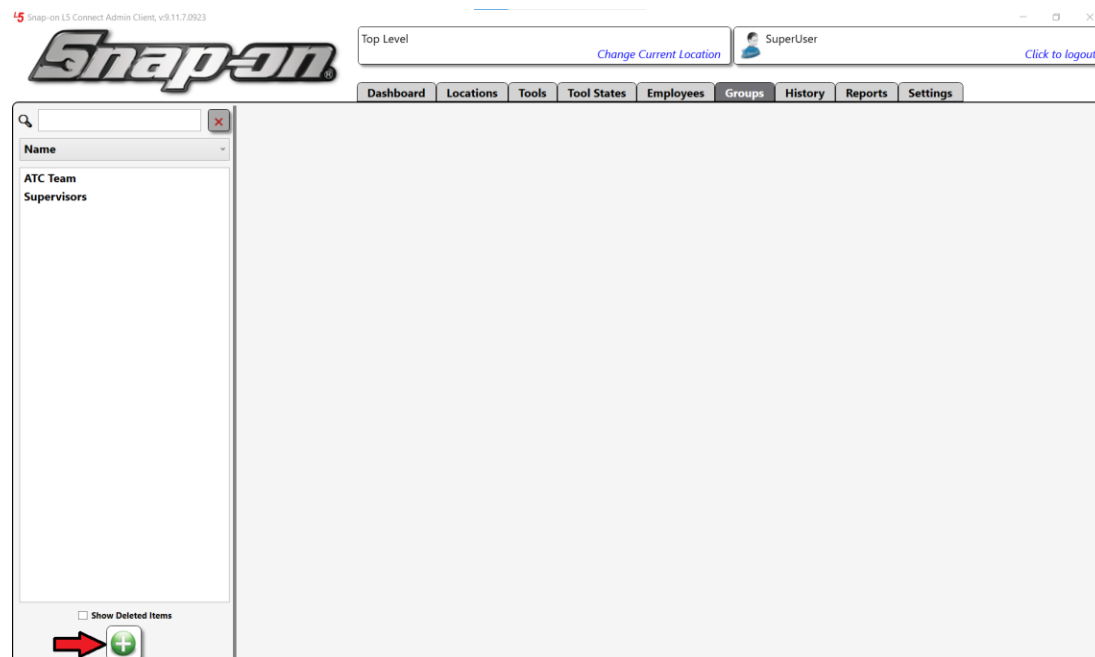
You should set permissions to groups and then assign users to those groups, as setting permissions on Employees can become challenging to manage if you have many users.

Creating a Group

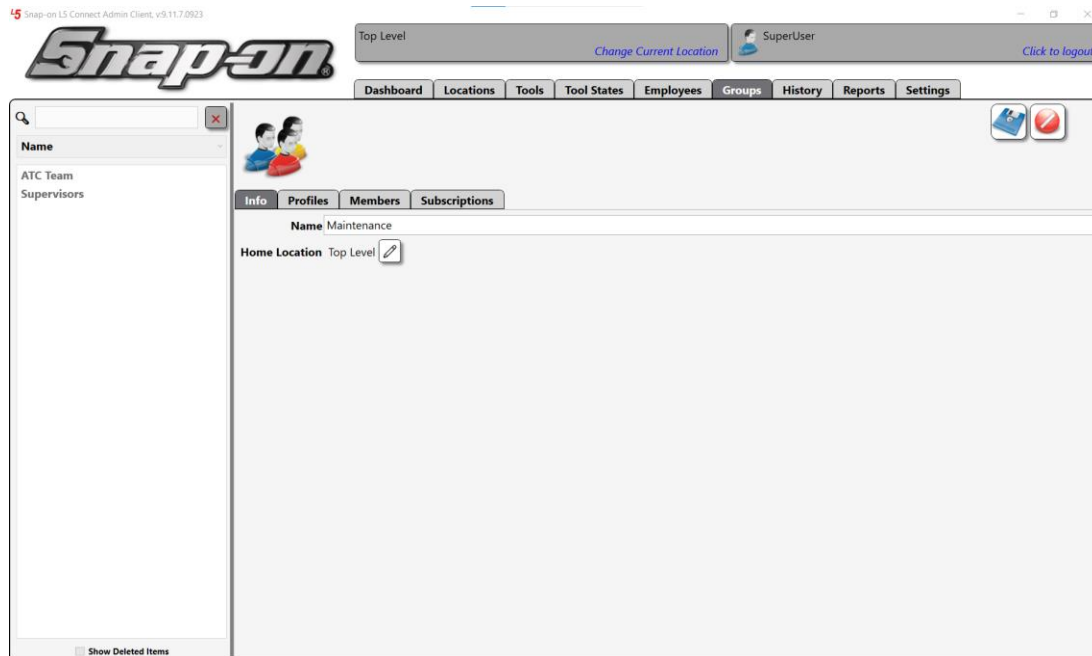
To create a group, you will need to have the appropriate administrative permissions for the location you wish to make the group. Once you have determined you have the appropriate permissions, you are ready to begin.

For this example, you need to create a group for the Maintenance Team within the Maintenance Location.

Click on the Groups Tab to bring up the Groups screen in the Administration Client. Then, on the bottom left of the Groups screen, click on the green **New** button. This will open the Group settings window.



In the Name textbox, enter the desired name of the group. For this example, you will be creating a group for your Maintenance team, so you set the **Name** to **Maintenance**. **Note: Group names must be unique.**



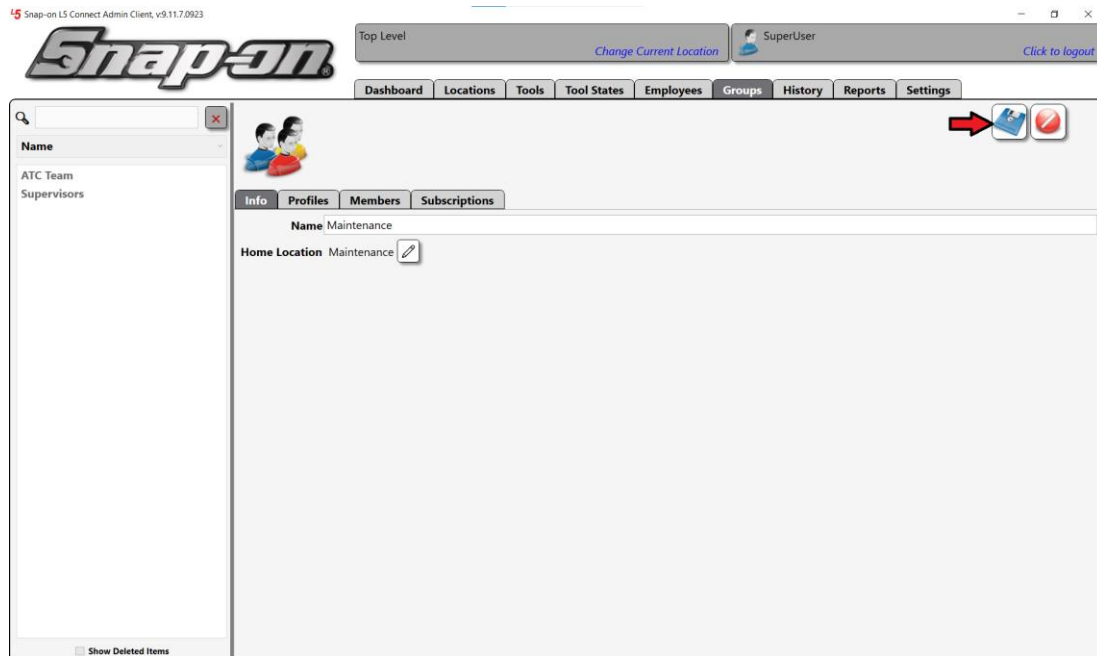
Next, set the Home Location by clicking on the **Change** button that looks like a pencil to open the location selection screen. Select the location where you want to place the group. In this case, the group represents the Maintenance team, so you want to place it at the Maintenance location. Once you have the Location highlighted, click on the green check at the bottom to confirm the Location. When creating a group, the Home Location will default to your Current Location. For more information, please see the L5 Connect™ Locations document.



Click the blue **Save** button to finish creating the group.



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You will see the newly created group listed on the group List on the left side of the screen.



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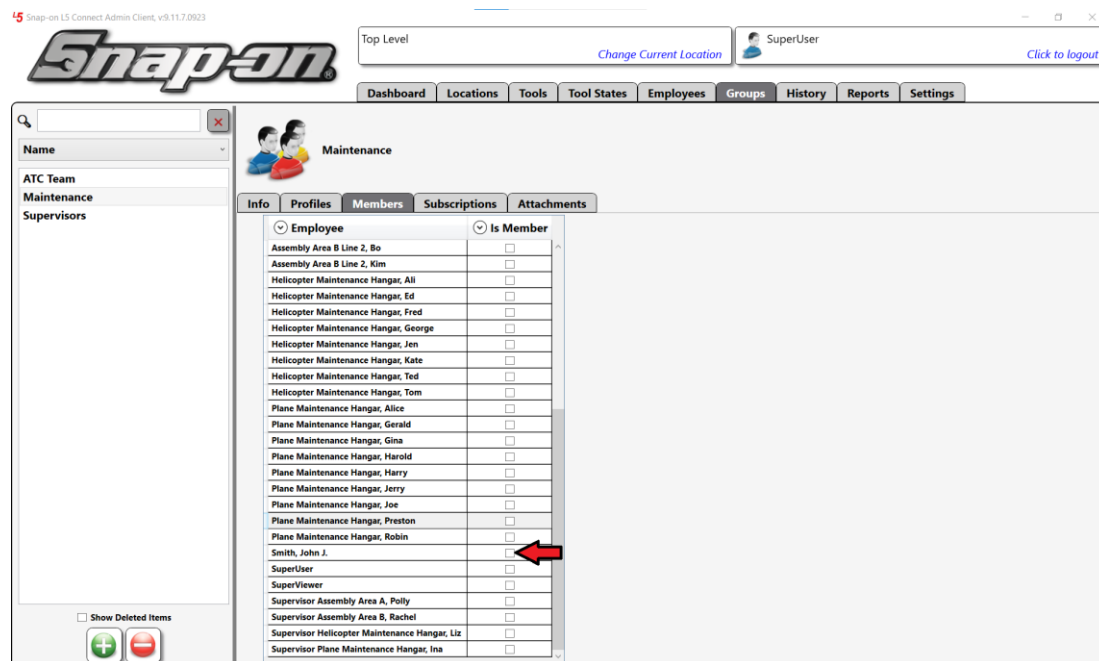
Editing a Group

To edit a group, you need to select it, make any required changes, and then click the SAVE button.

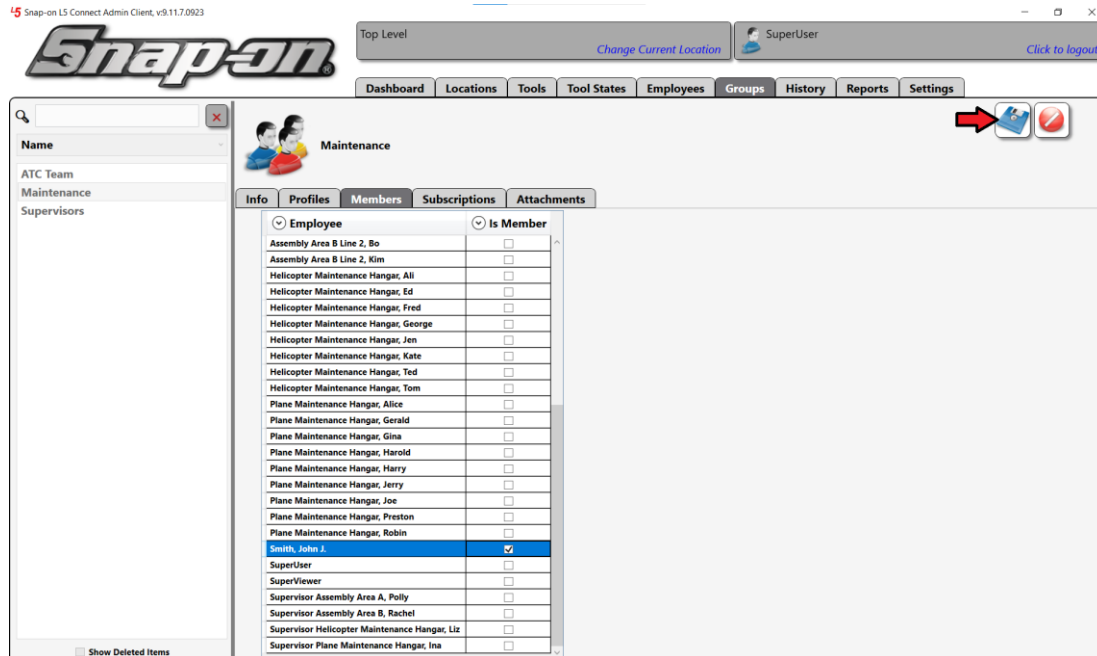
NOTE: The save and cancel icons will not appear until you make a change to the group.

Adding/Removing Employees to a Group

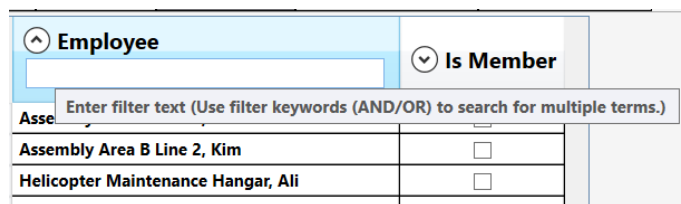
Select the Members sub-tab on the Groups tab to add an Employee to the group. Find the Employee you want to add to the group from the list, then check the Is Member check box. Add John J. Smith to the Maintenance group.



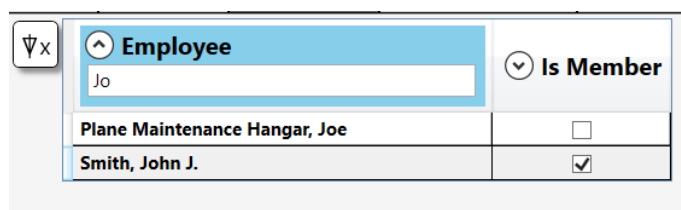
Click on the blue **Save** button to save our changes.



If you have many users, you can filter the list by clicking on the **Filter** button.



You can then start typing a name, and the list will automatically filter based on the text in the box. To clear a filter, click the **Clear Column Filters** button on the left side of Employee Name.



To remove an employee from the group, uncheck the **Is Member** checkbox by their name.

Alternatively, you could add an employee to a group from the **Employees** tab. On the Employees tab you would select the employee you wish to add to the group and then select the **Memberships** sub-tab.

5 Snap-on L5 Connect Admin Client, v9.11.7.0923

Snap-on

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

Search: joh

Name: Smith, John J.

Smith, John J.

Smith, John J. 12345ABC

Info Profiles Memberships Subscriptions Attachments

Last Name: Smith
First Name: John
M. Initial: J
Title:
Customer ID: 12345ABC
Email: jsmith@contoso.com
Cell Phone: 5551239876 Carrier: AT&T
Home Location: R&D Lab
Language: Device Default

Badge Info
Badge ☐ ☐
Temp Badge ☐ ☐

Photo

Admin Login
User Name: jsmith
Change Password Clear Login

☐ Show Deleted Items

Then find the group to which you want to add the employee and check the **Is Member** checkbox.

5 Snap-on L5 Connect Admin Client, v9.11.7.0923

Snap-on

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

Search: joh

Name: Smith, John J.

Smith, John J.

Smith, John J. 12345ABC

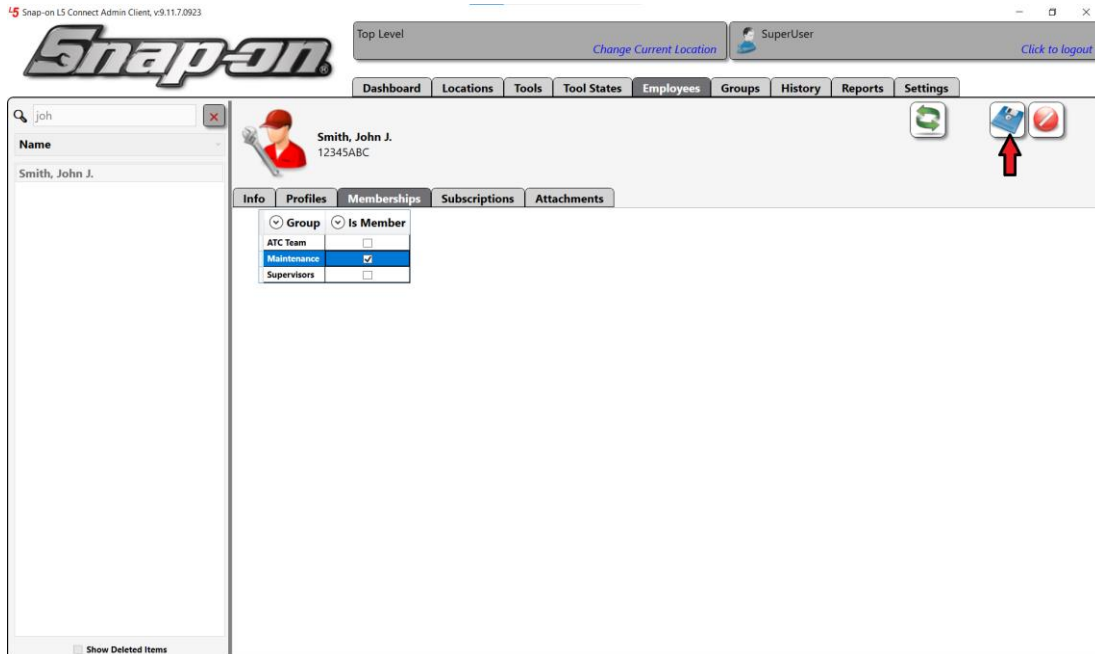
Info Profiles Memberships Subscriptions Attachments

Group Is Member

ATC Team	<input type="checkbox"/>
Maintenance	<input checked="" type="checkbox"/>
Supervisors	<input type="checkbox"/>

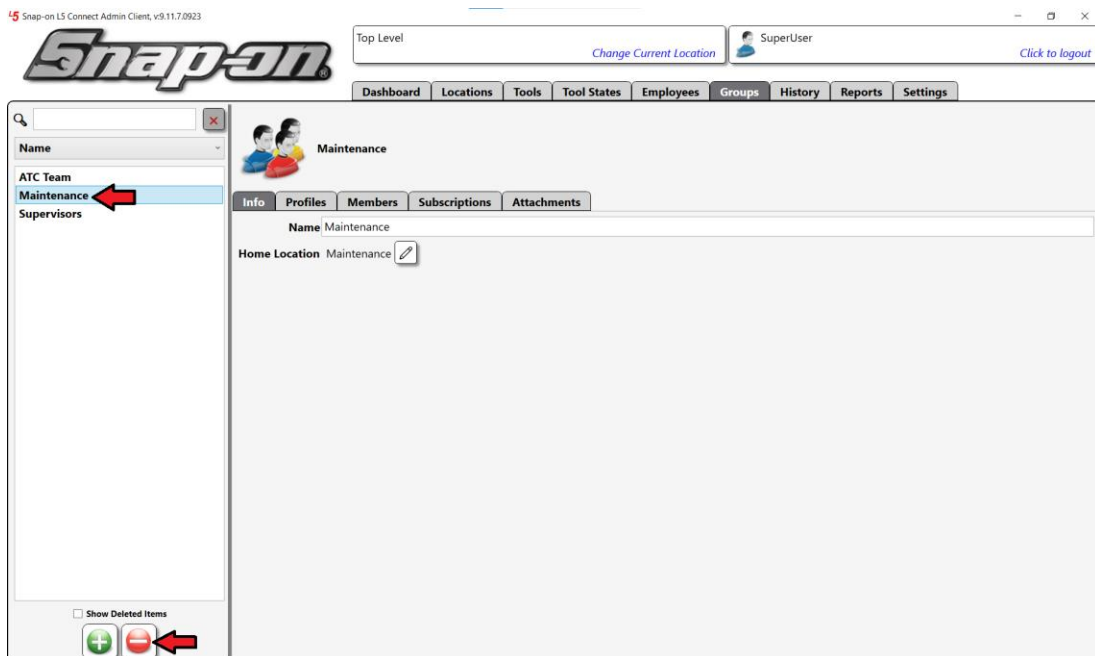
☐ Show Deleted Items

Finally, click the blue **Save** button.



Deleting a Group

When a group is no longer needed, you can remove that group from the system. To delete the group, make sure you are on the Groups Tab. Then select the group you want to delete from the list on the left side, then click on the red **Delete** button at the bottom of the list.





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You will then be prompted to confirm that you want to delete this group. Click **Yes**.

Are you sure you want to delete Maintenance?

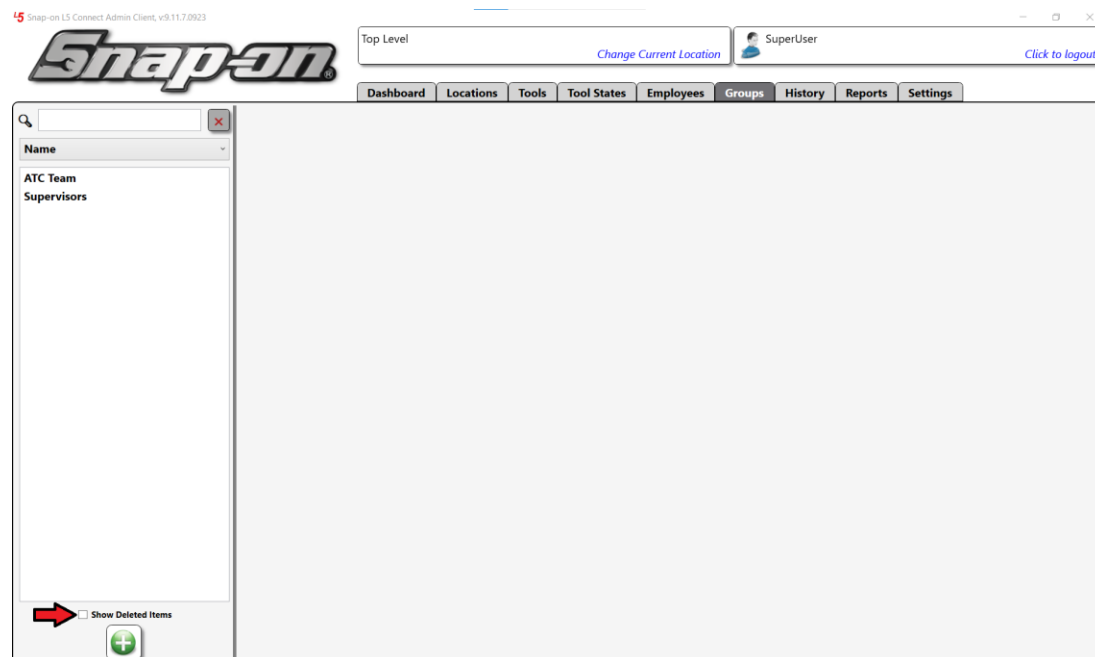
Yes

No

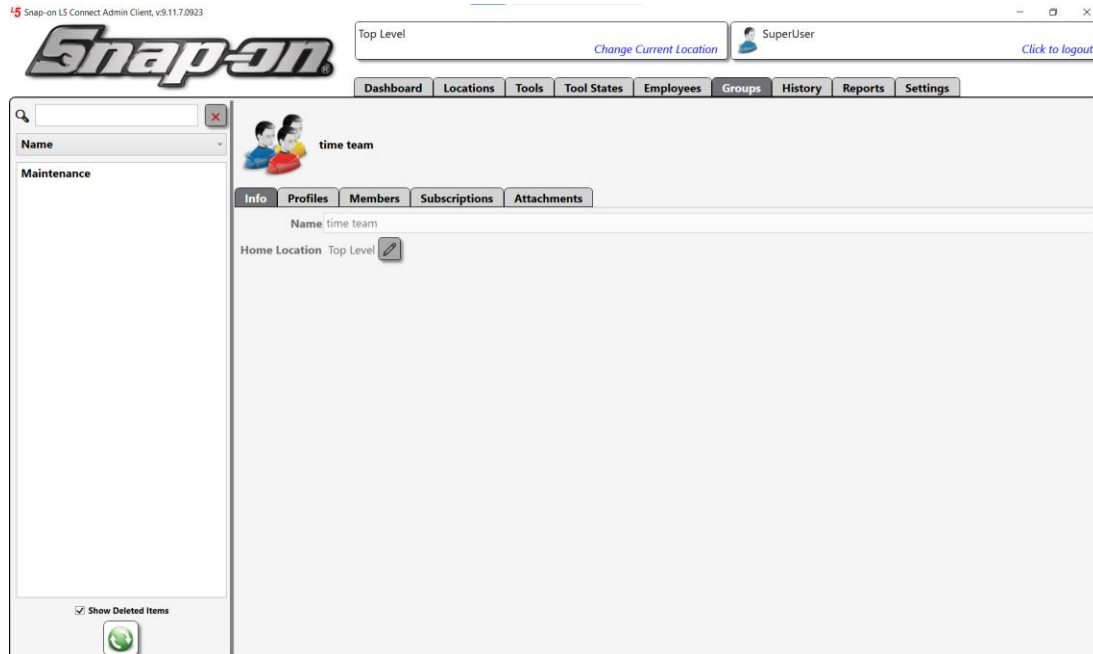
The group has now been deleted.

Restoring a Deleted Group

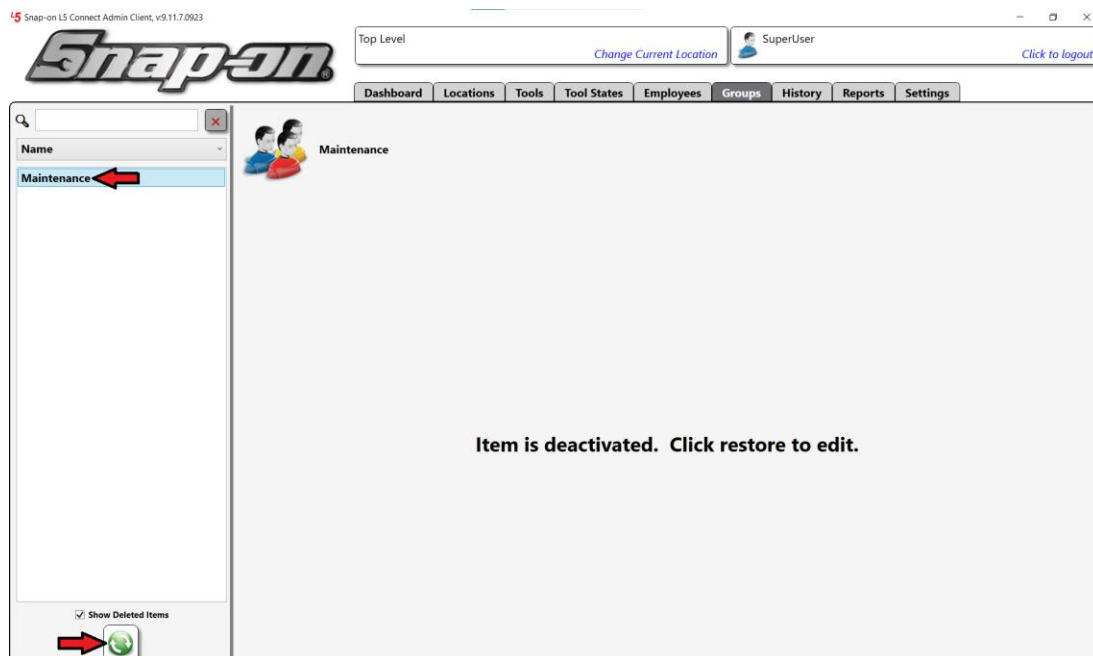
When you delete a Group, it is not removed from the system. Instead, it is deactivated to preserve event history. To restore the group, you must check the **Show Deleted Items** on the main group page found under the group list on the left side.



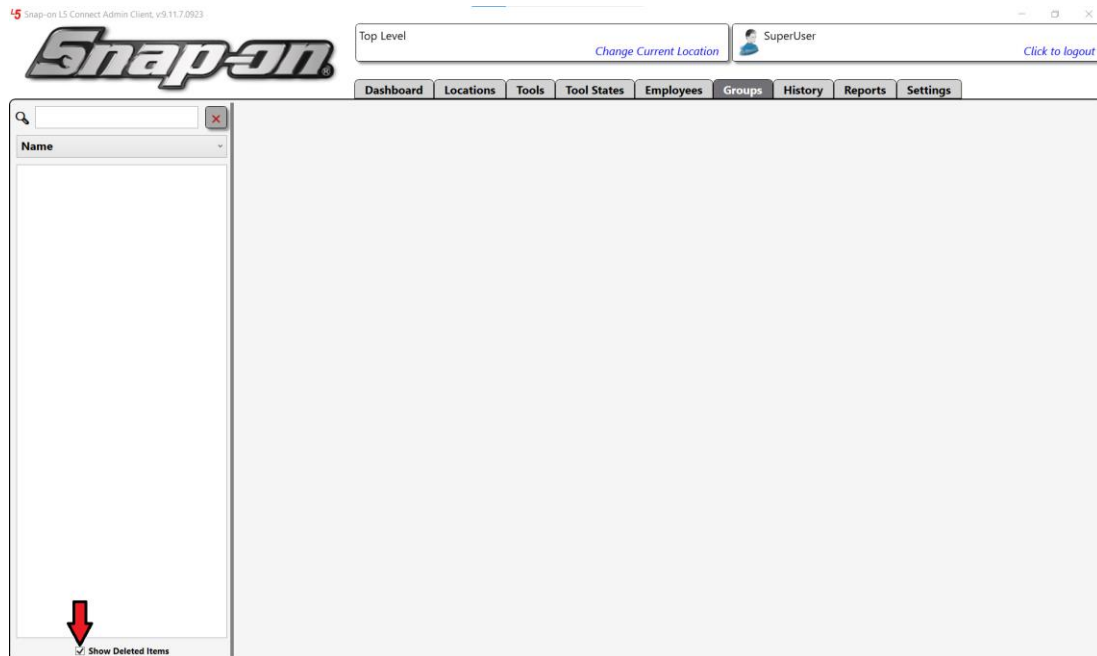
Once you have checked the box, you will see all groups that have been deleted. **NOTE: If you are not at the top level of the location tree, you will not see all deleted groups. You will only see groups at your current level and any sub-location levels.**



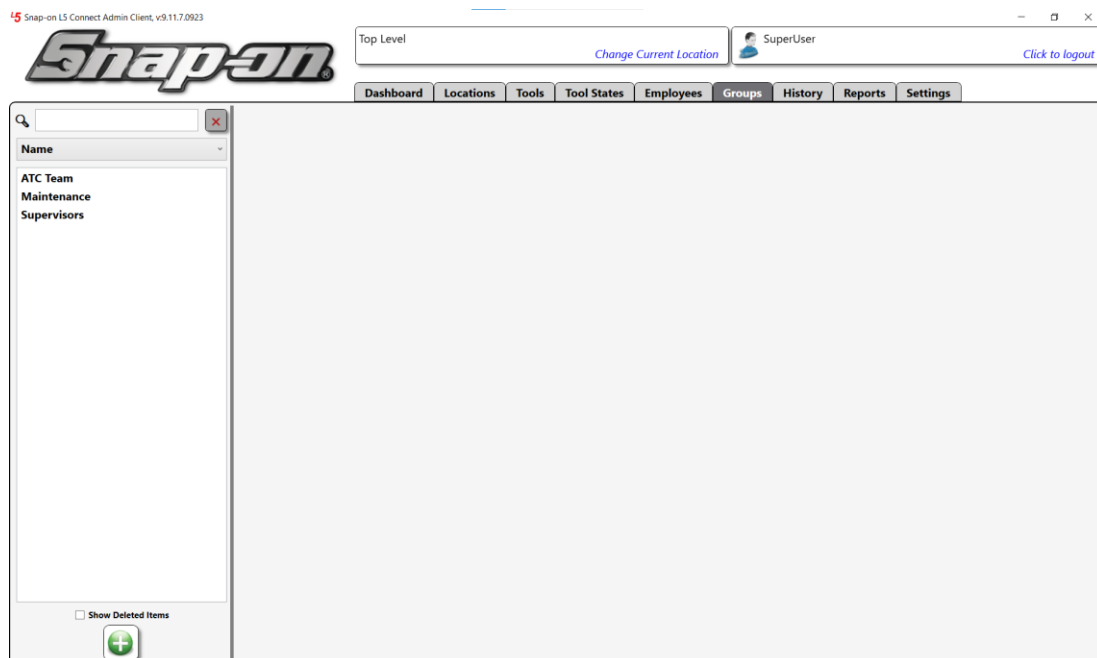
Select the group you want to restore, click on the green **Restore** button.



Uncheck the **Show Deleted Items** checkbox to see the active groups list.



Your group has been restored.



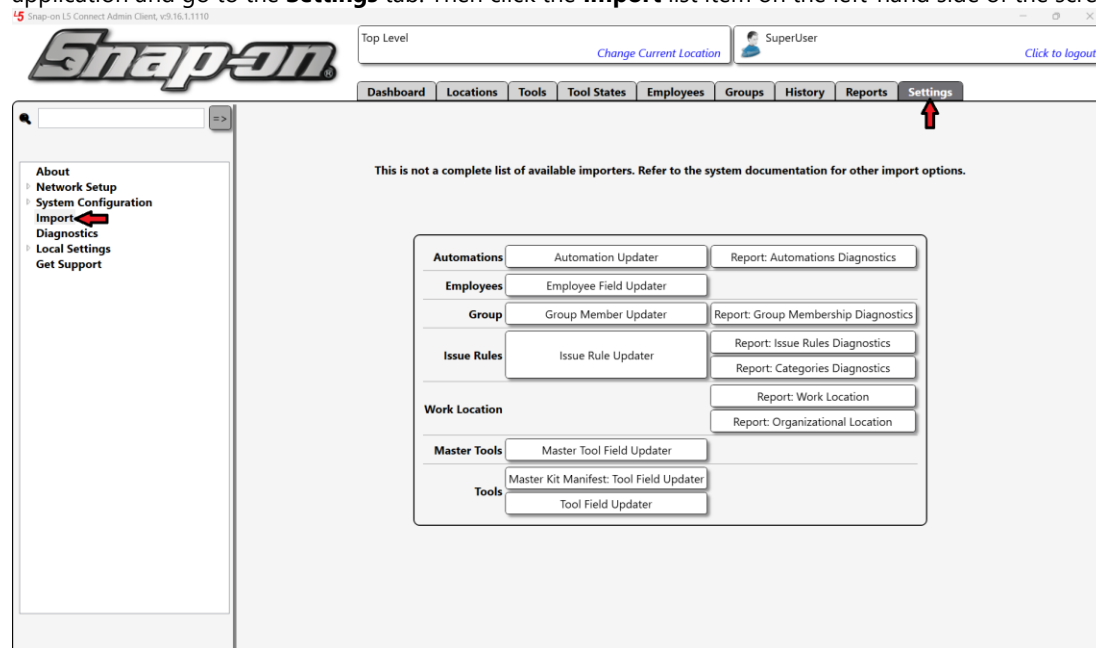
NOTE: When a Group is deleted, all assigned profiles, permissions, and members are cleared. When it is restored, these will need to be added back manually.

Group Member Updater

The L5 Connect system provides a way to update group membership through importing a spreadsheet. The only thing you can update with the method is currently existing employee membership in currently existing groups. You cannot delete or add new groups or employees.

Creating the Spreadsheet for Import

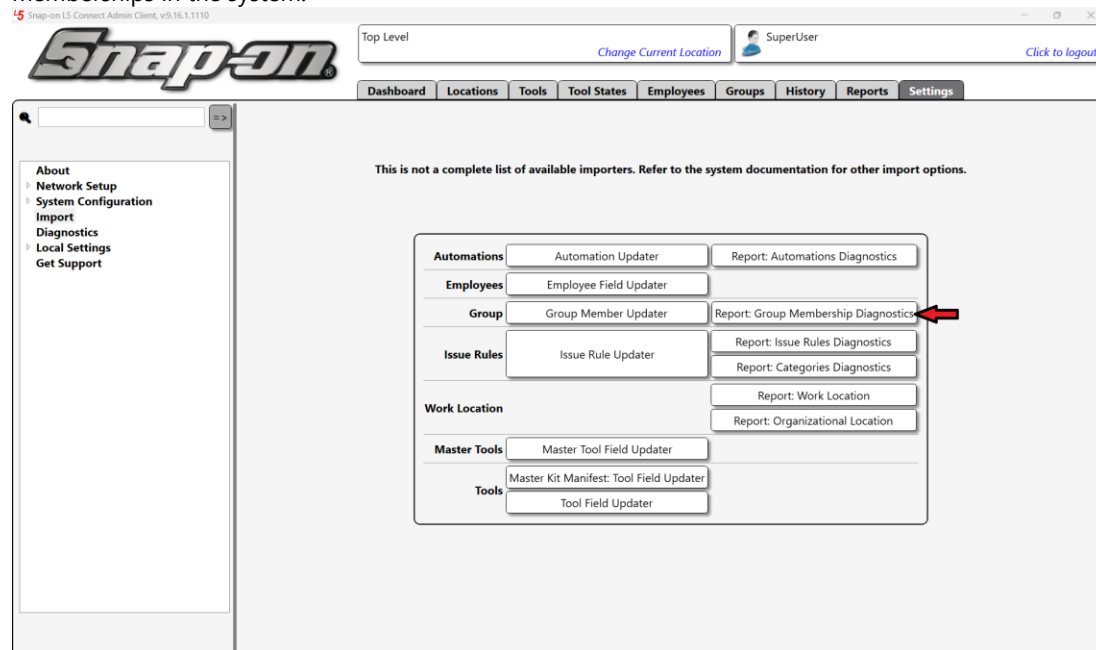
The first step is to create the Excel spreadsheet you will need to import the group membership data. Open the Admin application and go to the **Settings** tab. Then click the **Import** list item on the left-hand side of the screen.





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Click the **Report: Group Membership Diagnostics** button to run a report that will give a current list of group memberships in the system.



The export option of the report defaults to Xlsx format so all you need to do to export the data to an Excel file is click the **Export** button, which looks like a blue disk.

Group Membership Diagnostics

Filtering

Sticky Filters: Location = Top Level
Run Time: 11/14/2025 3:47 PM : Central Standard Time

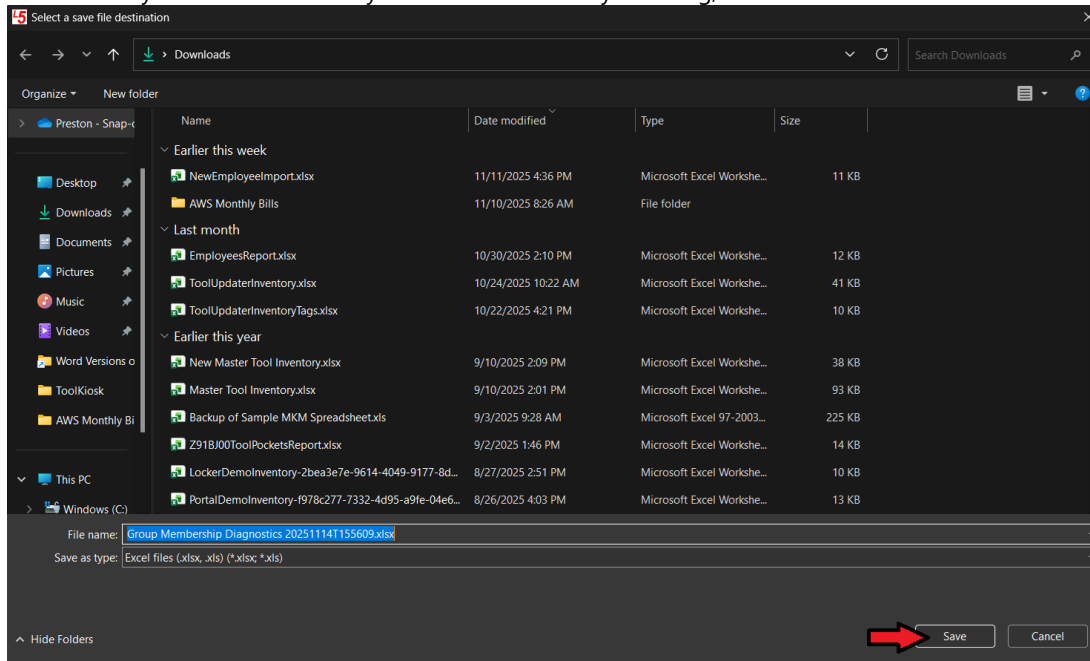
☐ Auto-Refresh

Group	Group ID	Employee	Employee ID
ATC Guys	1		
ATC Team	2		
Jackson 5	5		
Maintenance	7	Assembly Area A Line 0, Anne	31
Maintenance	7	Assembly Area A Line 0, Gene	30
Maintenance	7	Assembly Area A Line 0, Jerry	32
Maintenance	7	Assembly Area A Line 0, Steve	72
Maintenance	7	Assembly Area A Line 1, Becca	35
Maintenance	7	Assembly Area A Line 1, Ben	33
Maintenance	7	Assembly Area A Line 1, Chris	34
Maintenance	7	Assembly Area A Line 2, Amy	37
Maintenance	7	Assembly Area A Line 2, Lisa	36
Maintenance	7	Assembly Area A Line 2, Mike	38
Maintenance	7	Assembly Area B Line 0, Dean	41
Maintenance	7	Assembly Area B Line 0, Liv	39
Maintenance	7	Assembly Area B Line 0, Sara	40
Maintenance	7	Assembly Area B Line 1, Jess	42
Maintenance	7	Assembly Area B Line 1, Jim	43
Maintenance	7	Assembly Area B Line 1, Opal	44
Maintenance	7	Assembly Area B Line 2, Art	45
Maintenance	7	Assembly Area B Line 2, Bo	47
Maintenance	7	Assembly Area B Line 2, Kim	46
Maintenance	7	Helicopter Maintenance Hangar, Ali	16
Maintenance	7	Helicopter Maintenance Hangar, Ed	13
Maintenance	7	Helicopter Maintenance Hangar, Fred	17
Maintenance	7	Helicopter Maintenance Hangar, George	10
Supervisors	6	Supervisor Assembly Area A, Polly	28
Supervisors	6	Supervisor Assembly Area B, Rachel	29
Supervisors	6	Supervisor Helicopter Maintenance Hangar, Liz	26
Supervisors	6	Supervisor Plane Maintenance Hangar, Ina	27
Team Chopper	3		



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You will then see a file save dialog window where you can set the file name and directory to which the file will be saved. Once you have the directory and file name set to your liking, click the **Save** button.



The file should then be opened for you in Excel. Notice that There are four columns in the data, **Group**, **Group ID**, **Employee**, and **Employee ID**. The group and employee fields are included for ease of understanding what the IDs represent. When doing the import, the only columns that will actually be imported are the **Group ID** and the **Employee ID**.

Group Membership Diagnostics			
Filtered By: Location = Top Level			
Run Time: 11/14/2025 3:56 PM : Central Standard Time			
Requested By: Plane Maintenance Hangar, Preston			
Group	Group ID	Employee	Employee ID
ATC Team	2		
Maintenance	7	Assembly Area A Line 0, Anne	31
Maintenance	7	Assembly Area A Line 0, Gene	30
Maintenance	7	Assembly Area A Line 0, Jerry	32
Maintenance	7	Assembly Area A Line 0, Steve	72
Maintenance	7	Assembly Area A Line 1, Becca	35
Maintenance	7	Assembly Area A Line 1, Ben	33
Maintenance	7	Assembly Area A Line 1, Chris	34
Maintenance	7	Assembly Area A Line 2, Amy	37
Maintenance	7	Assembly Area A Line 2, Lisa	36
Maintenance	7	Assembly Area A Line 2, Mike	38
Maintenance	7	Assembly Area B Line 0, Dean	41
Maintenance	7	Assembly Area B Line 0, Liv	39
Maintenance	7	Assembly Area B Line 0, Sara	40
Maintenance	7	Assembly Area B Line 1, Jess	42
Maintenance	7	Assembly Area B Line 1, Jim	43
Maintenance	7	Assembly Area B Line 1, Opal	44
Maintenance	7	Assembly Area B Line 2, Art	45
Maintenance	7	Assembly Area B Line 2, Bo	47
Maintenance	7	Assembly Area B Line 2, Kim	46
Maintenance	7	Helicopter Maintenance Hangar, Ali	16
Maintenance	7	Helicopter Maintenance Hangar, Ed	13
Maintenance	7	Helicopter Maintenance Hangar, Fred	17
Maintenance	7	Helicopter Maintenance Hangar, George	10
Supervisors	6	Supervisor Assembly Area A, Polly	28
Supervisors	6	Supervisor Assembly Area B, Rachel	29
Supervisors	6	Supervisor Helicopter Maintenance Hangar, Liz	26
Supervisors	6	Supervisor Plane Maintenance Hangar, Ina	27



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Notice the first group, **ATC Team**. This group has an ID of 2 but there are no employees associated with it. This means that the group currently does not have any employees assigned to it in the system. Meanwhile, the **Maintenance** group has lots of employees assigned to it.

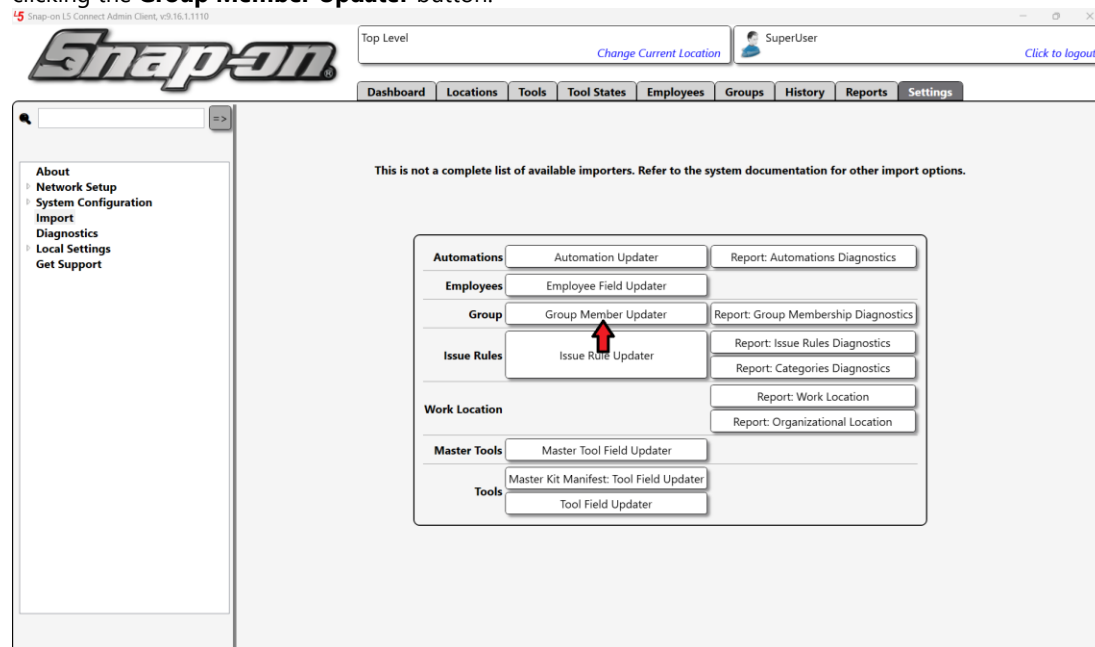
If you wanted to remove an employee from this group who had left the company, you would only need to delete the line with that employee ID and then import the data with the **Group Member Updater**.

If you wanted to delete all the employees from the group you would replace the list of all the employees with a line that just had the group ID similar to the ATC Team group. Then all the employees would be removed from the Maintenance group.

NOTE: Whatever employees you have defined for a group in the import will replace whatever the previous group membership was.

Importing the Updates

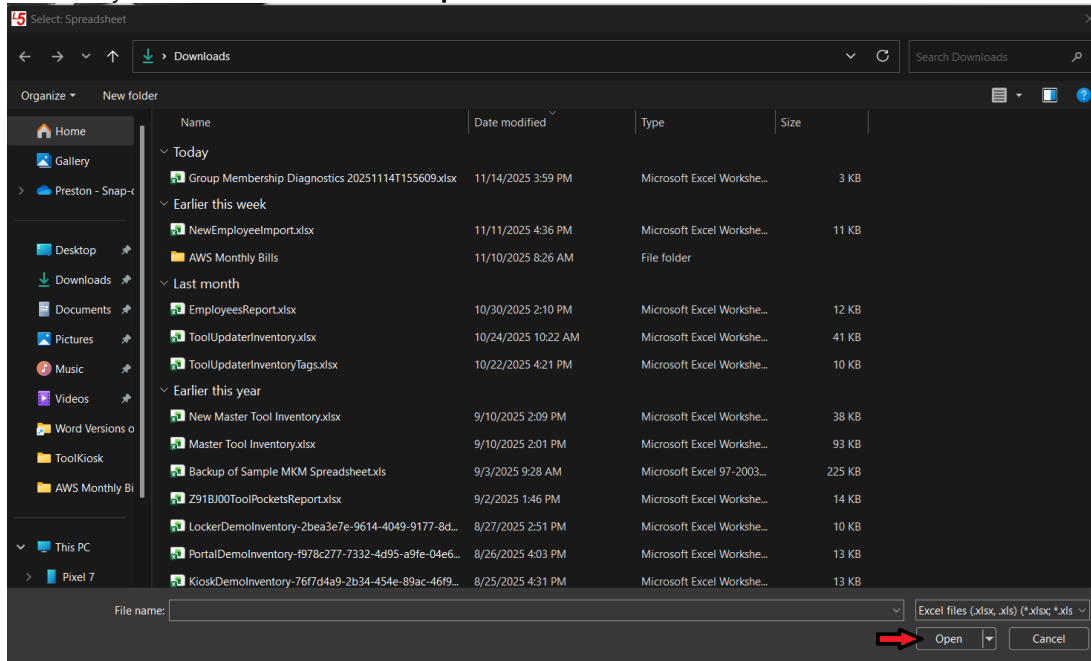
Once you have modified your spreadsheet to reflect the desired group memberships, you would begin the import by clicking the **Group Member Updater** button.



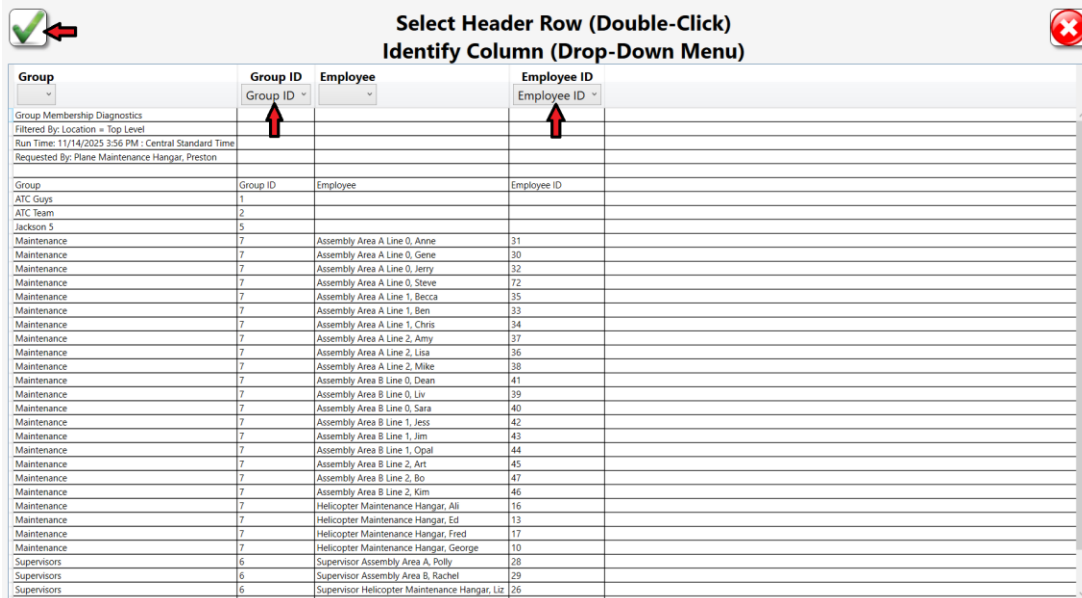


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You will then be prompted to with a file select dialog window to select the directory and filename of the spreadsheet file. Once you have done that, click the **Open** button.



Now the importer window will be displayed. You will need to map the **Group ID** and **Employee ID** tags to the appropriate columns in the spreadsheet. Once this is done, click the **OK** button that looks like a green checkmark.



This will start the actual importing of the data. Once complete, your group membership will be updated.



L5 Connect User Manual

Default and Custom Profiles and Permissions

With Locations, you can logically organize L5 Connect™ resources to make managing and delegating tasks and assignments much easier. But how do you determine what a specific Employee can and cannot do within a particular location? That is where Profiles come into play.

A **Profile** is a set of pre-configured permissions that can be assigned to either Employees or Groups and is used to define a job role within the system.

Permissions are organized into categories. Each category will have a list of actions that you can grant to a profile. These categories are:

- **Employees** – Permissions for managing employee access
- **Locations** – Permissions for managing location objects
- **Groups** – Permissions for managing groups
- **Devices** – Permissions for L5 Connect™ Devices
- **Status** – Permissions for the Device States and Status
- **System Configuration** – Permissions for Global L5 Connect™ Configuration
- **Tools** – Permissions for tools
- **Reports** – Permissions for custom and built-in reports

You can see the complete list of permissions in the Complete Permissions List.

Default Profiles

There are already five built-in profiles in the system. These Profiles are:

- **SUPERUSER** – This Profile is granted every permission in the system. It is usually reserved for the IT or Technical Engineer in charge of the system. This is the only default profile that can make system-level changes. To function correctly, an Employee with admin access must be assigned this Profile at the Top Level of the Location Tree.
- **SUPERVIEWER** – This Profile is granted all visibility permissions but cannot make any changes. This role is helpful for management that wants to see everything but does not plan on administration of the system.
- **ADMINISTRATOR** – This Profile is granted most administrative permissions but cannot make system-level changes. This role is reserved for an area or department supervisor who needs complete control of the users and devices in specific locations.
- **MAINTENANCE** – This Profile is granted limited administrative permissions to devices and reports. This role is designed for the maintenance team to keep the L5 Connect™ devices working online.
- **SYSTEM USER** – This Profile is granted the basic permissions to the system, with no access to administrative functions. This role allows a user to access ATC Devices in a location for tool issues and returns.

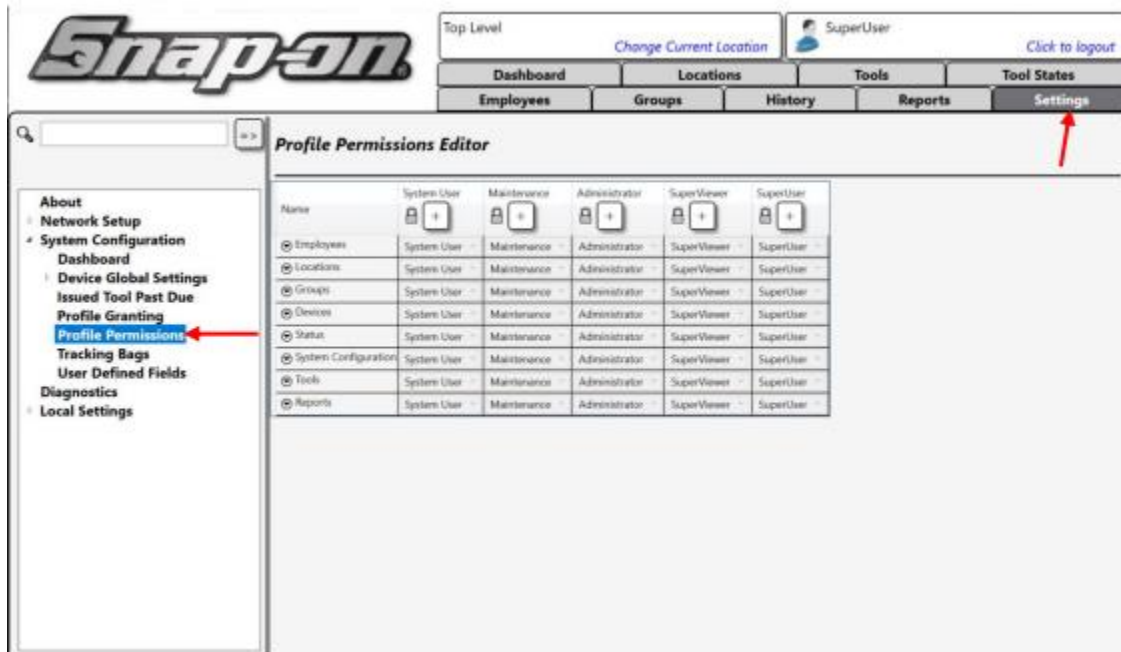
NOTE: These default Profiles cannot be edited or deleted.

Custom Profiles

The five default profiles should cover most roles needed to operate L5 Connect™ in an organization. Yet sometimes you may have a specific job role in your organization that the default profiles do not cover. In such cases, you need to create your own custom set of permissions by creating a Custom Profile. For example, your company needs a profile with more permissions than the Standard user but not an Administrator. You want to call this role Power User. This will require you to make a new Profile, as none of the built-in ones will fulfill this need.

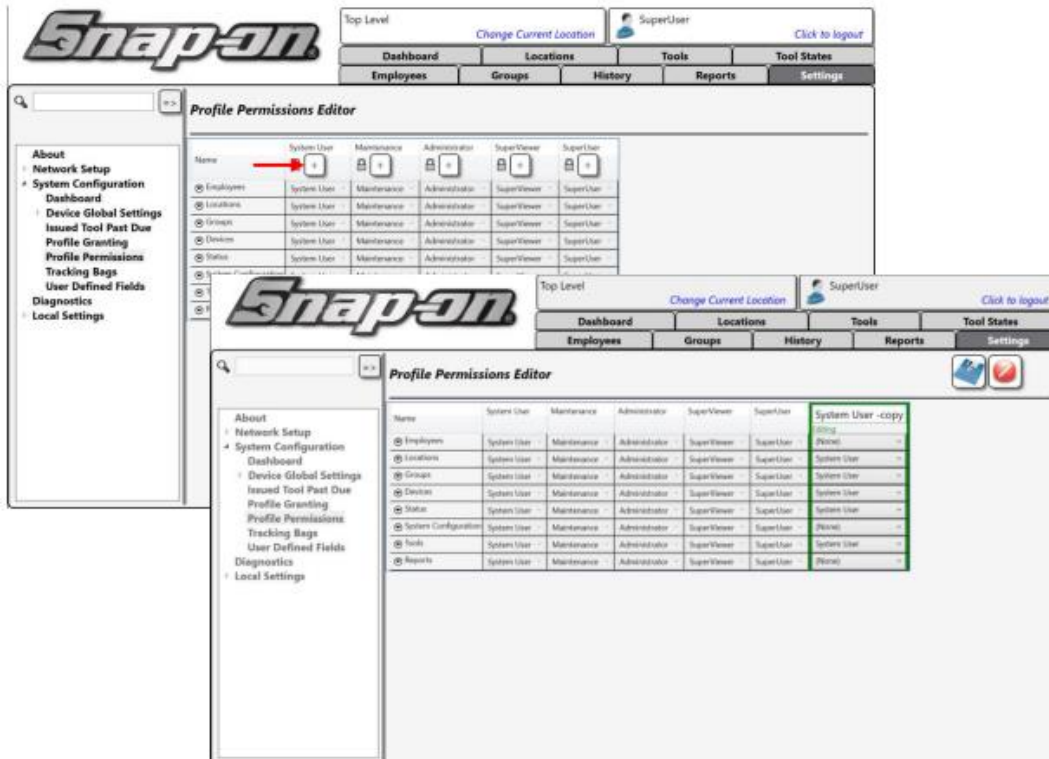
Creating the Custom Profile

1. Creating a Profile is done within the Profile Permission Editor. To access the editor, you must click on the Settings Tab in the L5 Connect™ Admin Client. Once there, on the left side of the screen, expand System Configuration, then select Profile Permissions.

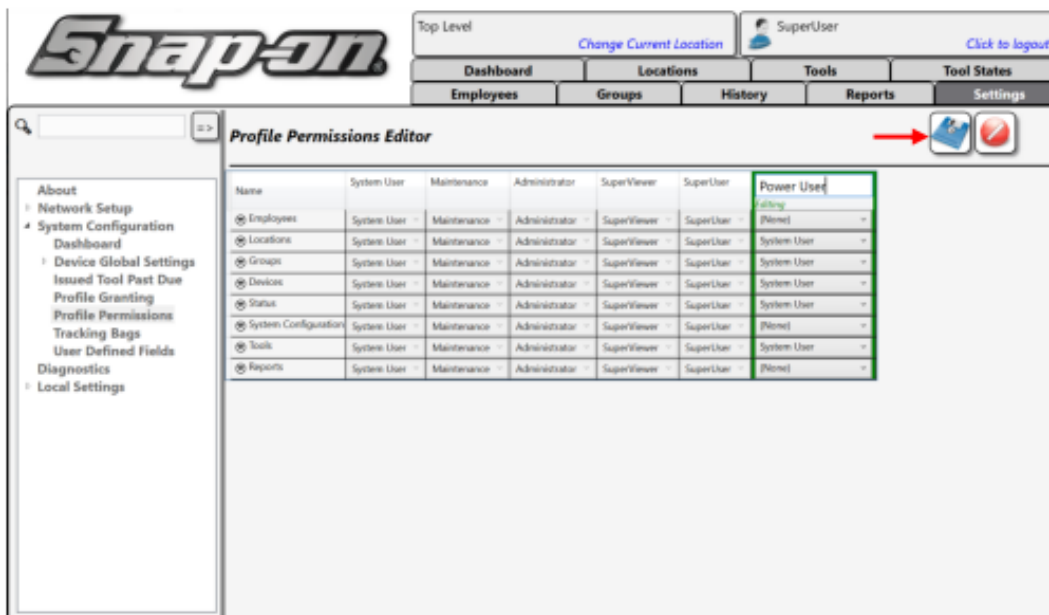


Name	System User	Maintenance	Administrator	SuperViewer	SuperUser
Employees	System User	Maintenance	Administrator	SuperViewer	SuperUser
Locations	System User	Maintenance	Administrator	SuperViewer	SuperUser
Groups	System User	Maintenance	Administrator	SuperViewer	SuperUser
Devices	System User	Maintenance	Administrator	SuperViewer	SuperUser
Status	System User	Maintenance	Administrator	SuperViewer	SuperUser
System Configuration	System User	Maintenance	Administrator	SuperViewer	SuperUser
Tools	System User	Maintenance	Administrator	SuperViewer	SuperUser
Reports	System User	Maintenance	Administrator	SuperViewer	SuperUser

- On this screen, you will see all the current profiles in the system. Right now, you only have the default available. To create the new custom profile, you will need to select one of the defaults that match your needs as closely as possible. In this case, you will be creating our custom profile based on the System User Profile. Click the + icon under System User. This will create a copy of the System User profile that you can modify.



- Rename the Profile to **Power User**, then click on the **Blue save** button.



4. You will be presented with a message box informing you that the new Profile must be set in the Profile Granting screen before use. More information about Profile granting will be later in this section. Click **OK**.



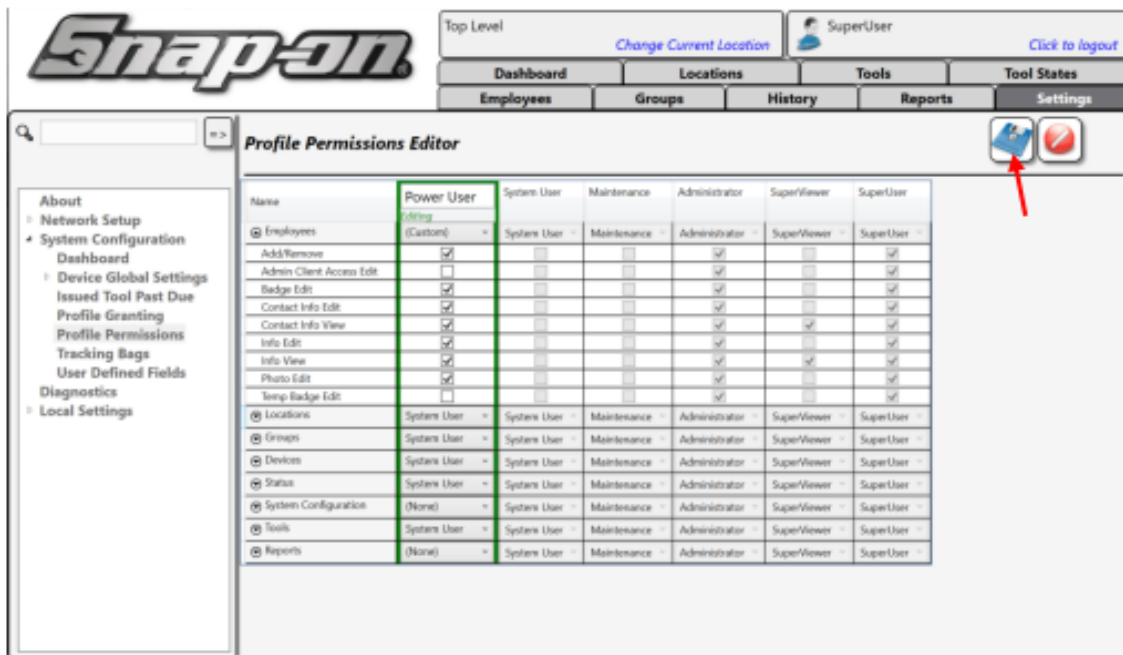
5. The Profile is now created. Right now, it's just a copy of System User; you need to customize the permissions to reflect the role you want this Profile to serve.



- Click on the **pencil** icon for **Power User** to enter edit mode.



- When in edit mode, you can only change the currently selected Profile. Give this user the ability to add employees and update their badges. You do not want them to grant admin access, nor do you want them to give out Temp Badges. All other permissions should be the same as System User. So, the new permissions should look like this. Click the **Blue save** button to commit the changes.



8. If you want to delete a profile, click on the **X** icon under the Profile's name. Then save your changes.



Common Custom Profiles

Here are a few custom profiles that you might want to create.

Tool Crib Attendant

To create a **Tool Crib Attendant** profile, you would make a copy of the profile that most closely matches what you would like your attendant to have and then add the **Tool Crib Attendant** permission from the **Locations** group.

Tool Courier

To create a **Tool Courier** profile, you would make a copy of the system user profile and add the **Tool Courier** permission from the **Devices** group.

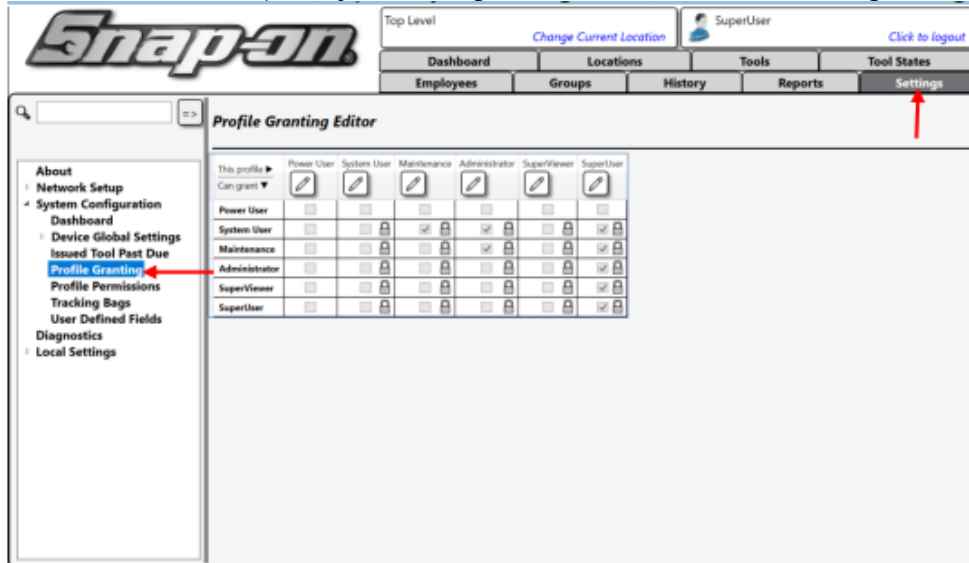
Cal Lab Tech

To create a **Cal Lab Tech** profile, you would make a copy of the maintenance profile and add the **Info Edit** permission from the **Tools** group.

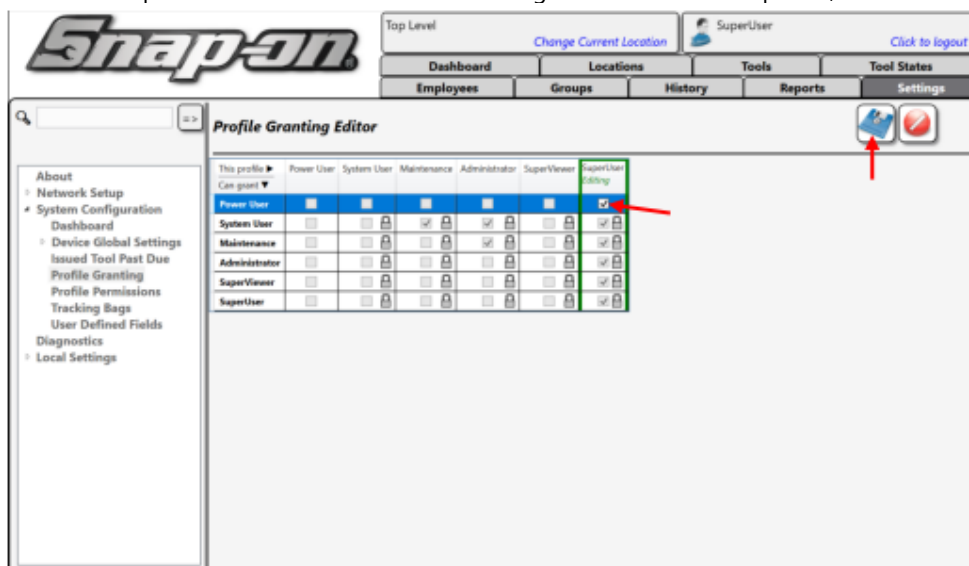
Profile Granting

When you create a new custom profile, you need to determine which other profiles in the system can assign that new Profile to users and groups. This is done in the Profile Granting Editor.

1. To access the editor, you must click on the **Settings** Tab in the L5 Connect™ Admin Client. Once there, on the left side of the screen, expand **System Configuration**, then select **Profile Granting**.



2. The checkboxes on the screen represent if a profile has access to grant other profiles. You need to give Super User and Administrator the ability to grant the Power User profile. If you click on the **Pencil** icon, you will enter edit mode for that Profile. All other profiles will be locked until you save your changes. Click the **Pencil** button for Super User and check the box so it can grant the Power User profile, then click the **Save** button.



- As you can see, the Super User profile can now grant the Power User profile. Edit the **Administrator** profile to also grant the **Super User** profile. When you are done, your screen should look similar to this.



- Now, the Super User or Administrator Profile should be able to assign the Power User profile to employees and groups.

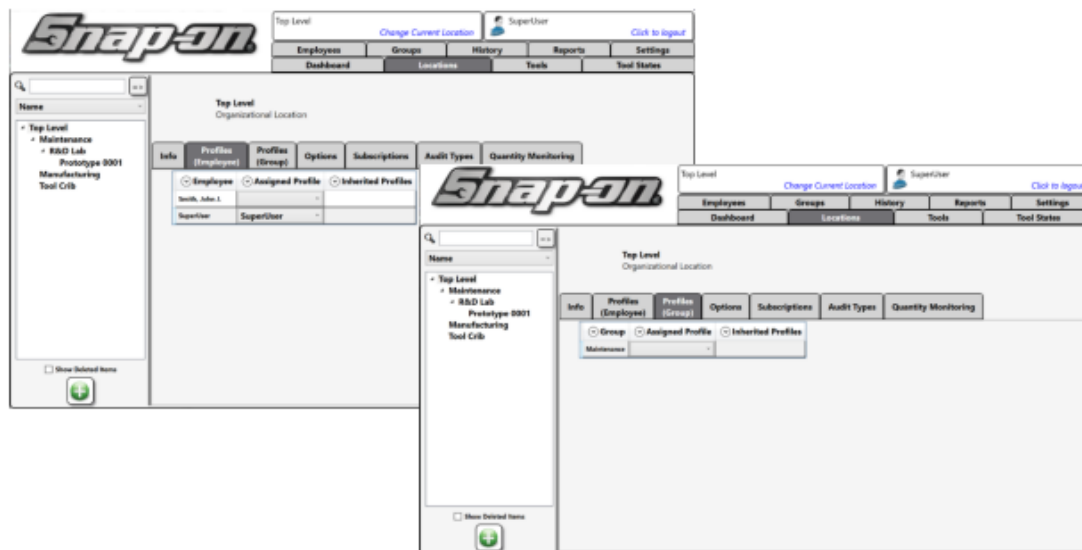
Assigning Profiles

Now that you have created a Profile, assigned permissions to it, and given grant rights to it for **Super User** and **Administrator**, you need to assign it to an employee or group to apply those permissions to Employees. You can do this in a few different ways. You can use the **Locations Tab**, **Employees Tab**, or **Groups Tab**. Each one has a different way of assigning a profile.

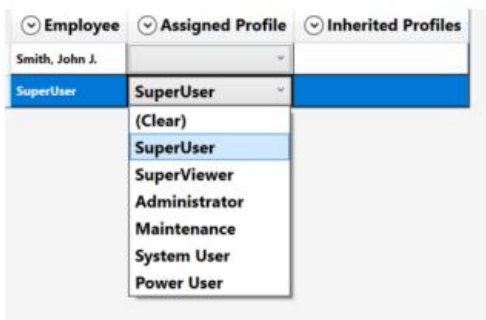
Location Tab Method

The first method is the **Location Method**. In this method, you will select a location in the **Location Tree** on the left side of the screen. Once you have chosen that Location, you will see two sub-tabs, **Profiles (Employees)** and **Profiles (Groups)**. Clicking on the Employees sub-tab will display all the Employees in the system. The Groups sub-tab will show you all the Groups in the system.

NOTE: You will only see Locations, Employees, and Groups that you have permissions to.



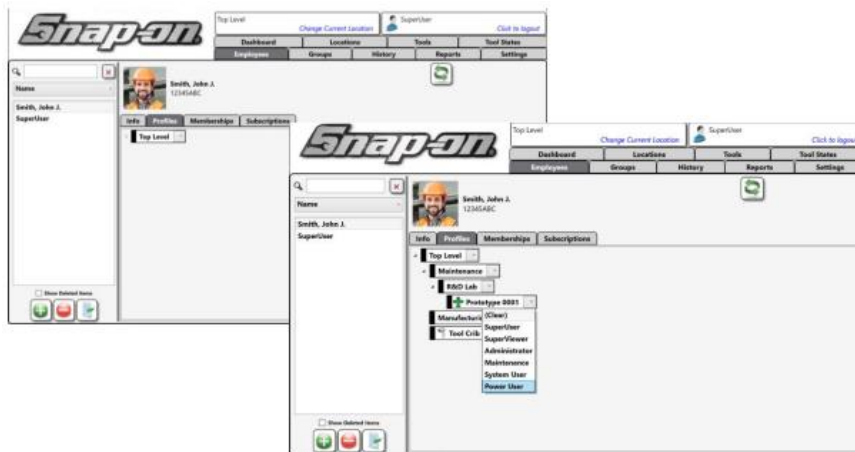
Simply use the pull-down to select which profile you want to assign to a particular employee or group, depending on which sub-tab you are on. Once selected, click the **Save** button in the top right of the screen.



Employee Method

The second method to assign profiles is the **Employee Method**. In this method, you will use the **Profiles sub-tab** on the **Employees Tab**.

Locate the Employee you want to assign the Profile to on the left side and select them to bring up their Employee Settings. Then choose the **Profiles sub-tab** and expand the **Location Tree** to drill down to the location you want to assign the Profile.



NOTE: An Employee or Group can have different profiles assigned at different locations at the same time.

Use the pull-down to select the Profile you want to assign. Then save the Employee.

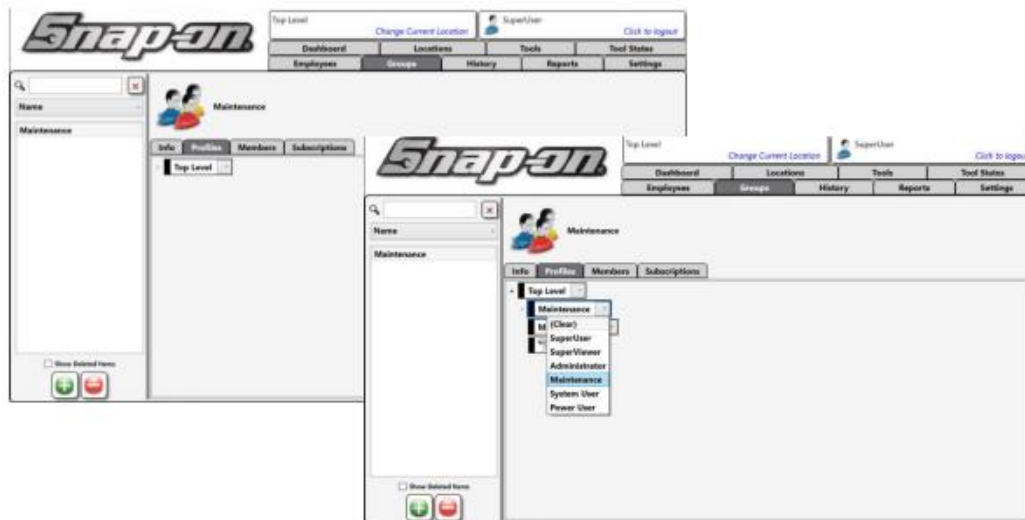


NOTE: When a profile is assigned, the location will turn GREEN, when no profile is assigned, the location will be BLACK.

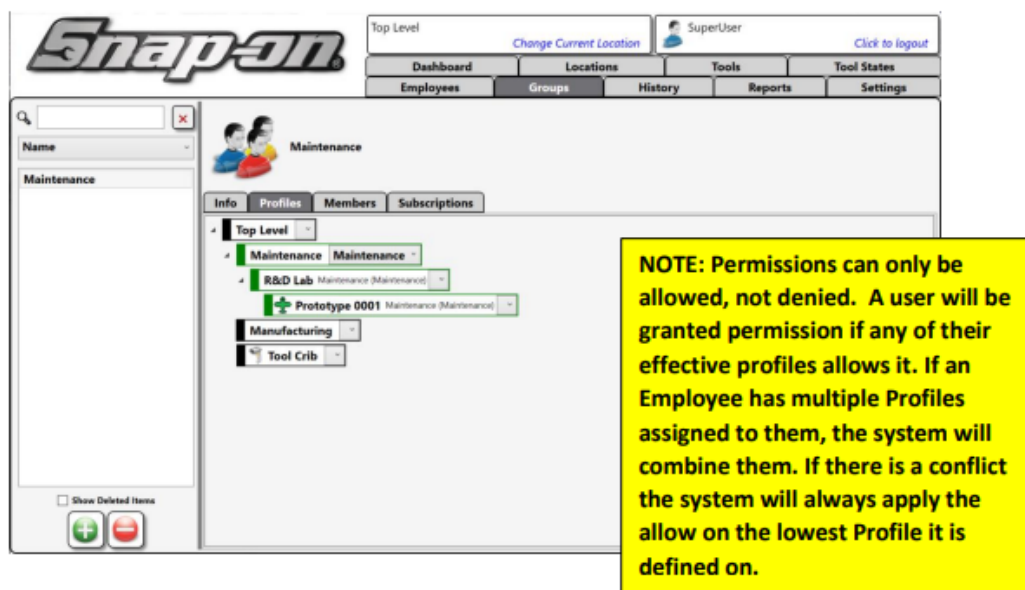
Group Method

This Method works identically to the **Employee Method**, except that it applies to groups. You will assign the Profiles just like in the **Employee Method**.

Locate the group you want to assign the Profile to on the left side and select them to bring up their Group Settings. Select the **Profiles** sub-tab. You will use the **Location Tree** to drill down to the location you want to assign the Profile.

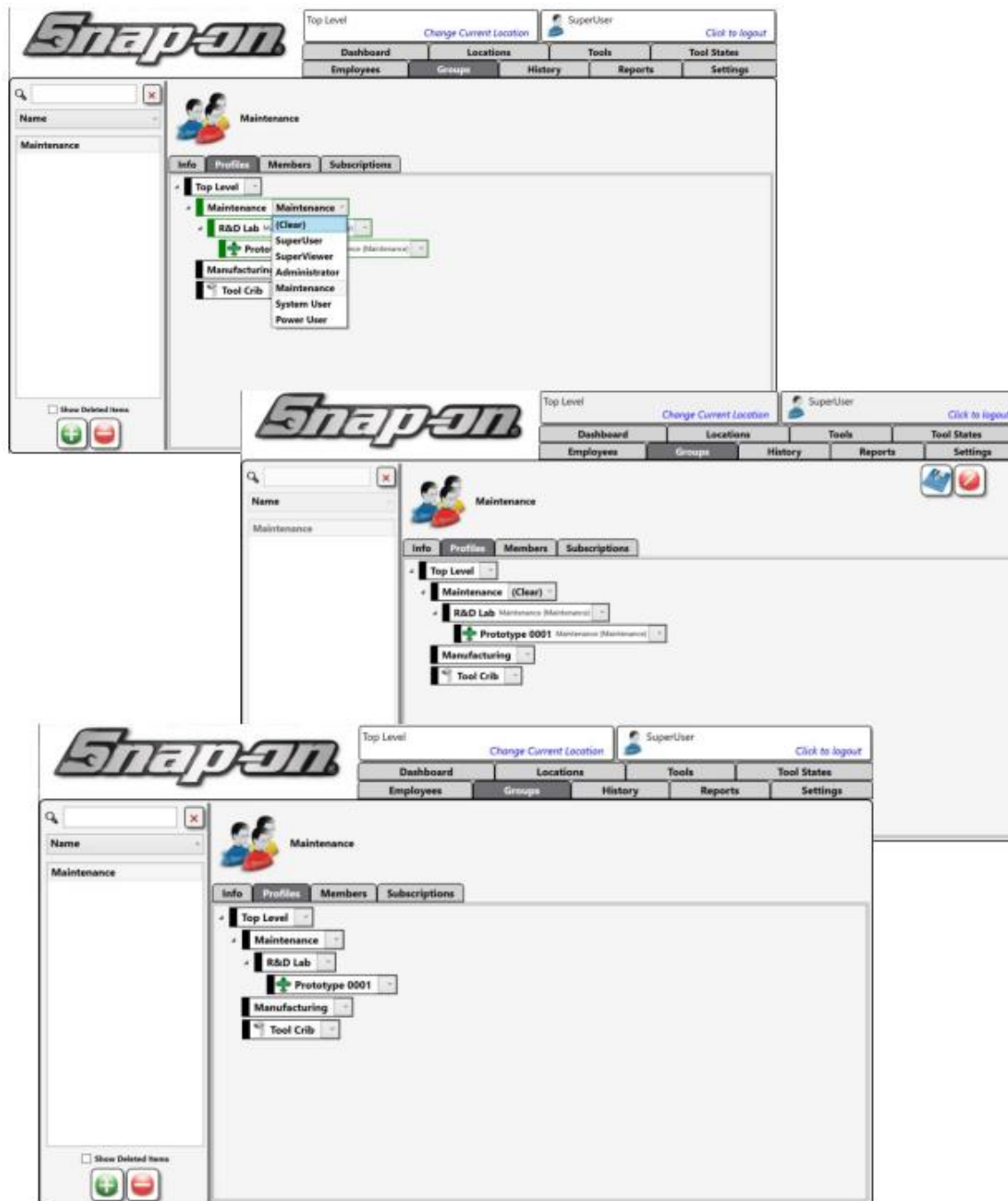


Now use the pull-down to select the Profile you want to assign. Then save the Group. As you can see, when you set a **Profile** to a location with sub-locations, the same **Profile** is applied to the parent's **Child Locations**.



Clearing a Profile

When you want to remove a Profile from an Employee or Group, you need to select the **(CLEAR)** option from the pull-down and save the Profile.





L5 Connect User Manual

Complete Permissions List

Group	Permission	Purpose
Employees		
	Add/Remove	Add and remove employee accounts
	Admin Client Access Edit	Promote a standard Employee account to an Admin account and set a username & password
	Badge Edit	Set, change, and clear the RFID badge of an Employee
	Contact info Edit	Edit the E-mail, Cellphone number, and Cell Carrier of an Employee account
	Contact info View	View the E-mail, Cellphone number, and Cell Carrier of an Employee account
	Info Edit	Edit the properties of an Employee account
	Info View	View the properties of an Employee account
	Photo Edit	Add, remove, and change the photo of an Employee account
	Temp Badge Edit	Set, change, and clear the temp RFID badge of an Employee
Locations		
	Device Edit	Change the properties of a Tool Control Device
	Device Move	Change the Location of a Tool Control Device
	Info View	View Information about a Location
	Issue Tool to Work Location	Assign Tool to Work Location in Selected Location
	Issue Tools From Device	Check out Tool from Device in Location
	Notifications Edit	Change Notification Settings for a Location
	Organizational Location Edit	Change Org Location Object Properties
	Tool Crib Attendant	Enables Employee to sign in as Crib Attendant
	View Employee Signatures	Allows the user to view employee signatures entered at the end of a crib session
	View Events	View Events of Location



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Group	Permission	Purpose
	Work Location Edit	Change Properties of a Work Location Object
	Work Location Move	Move a Work Location Object to a new Location
Groups		
	Add/Remove	Add/Remove a Group Object
	Edit Members	Edit member of a Group Object
	Info Edit	Edit Group Object Properties
	Info View	View the Group Object Properties
Devices		
	Access	Access a device to check out/in tools
	Add/Remove from Service	Add/remove a device from a service
	Audit	Enables Audit Mode Access
	Bypass Biometrics Access	Disable this option to require Biometrics for Device Login
	Bypass Issued Tool Lock Out	Disable to deny users log in at a device if they have tools issued from another device
	Bypass Second Badge Verify	Disable this option to require 2nd Badge for Verification
	Date Time	Change Date/Time Settings in System Menu
	Device Setup	Allows the user to perform device setup tasks on the device
	IT Function Access	Access IT Functions in System Menu
	Network Settings	Access Network Settings in System Menu
	Screen Calibration	Access Screen Calibration Settings in System Menu
	Service Diagnostics	Access Service Diagnostics in System Menu
	Tool Courier	Allow user to pick up and drop off tools from FlexHub drop off compartments
	Tool Return Device Other User Drop Off	Allow user to return someone else's tools to LockerHub



L5 Connect User Manual

Group	Permission	Purpose
	Tool Training - Drawer	Enable Full Drawer Training
	Tool Training - Single	Enables Single Tool Training
	Volume	Change Sound Volume of Voice Statements from Device
Status		
	{Customizable Statuses}	Only the protected statuses that cannot be changed are listed below. The other "customizable" status names are not listed in this document but are visible in the Admin Client. For more information about customizing statuses see the Tool Statuses document.
	Info Conflict Clear	Allow user to clear an information conflict
	Needs Confirmed Clear	Clear Status Needs Confirmed status
	Status Change for Other Issued Tool	Change Status for tool issued to another user
System Configuration		
	Audit Types Edit	Change audit type
	Certifications Edit	Change Certifications Requirements for Tool
	Diagnostics	Access Diagnostics
	Maintenance Type Edit	Change Maintenance Types
	Master Tool Edit	Add/Edit/Remove Master Tools
	Network Settings	Change Network Settings
	Profiles Edit	Add/Edit/Remove and Assign Profiles (recommended only for Sys Admin Account)
	System Configuration	Edit System Configuration Settings
	Tracking Bags Edit	Allow user ability to manage tracking bags
	Units Edit	Edit Unit values
	Verifications Edit	Edit Verification Settings



L5 Connect User Manual

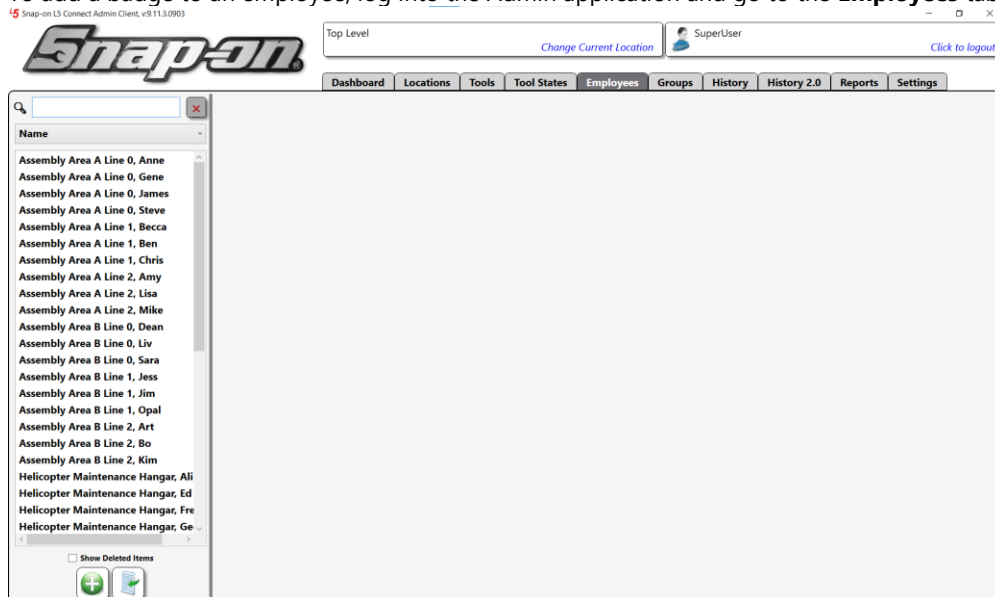
Group	Permission	Purpose
	Work Location Template Edit	Edit Work Location Templates
Tools		
	Bypass Tool Status Issued Lock Out	Allow user to issue tools with statuses
	Home Location Change	Change Location of Tool Instance
	Info Edit	Change Tool Properties
	Info View	View Tool Properties
	Override Issued Tool State	Allow user to manually edit issued tool state
	Tolerance Edit	Enabled editing detection tolerances of tools in devices
Reports		
	Report Schedule	Enables the Ability to Schedule report
	Report Share	Enables Ability to Share Custom Reports

Employee Badges

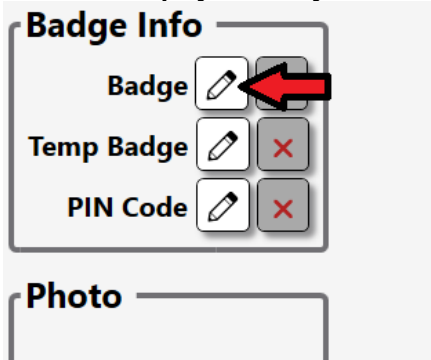
This document will cover managing employee badges. The L5 Connect system uses RFID badges assigned to the employees defined in the system to allow access to the devices managed by the system. When creating an employee, if there is no badge assigned to that employee, they will not be able to access any of the devices in the system. This document will explain how to properly assign a badge to an employee.

Adding a Badge

1. To add a badge to an employee, log into the Admin application and go to the **Employees** tab.

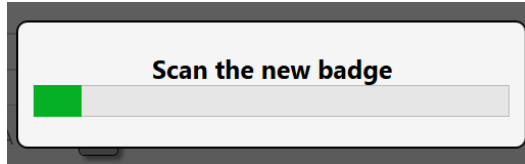


2. Select the employee for whom you would like to add a badge. In the **Badge Info** group box, click the **Badge** edit button that looks like a pencil. **NOTE: If this button is instead a greyed out green checkmark, that means the employee already has a badge assigned to them.**

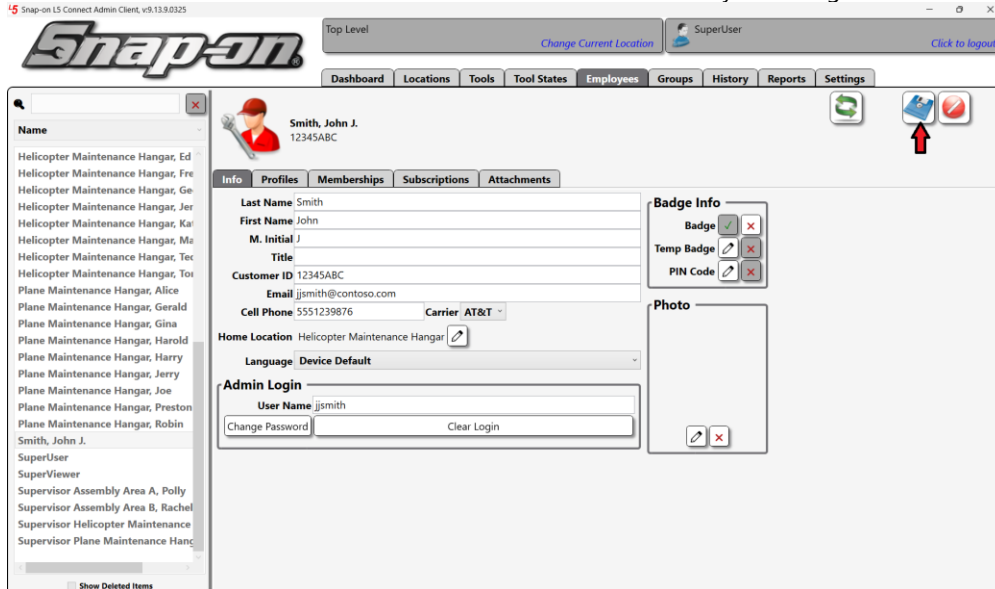


3. You will see a pop-up window with a progress bar asking you to scan the RFID badge of that employee. If you don't scan a badge by the time the progress bar completes, the system will time out and no badge will

be added.



- After successfully scanning a badge, you will see the badge edit button change to a greyed out green checkmark. Click the **Save** button that looks like a blue disk to save your change.

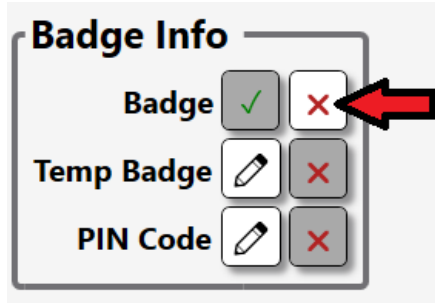


- You have now successfully added a badge to the employee.

NOTE: Even though you have assigned a badge to the employee, they will still not have access to any devices unless they also have a profile within the system. For more information about profiles see the [Default and Custom Profiles and Permissions](#) document.

Updating a Badge

- If an employee loses or breaks a badge and needs to have his badge updated, you would simply click the **Clear** button that looks like a red x to remove the old badge.

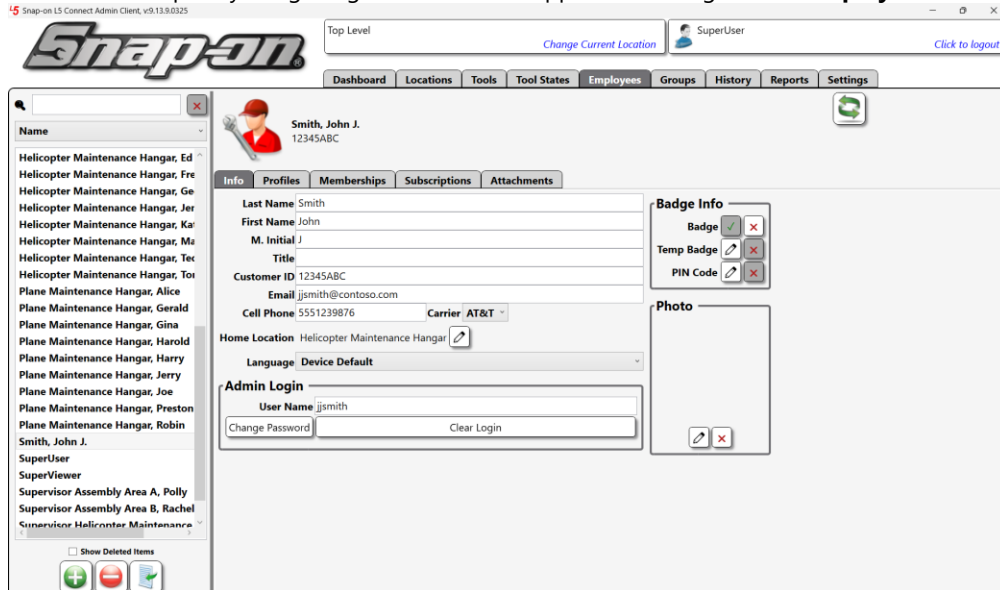


- Then, repeat the process to add a badge.

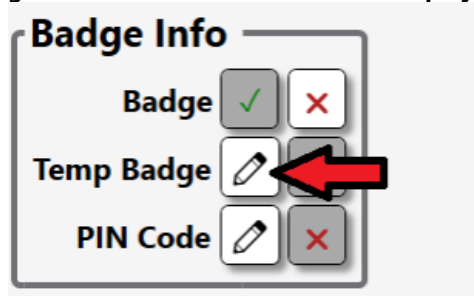
Adding a Temporary Badge

Suppose you have an employee forget their badge one day or you have a contractor who needs access for a limited time. You can provide them with a temporary badge to allow access for an amount of time specified at the creation of the temporary badge.

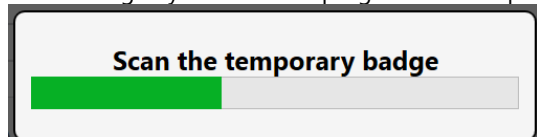
1. To create a temporary badge, log into the Admin application and go to the **Employees** tab.



2. Then select the employee for whom you would like to add a temporary badge. In the **Badge Info** group box, click the **Temp Badge** edit button that looks like a pencil. **NOTE: If this button is instead a greyed out green checkmark, that means the employee already has a temporary badge assigned to them.**



3. You will see a pop-up window with a progress bar asking you to scan the RFID temporary badge. If you don't scan a badge by the time the progress bar completes, the system will time out and no badge will be added.



4. After successfully scanning a badge, you will see the badge edit button change to a greyed out green checkmark. You will also see a date and time, which you should set to when you would like the temporary badge to stop providing access to the system devices. Once that is set, click the **Save** button that looks like a



L5 Connect User Manual

blue disk to save your changes.

Snap-on L5 Connect Admin Client, v9.13.0.0325

Snap-on

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

Name Smith, John J. 12345ABC

Info Profiles Memberships Subscriptions Attachments

Last Name: Smith
First Name: John
M. Initial: J
Title:
Customer ID: 12345ABC
Email: jsmith@contoso.com
Cell Phone: 5551239876 Carrier: AT&T

Home Location: Helicopter Maintenance Hangar
Language: Device Default

Admin Login
User Name: jsmith
Change Password Clear Login

Badge Info
Badge ☒
Temp Badge ☒
4/4/2025 12:00 AM
Photo ☒

Show Deleted Items

5. You have successfully added a temporary badge to the employee.

Assigning Badges at Device

Admin users can assign primary or temporary badge credentials for existing employees from certain ATC devices.

Supported software versions: 9.11.2 or greater

Supported devices: ATC Toolbox, RFID Cabinet

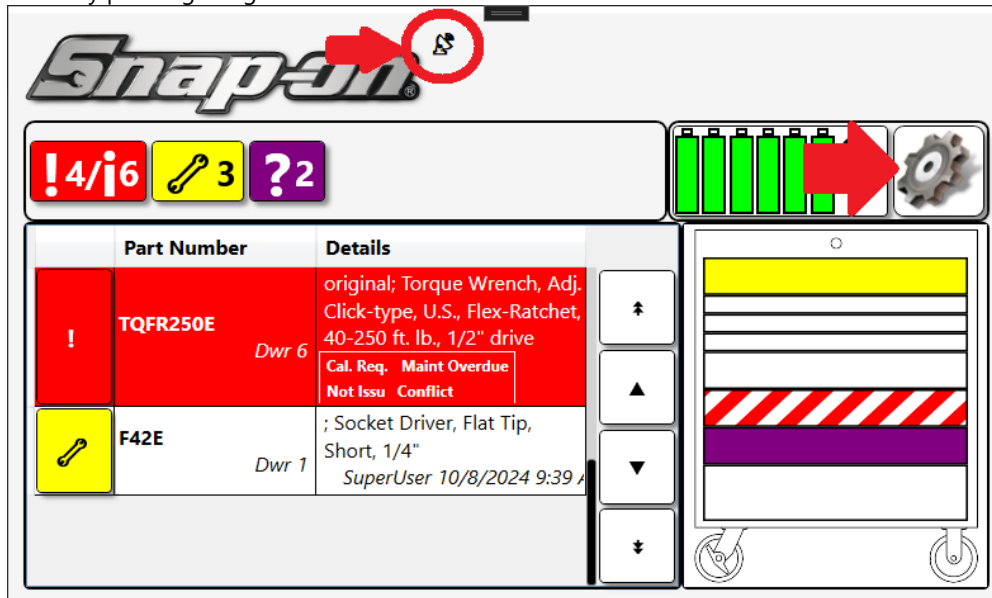
Access point: Device menu/System Changes/Edit Employee

Device must be online (satellite icon showing on front screen).

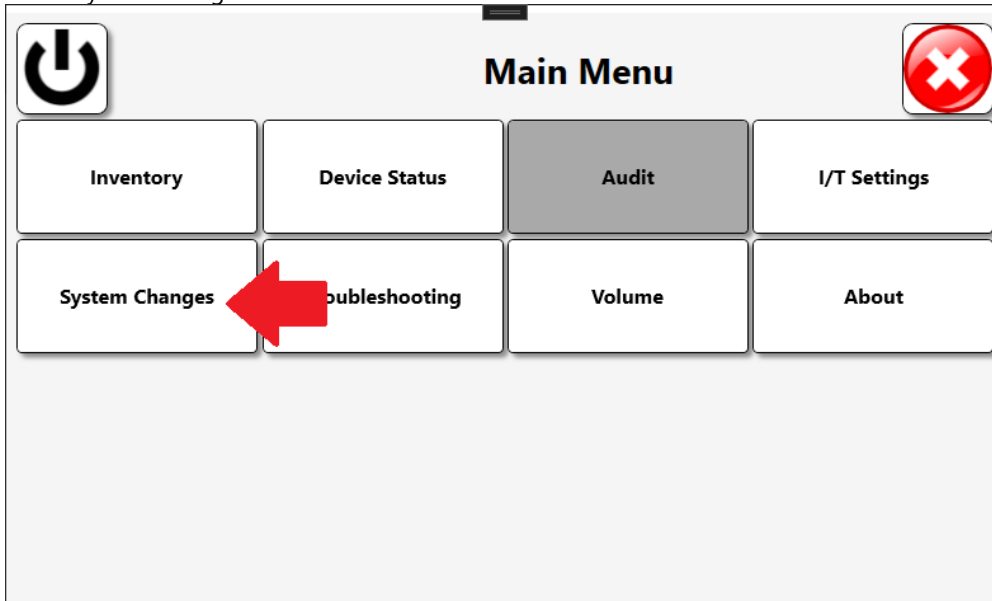
Required permissions: ATC Admin Client login + Badge edit or Temporary Badge Edit over desired employee(s)

NOTE: Users cannot use this feature to add a new employee at the device.

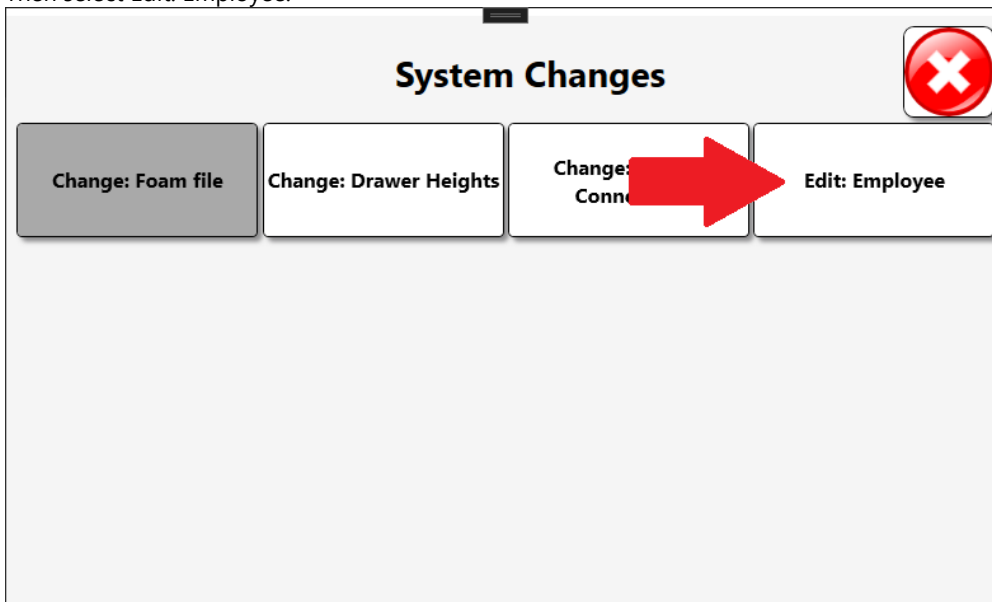
1. From the device main screen, confirm the device is online with the satellite icon, then access the Device Menu by pressing the gear icon button.



2. Select System Changes.

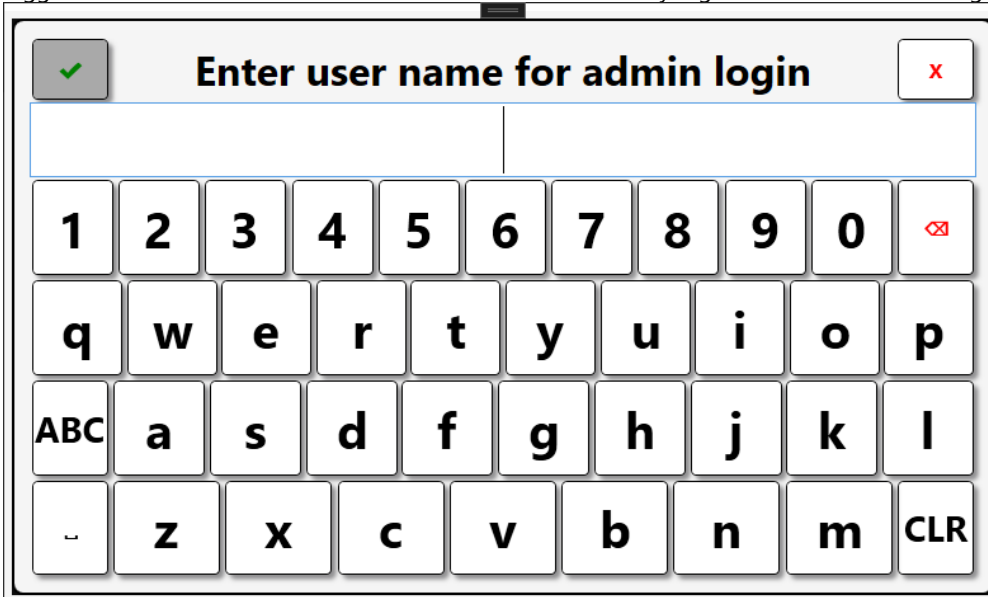


3. Then select Edit: Employee.

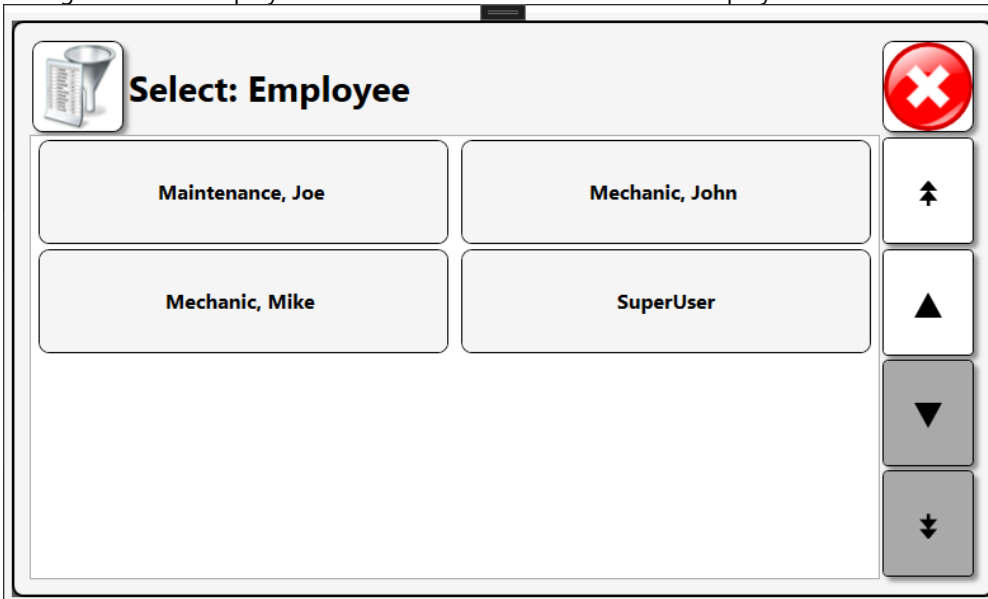


4. You will be prompted for your admin username and then your admin password. This is the same username and password that you use to log into the L5 Connect Admin Client software. You can use the touch screen keyboard, or you can plug in an external USB keyboard to enter your credentials. Please note that you will be

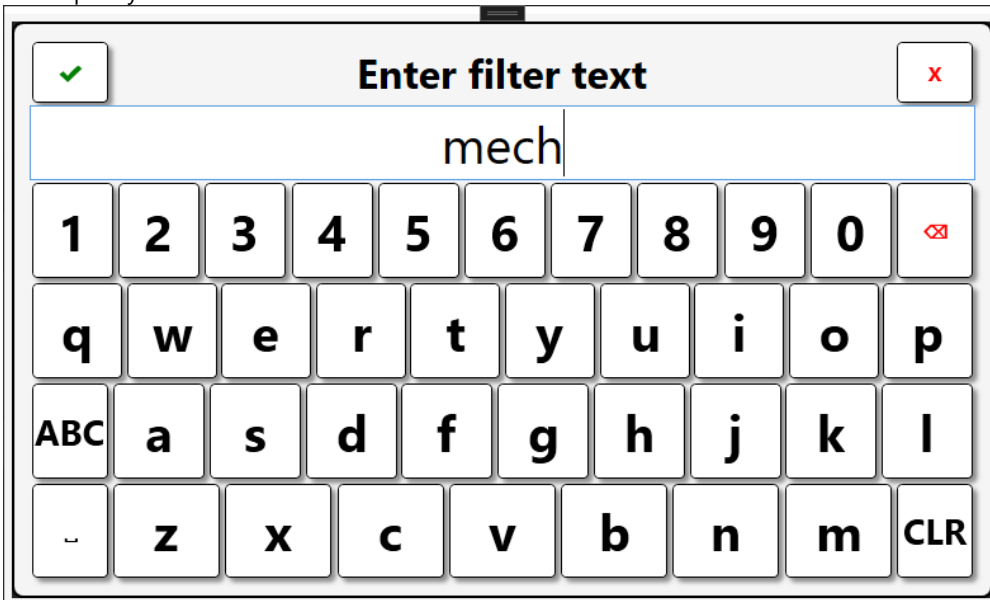
logged out of admin access mode after 30 seconds of inactivity regardless of device auto logout settings.



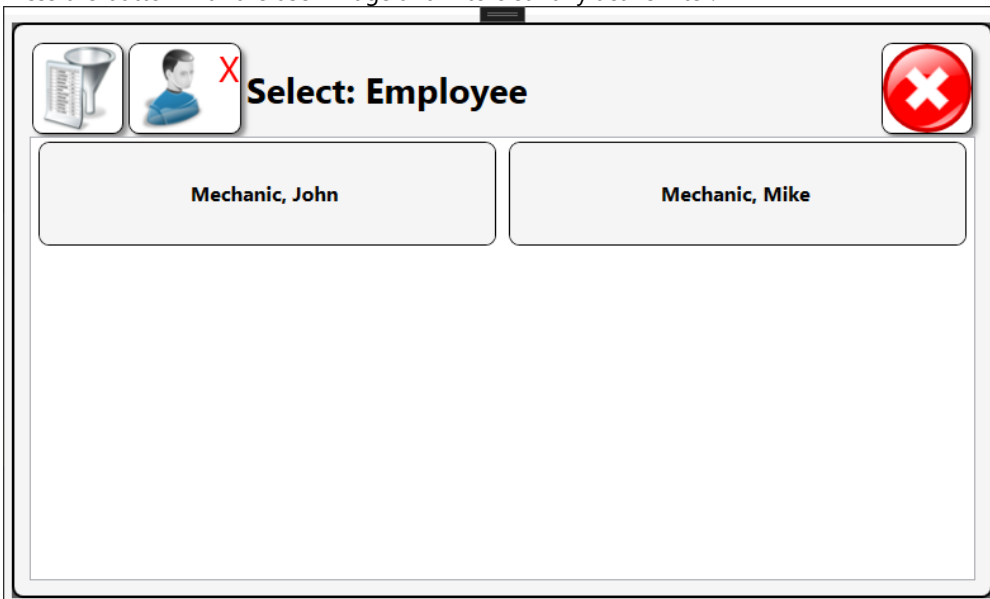
5. After logging in, you will be prompted to select an employee to edit. This list will only contain the names of employees that you have permission to edit. You can use the navigation arrows on the right to move through the list of employees. Touch the button with the desired employee's name to make a selection.



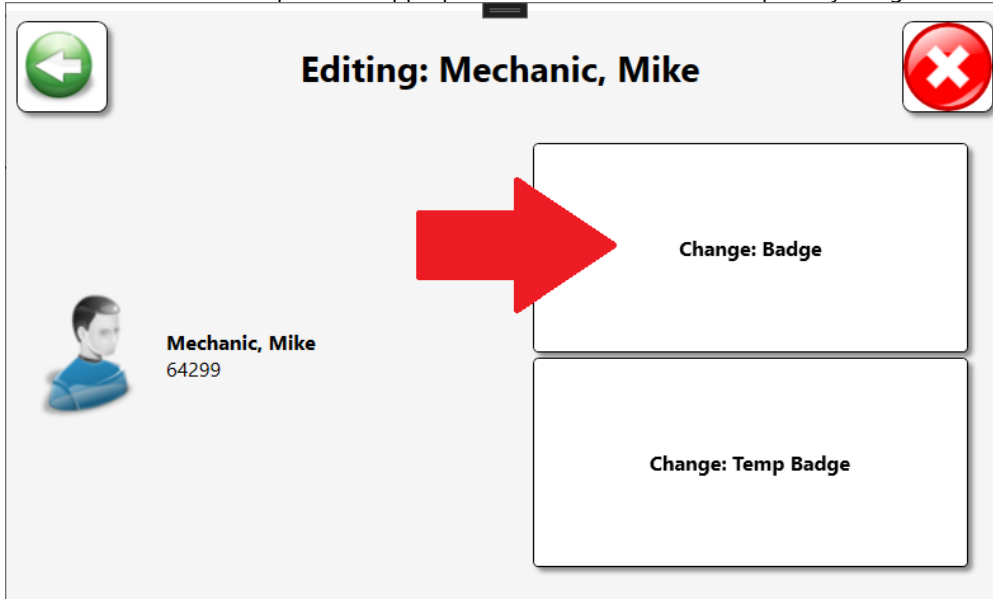
6. You can also select the filter button in the upper left and enter all or a portion of the employee's name to more quickly locate a user.



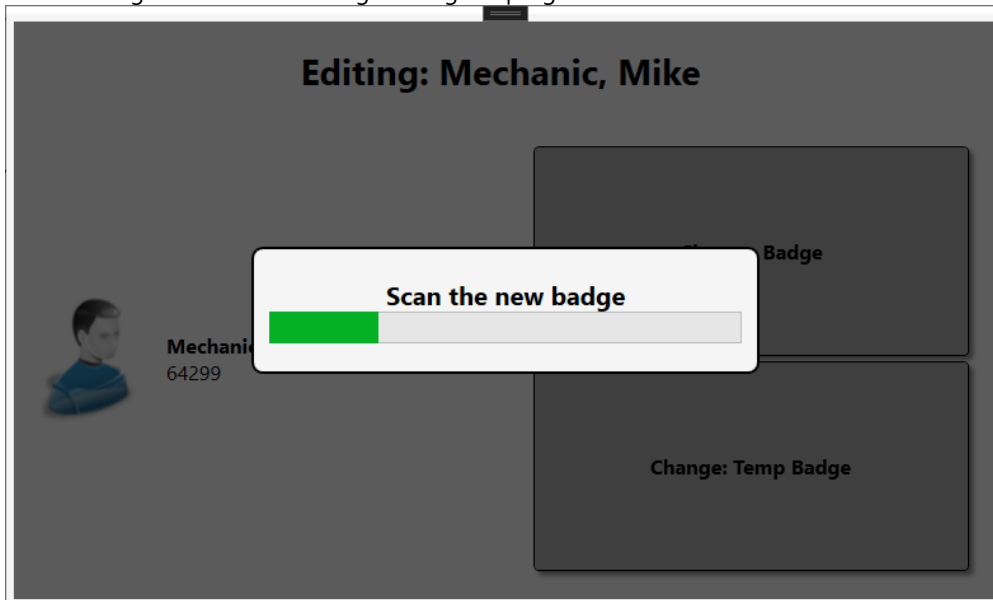
7. Press the button with the user image and X to clear any active filter.



8. After the user is selected, press the appropriate button to set the user's primary badge or temporary badge.

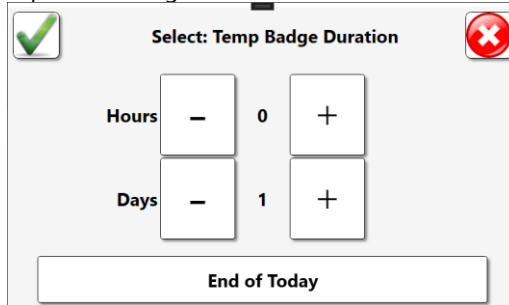


9. Scan the targeted user's new badge during the progress bar count down.



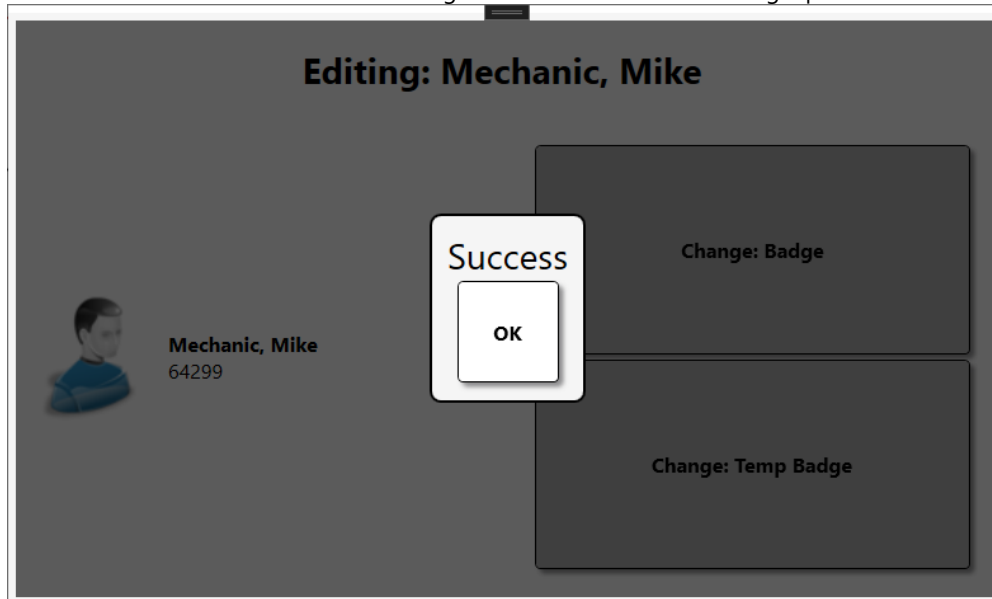
10. If you are editing a temporary badge, you will be asked to assign an expiration date for the temporary badge. You can press the green check button to accept the default time of 1 day, or you can use the on-screen buttons to change the badge duration. Pressing the 'End of Today' button will cause the badge to

expire at midnight local time.

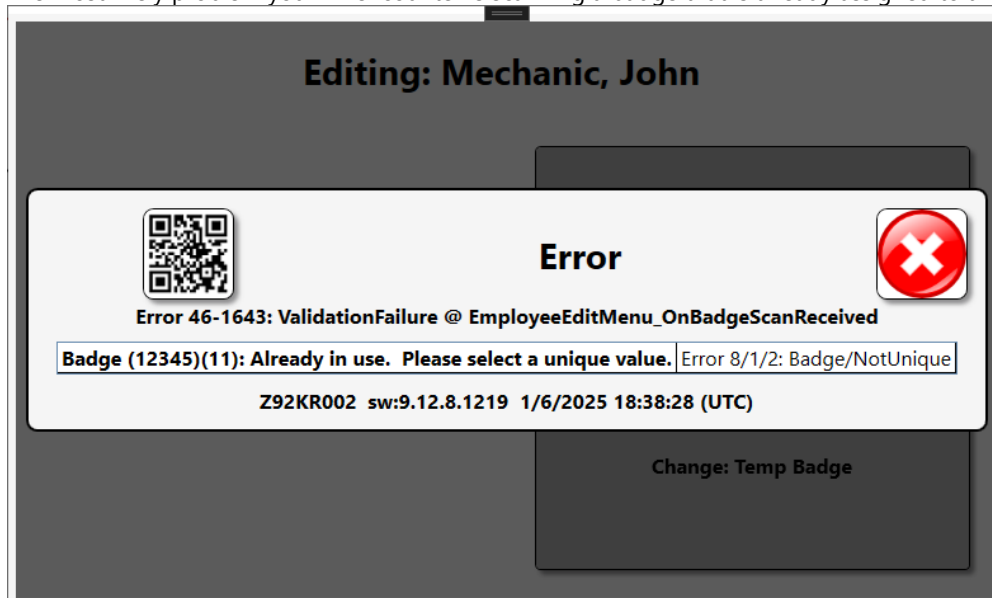


A dialog box titled "Select: Temp Badge Duration" with a green checkmark icon on the top left and a red X icon on the top right. It contains two rows of controls: "Hours" with a minus button, the number "0", and a plus button; and "Days" with a minus button, the number "1", and a plus button. At the bottom is a button labeled "End of Today".

11. You will then see either a 'Success' message or an error screen describing a problem.



12. The most likely problem you will encounter is scanning a badge that is already assigned to another user.





L5 Connect User Manual

13. From the employee edit screen, you can press the Left green arrow button to return to the employee select screen to continue the process for another user.

Badge Usage on Devices

RFID badges serve multiple purposes on the devices.

1. The only way to log into the devices is by scanning your badge.



2. Badge scans are required for performing device audits.

All Users
Me

! 2/i2
5
? 1
! 1
Audit

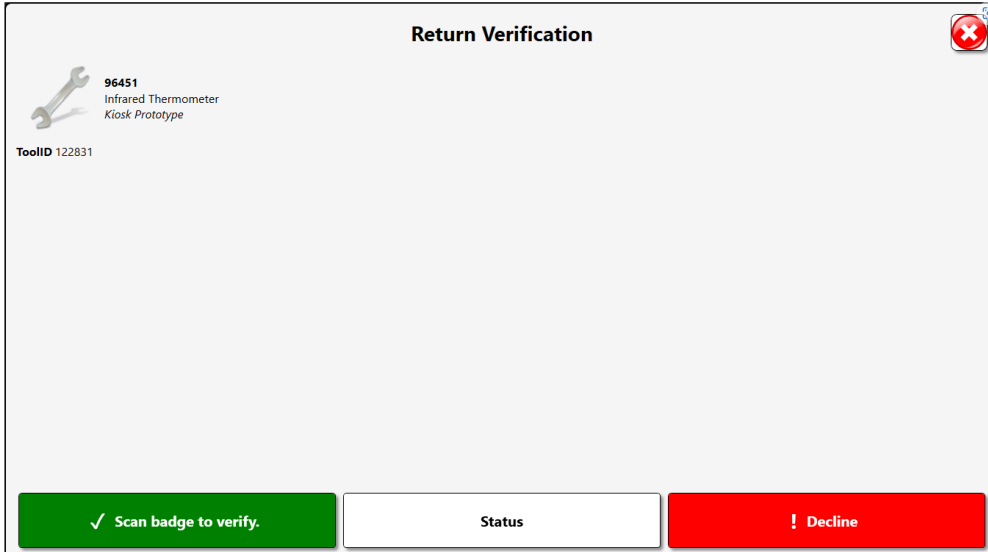
	Part Number	Details	
! 1	OEX22B Dwr 6	Wrench, Combination, Standard Length, 11/16", 12-Point SuperUser, SUPERUSER 10/14/2021	⬆
! 1	NDDM80 Dwr 4	Nut Driver, Metric, Ergonomic Handle, Black, 8 mm, 169.1 mm	⬆
! 1	QD2R1000 Dwr 5	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive SuperUser, SUPERUSER 10/26/2021	⬆
! 1	SGDMRC1A Dwr 2	Screwdriver Handle, Ratcheting, Soft Grip, Stubby, Red Tech, ATC 10/14/2021 1:48 PM	⬆
! 1	STM12 Dwr 1	Socket, Deep, 3/8", 6-Point SuperUser, SUPERUSER 10/14/2021	⬆
! 1	TC28C	Cutter, Tubing (1/8" - 1 1/8" O.D.)	⬆

Primary Auditor

SuperUser, SUPERUSER

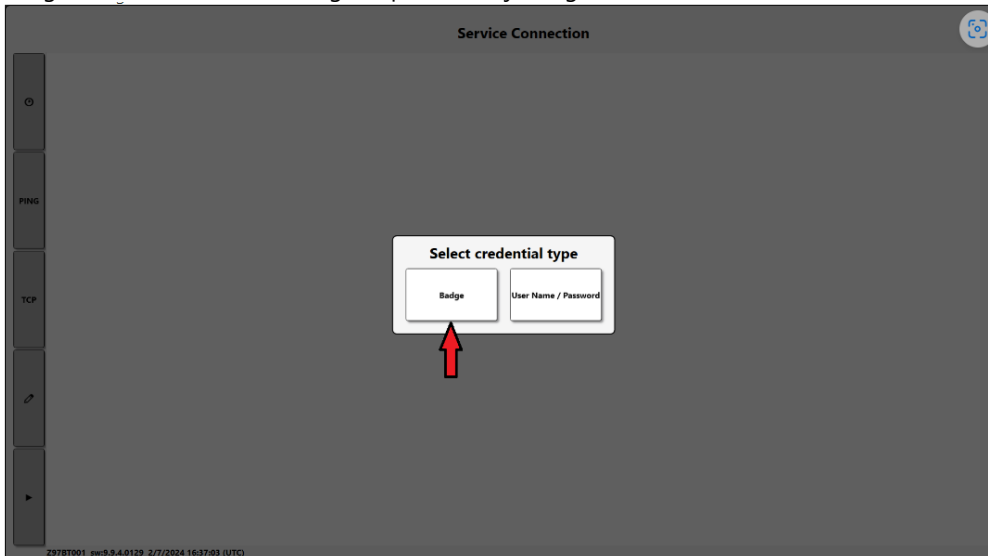
➔ Scan user badge

3. Badge scans are required for tool verifications.



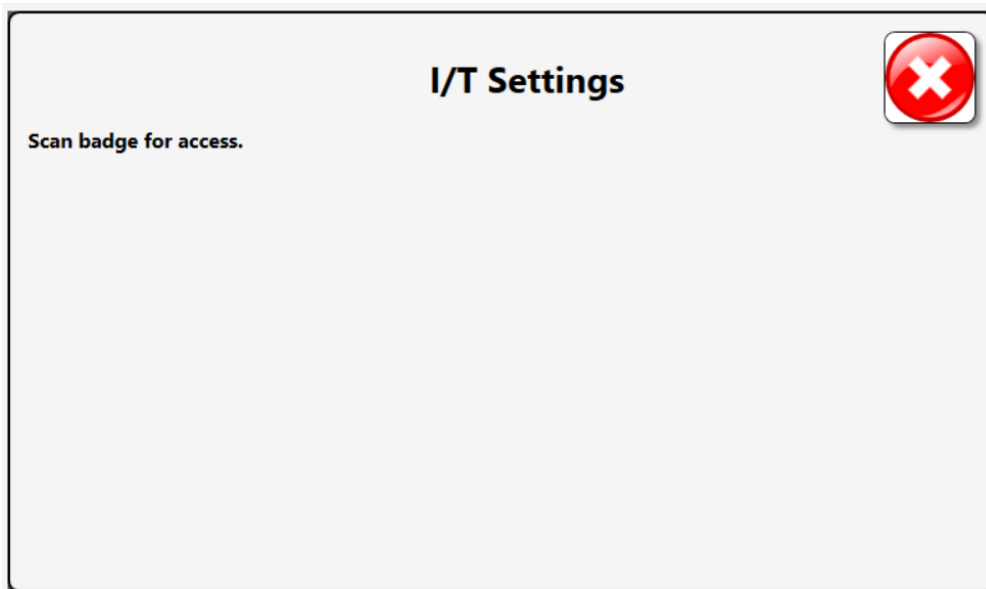
The screenshot shows a 'Return Verification' window. At the top left, there is a wrench icon and the text '96451 Infrared Thermometer Kiosk Prototype'. Below this, it says 'ToolID 122831'. At the bottom, there are three buttons: a green button with a checkmark and the text 'Scan badge to verify.', a white button with the text 'Status', and a red button with an exclamation mark and the text 'Decline'.

4. Badge scans can be used during the process of joining a device to the L5 Connect Service.



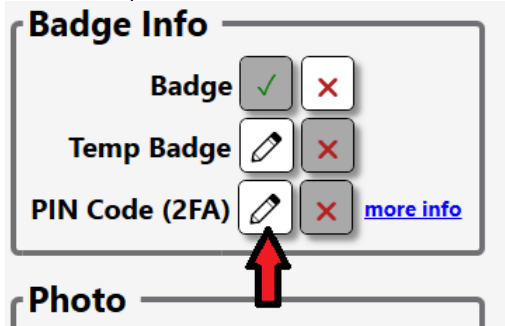
The screenshot shows a 'Service Connection' window. On the left side, there is a vertical menu with icons for 'PING', 'TCP', and other options. In the center, there is a 'Select credential type' dialog box with two buttons: 'Badge' and 'User Name / Password'. A red arrow points to the 'Badge' button. At the bottom left, there is a small text string: '2975T001 sw:9.9.4.0129 2/7/2024 16:37:03 (UTC)'.

5. They can also be required for activities such as device configuration.

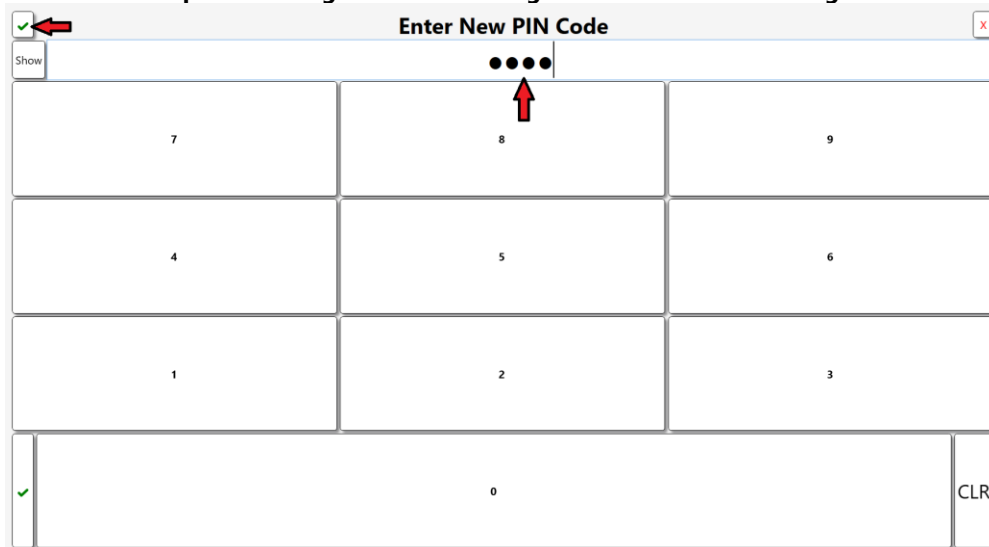


PIN Code

1. Some features in the L5 Connect™ system may require a PIN code in addition to a badge scan for authentication purposes. To set up a PIN code for an employee you would click the **Change** button that looks like a pencil next to the **PIN Code** label.



2. You would then enter a PIN code for the employee and then click the green checkmark button. **NOTE: A PIN code must be a positive integer of at least 4 digits and no more than 8 digits.**





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3. Finally click the **Save** button that looks like a floppy disk to save your addition.

Snap-on L5 Connect Admin Client, v5.15.2.0729

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

Name
Helicopter Maintenance Hangar, Ed
Helicopter Maintenance Hangar, Fre
Helicopter Maintenance Hangar, Ge
Helicopter Maintenance Hangar, Jer
Helicopter Maintenance Hangar, Kai
Helicopter Maintenance Hangar, Ma
Helicopter Maintenance Hangar, Tec
Helicopter Maintenance Hangar, Tom
Plane Maintenance Hangar, Alice
Plane Maintenance Hangar, Gerald
Plane Maintenance Hangar, Gina
Plane Maintenance Hangar, Harold
Plane Maintenance Hangar, Harry
Plane Maintenance Hangar, Jerry
Plane Maintenance Hangar, Joe
Plane Maintenance Hangar, Preston
Plane Maintenance Hangar, Robin
Smith, John J.
SuperUser
SuperViewer
Supervisor Assembly Area A, Polly
Supervisor Assembly Area B, Rachel
Supervisor Helicopter Maintenance
Supervisor Plane Maintenance Hangar

Smith, John J.
12345ABC

Info Profiles Memberships Subscriptions Attachments Certifications

Last Name: Smith
First Name: John
M. Initial: J
Title:
Customer ID: 12345ABC
Email: jsmith@contoso.com
Cell Phone: 5551239876 Carrier: AT&T
Home Location: Helicopter Maintenance Hangar
Language: Device Default

Admin Login
User Name: jsmith
Change Password Clear Login

Badge Info
Badge ☒ ☐
Temp Badge ☒ ☐
PIN Code (2FA) ☒ ☐ [more info](#)

Photo

☐ Show Deleted Items



L5 Connect User Manual

Tools



L5 Connect User Manual

Adding Tools

In L5 Connect™, there are two different types of tools: **Masters** and **Instances**.

A **Master** defines a tool's type, properties, and characteristics. It acts as a template for all instances of that tool.

Masters are typically managed within the Admin Client.

An **Instance** is a representation of a physical tool. You can have multiple **Instances** of a Master Tool to represent having multiples of that same tool. This is used to denote the availability of the tool. The **Instance** will get its properties such as calibration settings and validation from its Master. Instances are stored at a True-Crib™ or in an ATC Device.

Tool Properties

A tool's **Properties** are the attributes that define the tool and how the system handles it when someone checks one out.

- **Part Number** – a unique alphanumeric number to identify the tool
- **Description** – the name and description of what the tool is
- **Units** – the amount to be issued when checking out the part/tool
- **Tag** – the barcode or RFID tag that will be used to ID the tool
- **Photo** – A picture that represents the tool

In L5 Connect™, **Issue Behavior** determines the type of tool and how L5 Connect™ processes it. There are four types of Tools

- **Durable** – A Tool that can be returned and used again
- **Kit** – A collection of tools that are issued together
- **Consumable** – A Tool that is disposed of after use and not expected to be returned
- **Returnable Consumable** – A tool that must be returned to ensure proper disposal

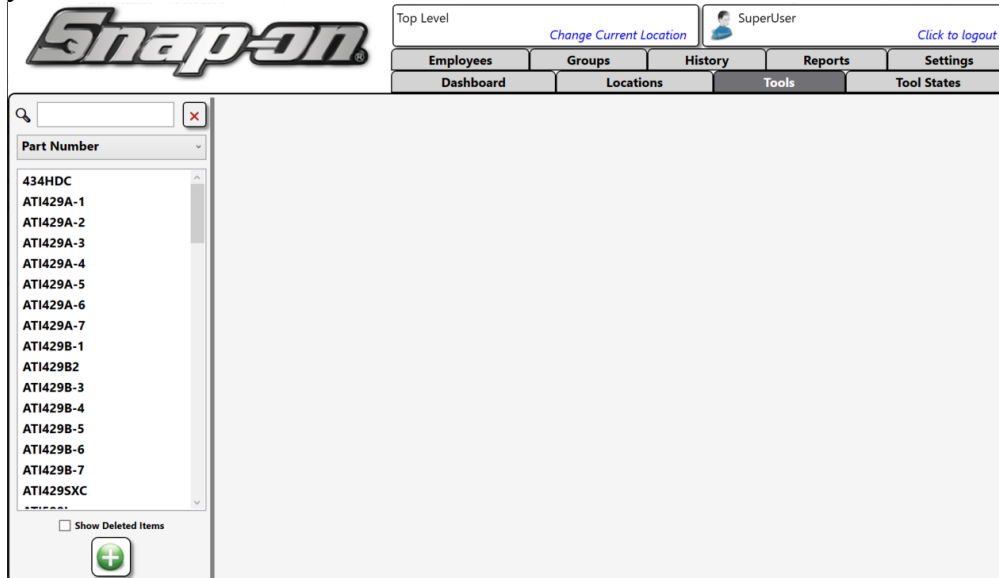
Instances also have a set of properties that can be defined as well.

- **Customer ID** – a unique alphanumeric number set by the user to ID the tool instance
- **Serial Number** – the serial number of the physical tool the Instance is being created for
- **Tag** – if the Barcode for the Instance is different from the Master, it will be defined here

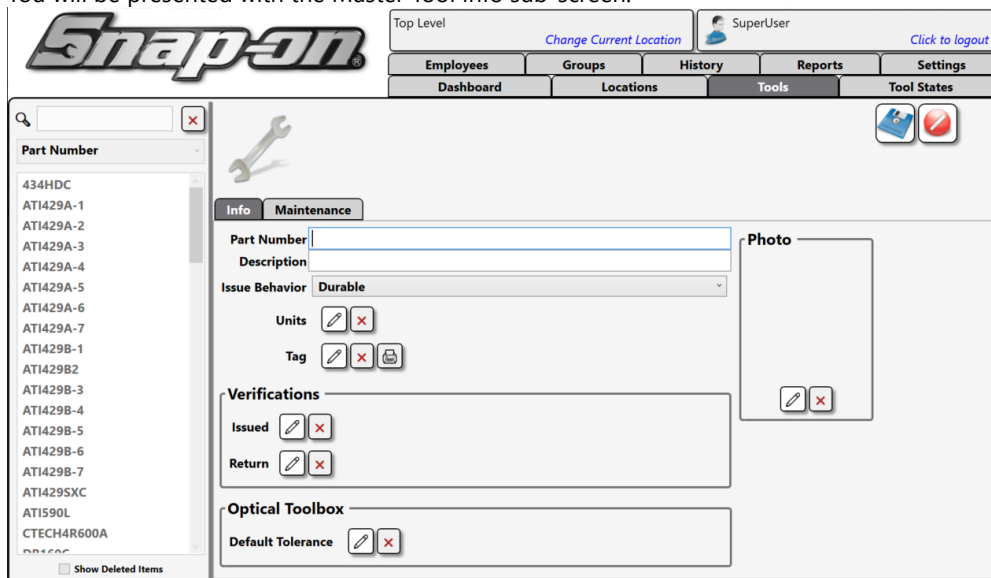
Adding Tools in the L5 Connect™ Admin Client

Durables

- First, you need to create a **Master**. Go to the **Tools** tab in the admin client. The list on the left side will list all known Master Tools in the system. Click on the Add Button at the bottom left of the screen. **NOTE: ATC Toolbox Devices automatically add their tool inventory to the system when they join the service, so you do not need to create tools for it.**



- You will be presented with the Master Tool Info sub-screen.

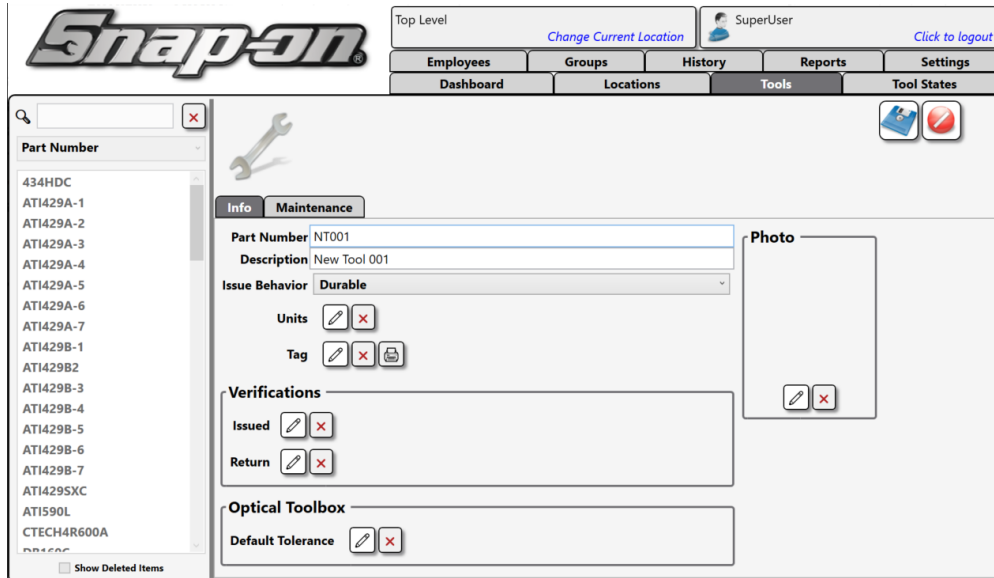


- Now add a tool with the following properties:

- Part Number of NT001
- Description of New Tool 001

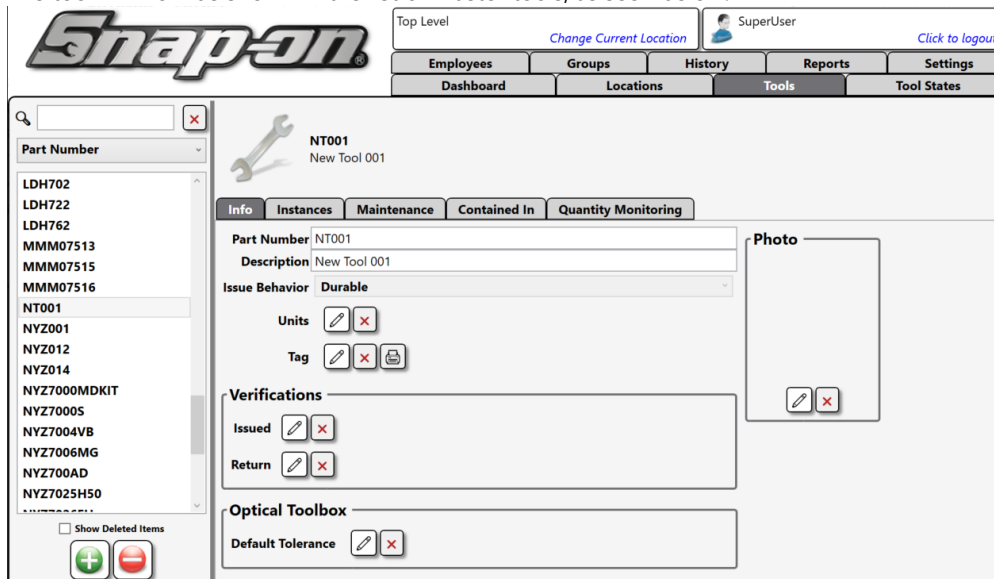
- Issue Behavior Durable
- It will not have a Unit, Tag, or Photo.

4. Click the save button to add the Master.



The screenshot shows the Snap-on L5 Connect web application interface. The top navigation bar includes the Snap-on logo, a 'Top Level' dropdown, a 'Change Current Location' link, a user profile for 'SuperUser', and a 'Click to logout' link. Below this is a secondary navigation bar with tabs: Employees, Groups, History, Reports, Settings, Dashboard, Locations, Tools, and Tool States. The main content area is titled 'Maintenance' and displays the 'Part Number' NT001. The 'Description' is 'New Tool 001'. The 'Issue Behavior' is set to 'Durable'. There are fields for 'Units' and 'Tag', each with a pencil icon and a red 'X' icon. Below these are 'Verifications' for 'Issued' and 'Return', each with a pencil icon and a red 'X' icon. At the bottom is the 'Optical Toolbox' with a 'Default Tolerance' field, also with a pencil icon and a red 'X' icon. On the left side, there is a search bar and a list of part numbers, including 434HDC, AT1429A-1 through AT1429B-7, AT1429SXC, AT1590L, and CTECH4R600A. A 'Show Deleted Items' checkbox is at the bottom of the list. On the right side, there is a 'Photo' field with a pencil icon and a red 'X' icon.

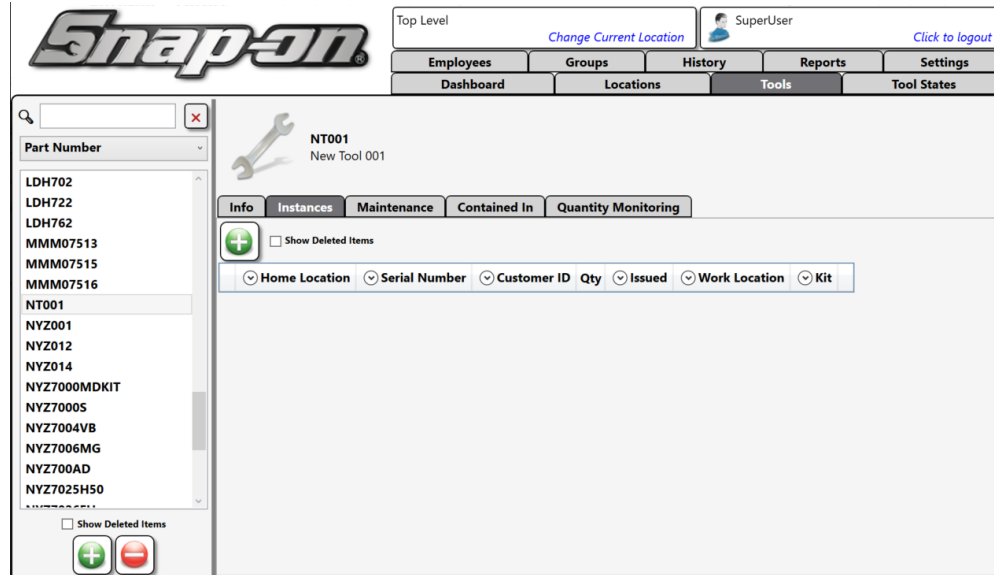
5. The tool will now be shown in the list of master tools, as seen below.



The screenshot shows the Snap-on L5 Connect web application interface, similar to the previous one, but with the 'Instances' tab selected. The 'Part Number' is still NT001, and the 'Description' is 'New Tool 001'. The 'Issue Behavior' is 'Durable'. The 'Units' and 'Tag' fields have pencil and red 'X' icons. The 'Verifications' for 'Issued' and 'Return' also have pencil and red 'X' icons. The 'Optical Toolbox' has a 'Default Tolerance' field with a pencil and red 'X' icon. On the left side, the search bar and list of part numbers are present, with a green plus button and a red minus button at the bottom. On the right side, the 'Photo' field has a pencil and red 'X' icon.

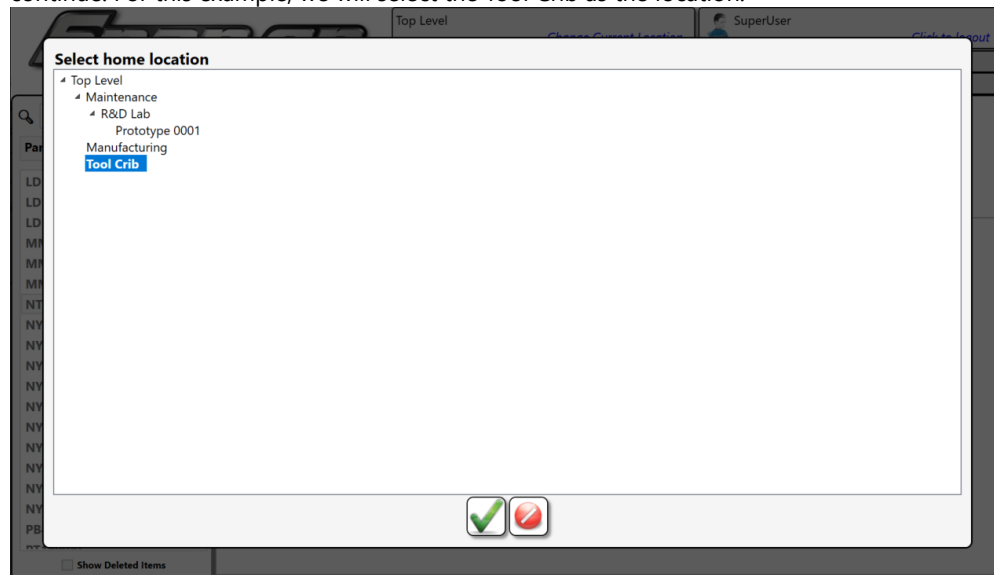
6. Now that you have the **Master** created, you need to add an instance of the Master tool to our crib so that you can issue them out to Employees.
Click on the **Instances** sub-tab to bring up the Instances screen. Click on the green plus button to create a

new Instance.



The screenshot shows the Snap-on L5 Connect web application interface. At the top, there is a navigation bar with the Snap-on logo, a 'Top Level' dropdown, a 'Change Current Location' link, a user profile for 'SuperUser', and a 'Click to logout' link. Below this is a secondary navigation bar with tabs for 'Employees', 'Groups', 'History', 'Reports', and 'Settings'. A third bar contains 'Dashboard', 'Locations', 'Tools', and 'Tool States'. The main content area is titled 'NT001 New Tool 001' and features a wrench icon. It has tabs for 'Info', 'Instances', 'Maintenance', 'Contained In', and 'Quantity Monitoring'. The 'Instances' tab is active, showing a '+ Show Deleted Items' checkbox and a list of filters: 'Home Location', 'Serial Number', 'Customer ID', 'Qty', 'Issued', 'Work Location', and 'Kit'. On the left, a 'Part Number' search bar is visible, with a list of part numbers including LDH702, LDH722, LDH762, MMM07513, MMM07515, MMM07516, NT001, NYZ001, NYZ012, NYZ014, NYZ7000MDKIT, NYZ7000S, NYZ7004VB, NYZ7006MG, NYZ700AD, and NYZ7025H50. At the bottom left, there are '+ Show Deleted Items' and '+ Add' buttons.

7. Select an ATC device as the Location this Instance will be created and stored, then click the ✓ button to continue. For this example, we will select the Tool Crib as the location.

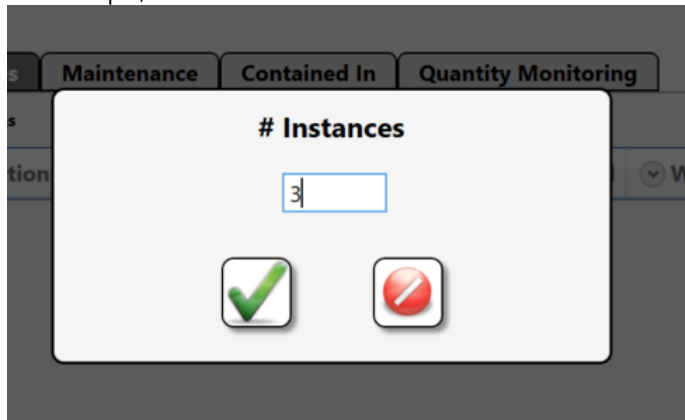


The screenshot shows a 'Select home location' dialog box overlaid on the application. The dialog has a title bar and a list of locations. The list is structured as follows:

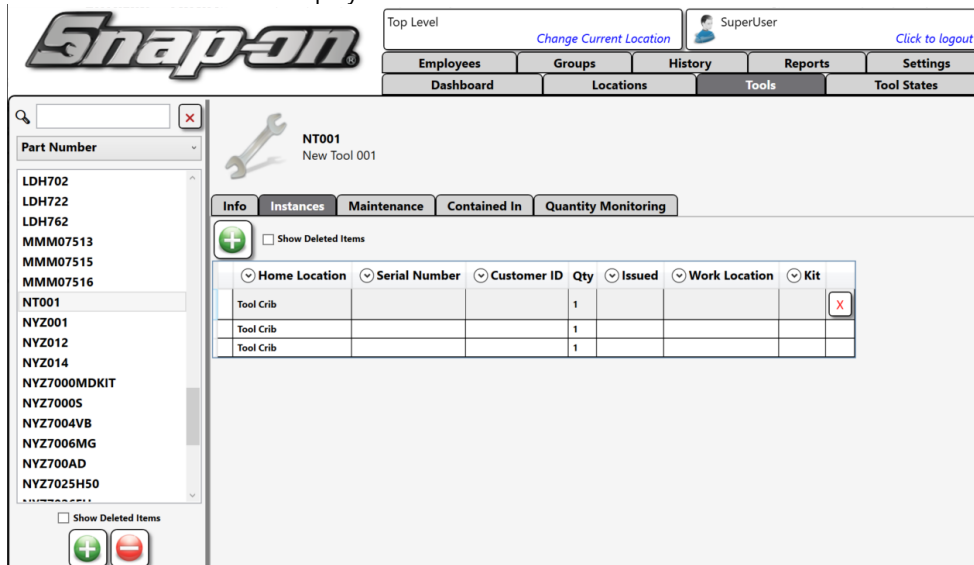
- Top Level
 - Maintenance
 - R&D Lab
 - Prototype 0001
 - Manufacturing
 - Tool Crib** (highlighted)

At the bottom of the dialog, there are two buttons: a green checkmark button and a red 'X' button. The background application is dimmed, showing the same navigation and part number list as the previous screenshot.

8. After selecting a device location, the system will then ask you how many instances you want to create. For this example, we will make 3. Click the ✓ button to continue.



9. The instances will then be displayed in the **Instance** tab of the Master Tool.



Home Location	Serial Number	Customer ID	Qty	Issued	Work Location	Kit
Tool Crib			1			
Tool Crib			1			
Tool Crib			1			

10. If you need to identify each tool separately due to different maintenance schedules or other reasons, you can distinguish each tool instance using its instance properties. To access the properties of an instance, double click on one of the tool instances in the list. This will bring up the **Instance Information** screen.
NOTE: When a tool instance is created, a ToolID will be assigned to it by the system. This is a unique internal tracking number that is used to identify a specific tool instance and allows for tracking and historical forensics within the system. You cannot change the ToolID. It is recommended that when you replace a tool that you create a new instance and scrap the old one. That way you can track when

a tool was replaced.

Editing NT001

NT001

New Tool 001

Top Level/Tool Crib

Info
Issued
Status

Customer ID

Serial Number (Tool)

Tag


Color ID Tag

Home Location

ToolID 100272


Default Part # / Desc. NT001 / New Tool 001

11. You can then define the instance with additional identifying information. For this example:
 - Customer ID- NT001a
 - Serial Number - NT001a
12. You can click on the **SAVE** button to save the changes to the Instance, then click the **CLOSE** button. The updated instance information will then be displayed in the instance list.



Top Level

[Change Current Location](#)

 SuperUser
 [Click to logout](#)

Employees

Groups

History

Reports

Settings

Dashboard


Locations

Tools

Tool States

Part Number

LDH702
 LDH722
 LDH762
 MMM07513
 MMM07515
 MMM07516
NT001
 NYZ001
 NYZ012
 NYZ014
 NYZ7000MDKIT
 NYZ7000S
 NYZ7004VB
 NYZ7006MG
 NYZ700AD
 NYZ7025H50



NT001
 New Tool 001

Info

Instances

Maintenance

Contained In

Quantity Monitoring

☐ Show Deleted Items

Home Location	Serial Number	Customer ID	Qty	Issued	Work Location	Kit
Tool Crib	NT001a	NT001a	1			<input type="button" value="X"/>
Tool Crib			1			
Tool Crib			1			

☐ Show Deleted Items

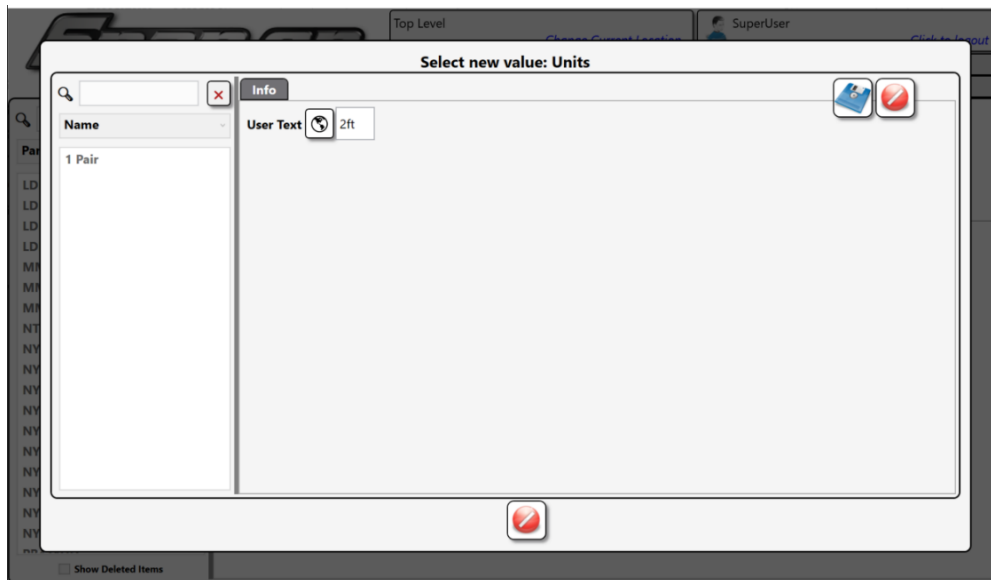
Consumables

Consumables & Returnable Consumables are tools that have a quantity and are disposed of after use. The process of creating these is the same as creating a Durable tool. The only difference is that you create a single instance to

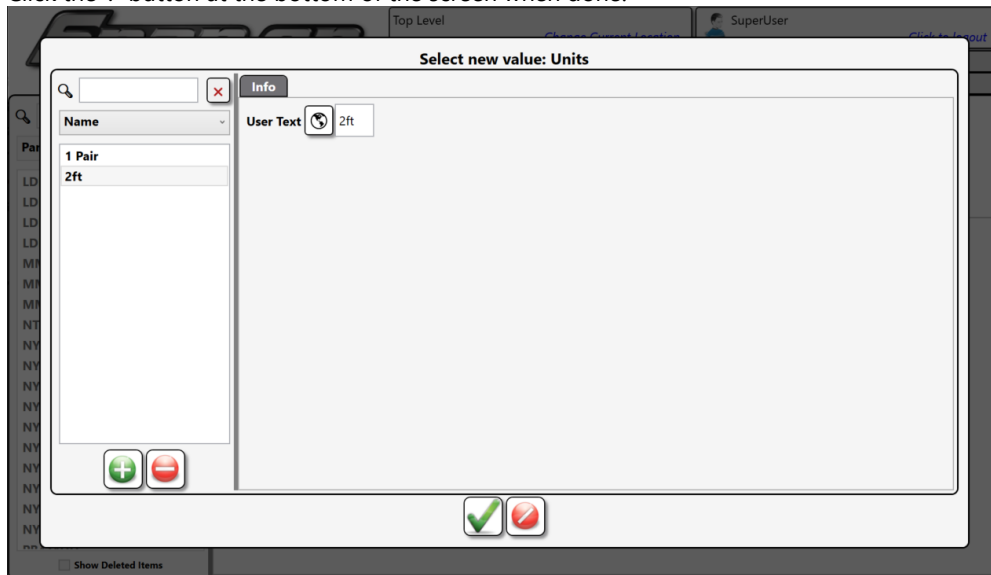


WARNING! When creating instances of Consumables & Returnable Consumables only create 1 instance. The quantity of the consumables is defined in the properties of the instance.

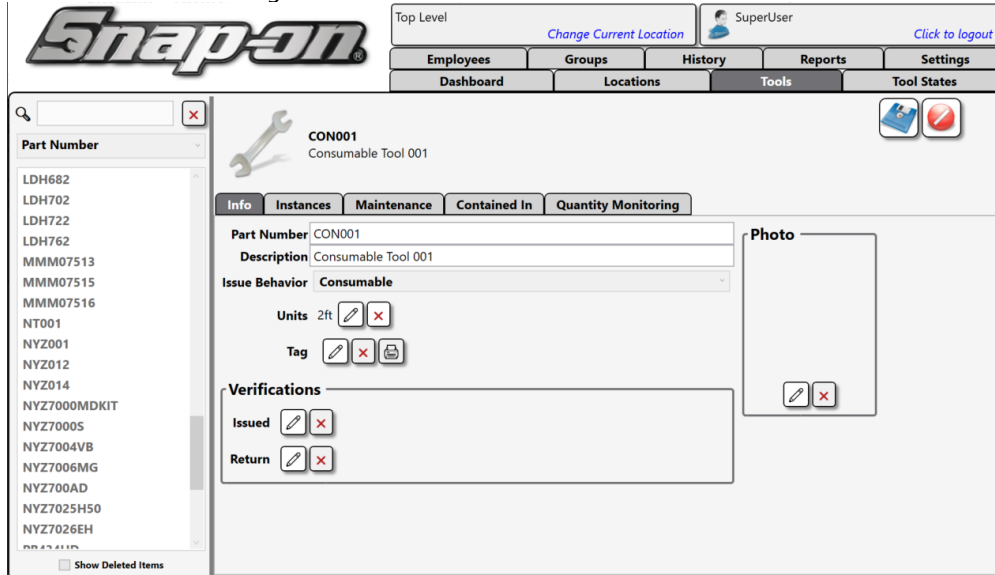
-



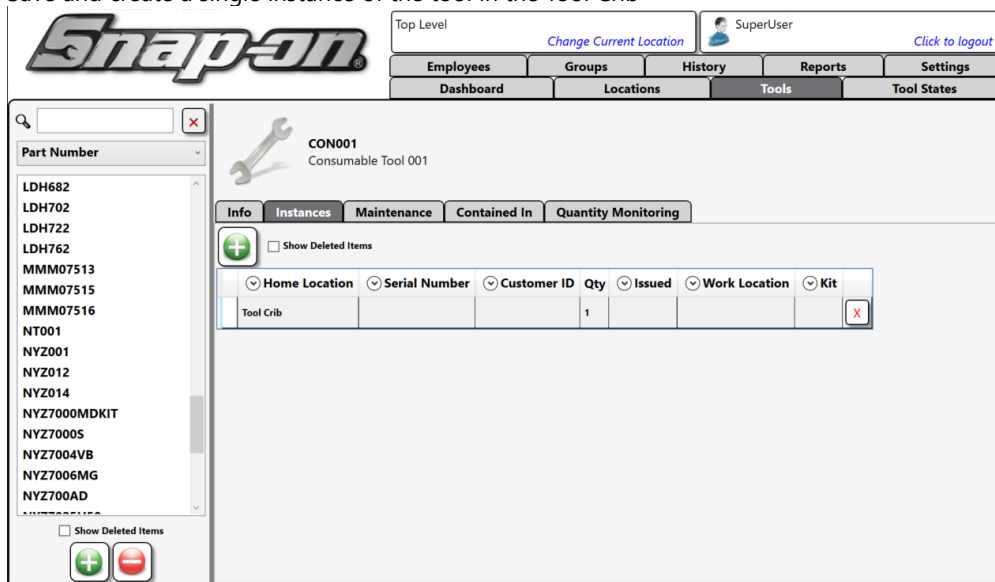
3. Click the ✓ button at the bottom of the screen when done.



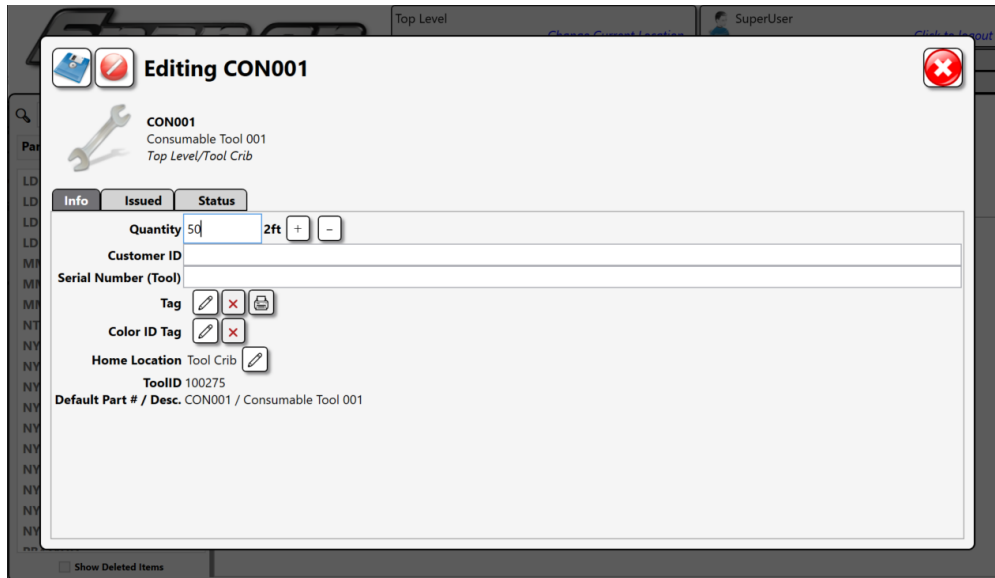
4. The Unit will now be assigned to the Master Tool.



5. Save and create a single instance of the tool in the Tool Crib



- In the instance properties set the Quantity to 50. Save and Close. The Quantity is now listed in the instance list.



Editing CON001

CON001
Consumable Tool 001
Top Level/Tool Crib

Info Issued Status

Quantity 50 2ft + -

Customer ID

Serial Number (Tool)

Tag

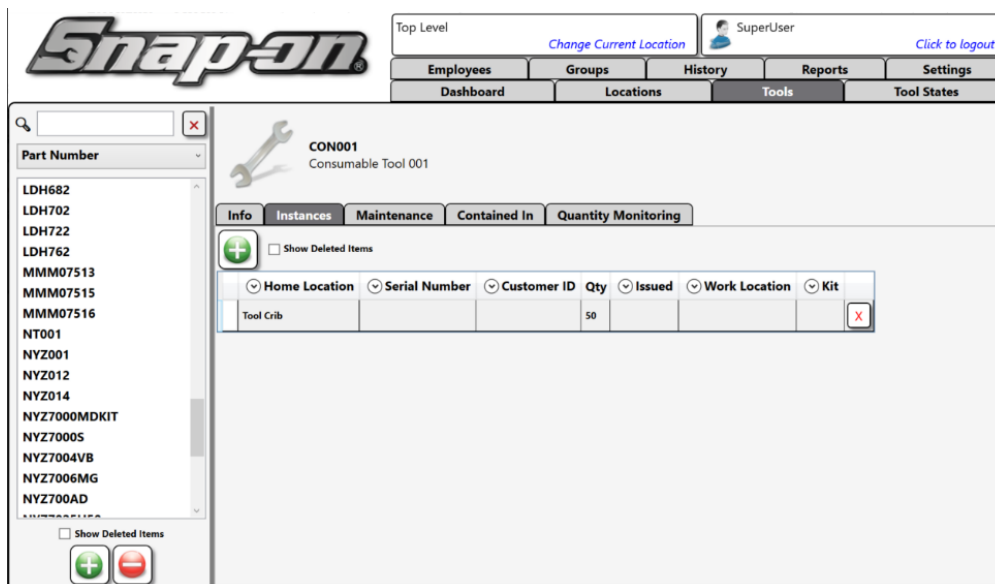
Color ID Tag

Home Location Tool Crib

ToolID 100275

Default Part # / Desc. CON001 / Consumable Tool 001

Show Deleted Items



Snap-on

Top Level Change Current Location SuperUser Click to logout

Employees Groups History Reports Settings

Dashboard Locations Tools Tool States

CON001
Consumable Tool 001

Info Instances Maintenance Contained In Quantity Monitoring

Show Deleted Items

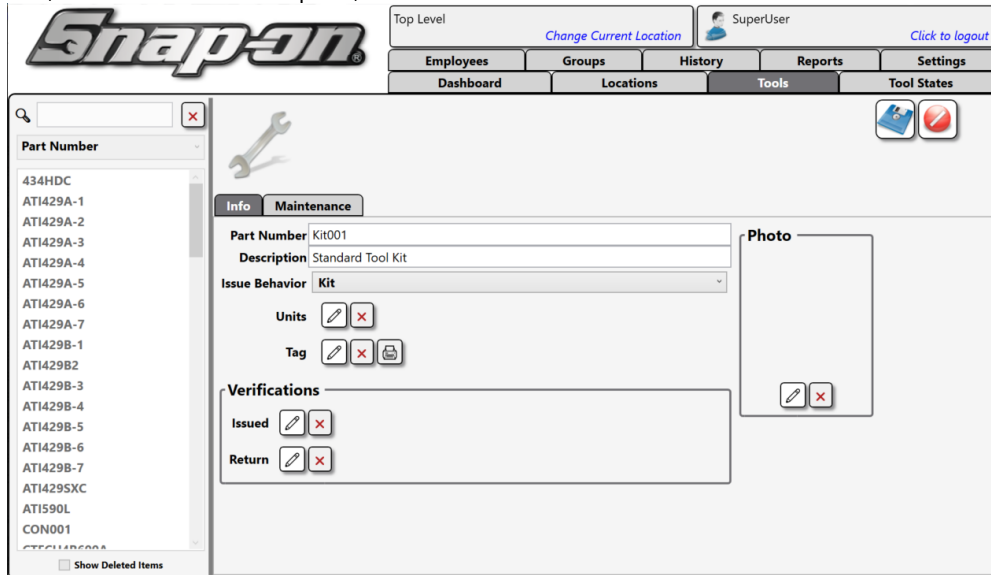
Home Location	Serial Number	Customer ID	Qty	Issued	Work Location	Kit
Tool Crib			50			

Show Deleted Items

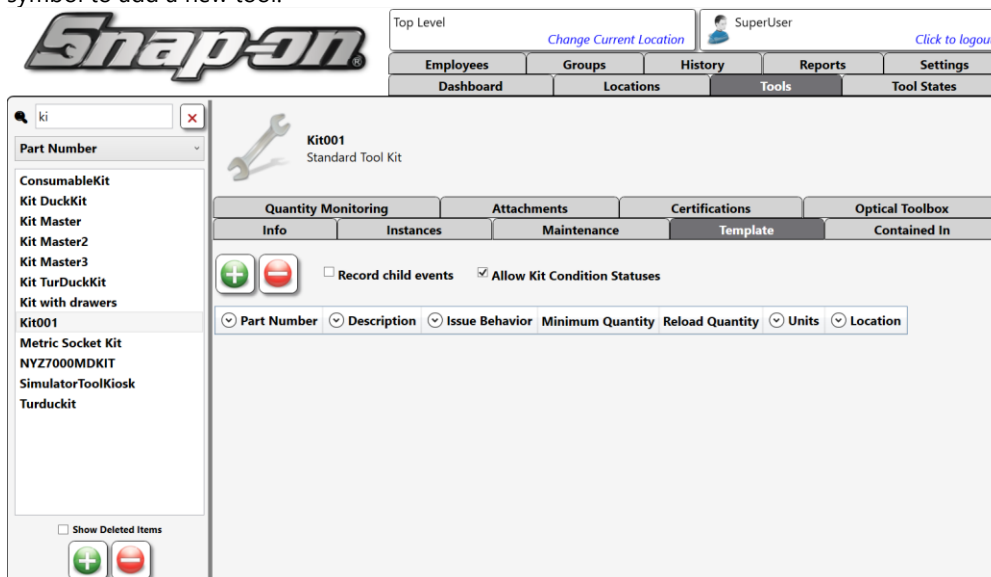
Tool Kits

Tool Kits allow us to create a bundle of tools that can be issued out as a single instance. This is useful when you have a standard tool loadout issued to Employees frequently.

1. To create a toolkit, you need to create a new Tool Master and set the behavior to Kit. Name this new master tool, **Kit001**. Add the description, **Standard Tool Kit**. Save the Tool Master.



2. Now add the tools that will be included with the kit. Click on the **Template** tab, then click on the **Green +** symbol to add a new tool.

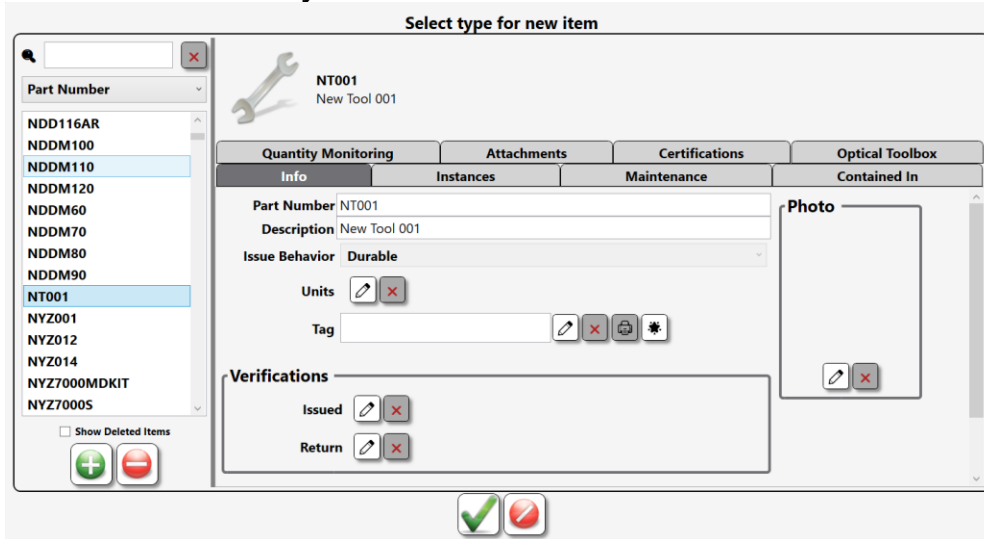


3. You will then be presented with a list of the master tools managed by the system. Find the tool you want to include in your kit. For this kit, select **NT001** and click on the ✓ button to add it.

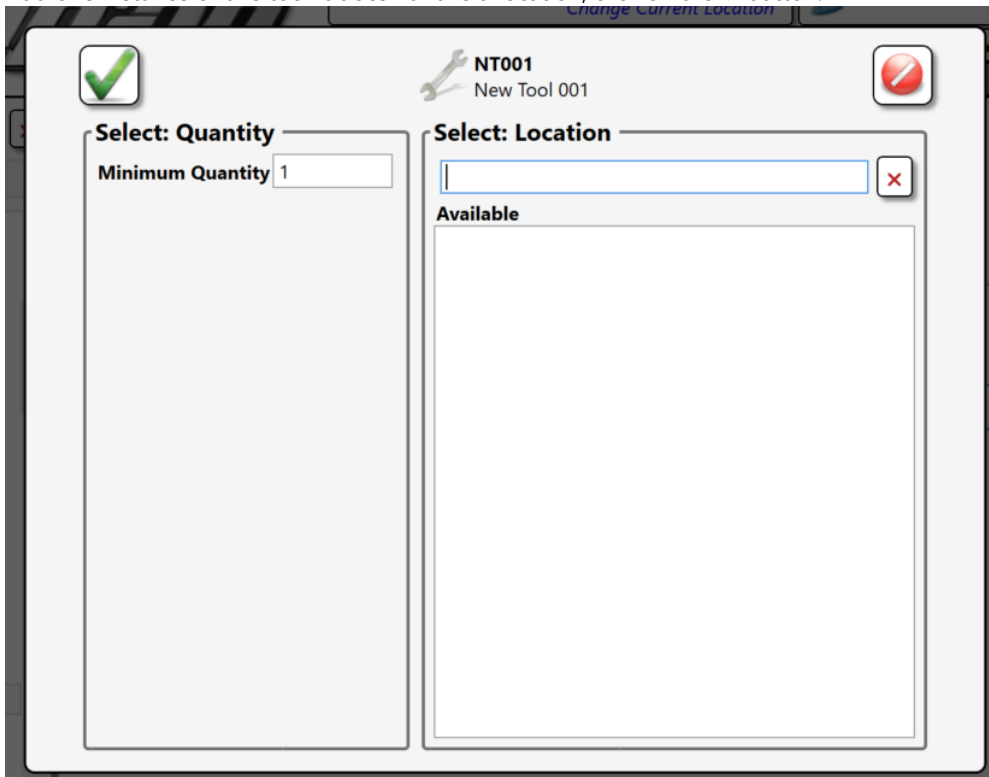
NOTE: Just like with normal Tools, Kit Tools have a MASTER and instances. If the tool you want to add

to the kit is not in the list, you will need to create a new MASTER for that tool.

Select type for new item

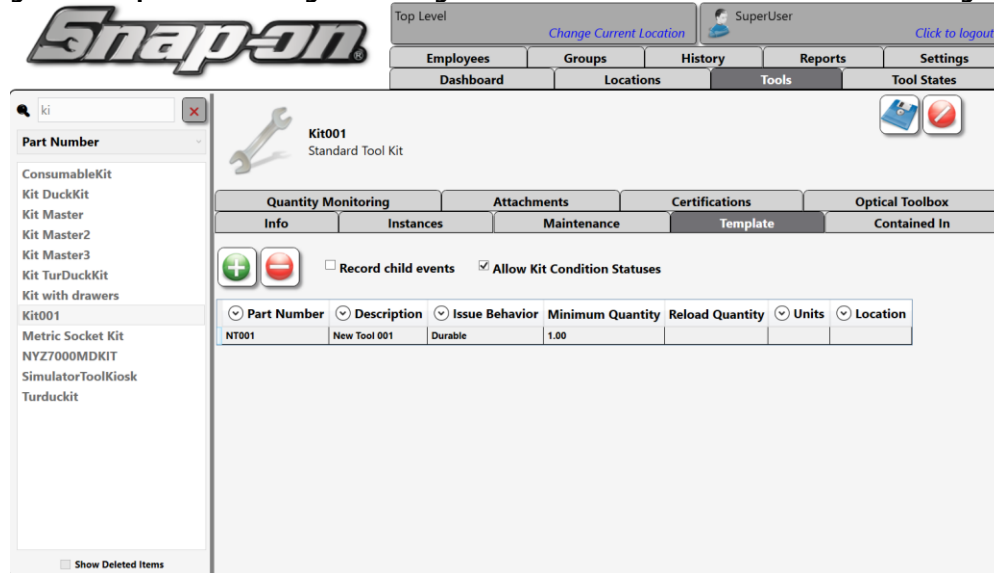


4. Once you have selected your tool, the system will ask how many of the tools you wish to add to the kit. Also, If the kit has specific locations like drawers or pouches, you can add those. Add one Instance of this tool it doesn't have a location, click on the ✓ button.



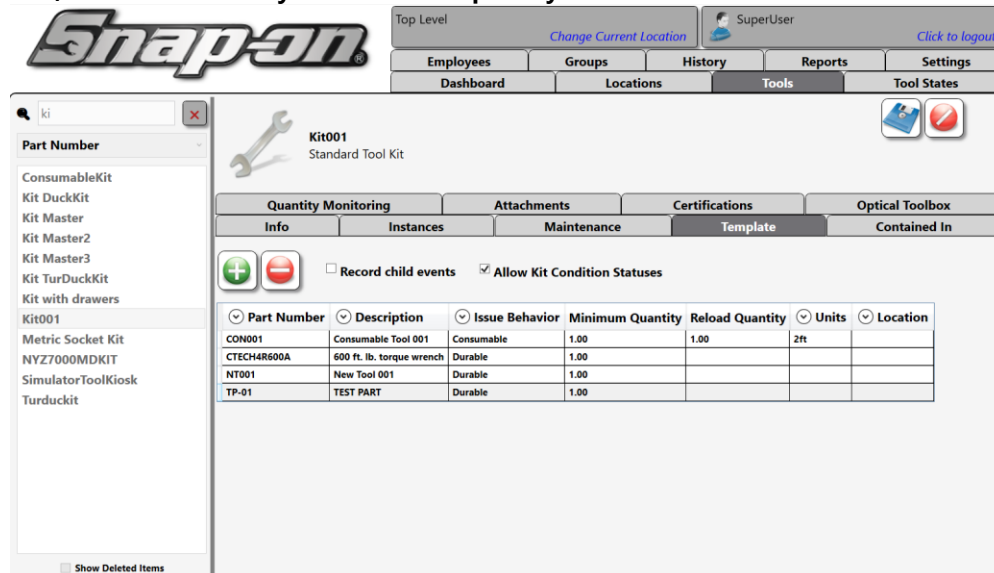
5. You should see the tool listed in the Template.
NOTE: Adding a tool to a template does not create an instance, like a master tool, a template is just a blueprint of what the kit is supposed to contain. When you create an instance of the Kit, you will be

given the option of moving an existing instance of the child tool to the kit or creating a new one.

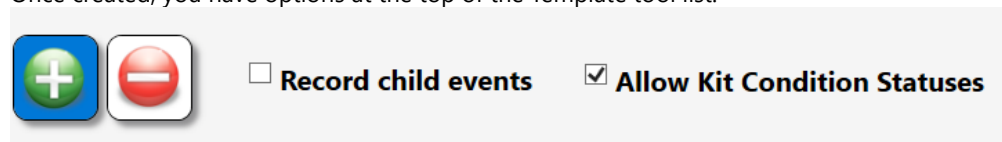


6. Finish setting up your kit by adding tools to the kit by repeating the steps above. Once you are finished, click the **Blue Save Icon** to save the **Kit Master Tool**.

NOTE: When adding a consumable to a kit, it will prompt you for a Minimum Quantity like a durable tool, but it will also ask you for a reload quantity once the minimum amount has been reached.



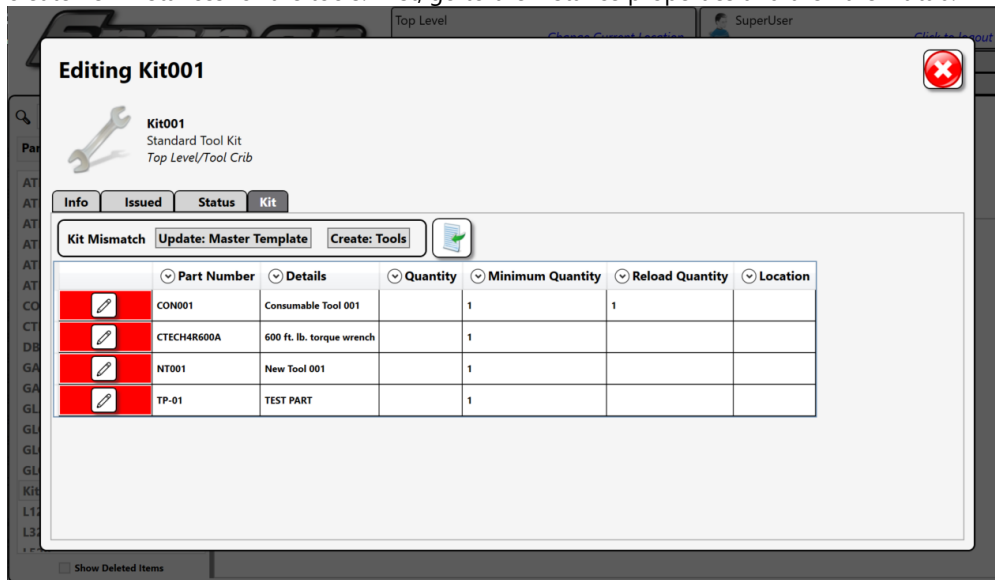
Once created, you have options at the top of the Template tool list.



- **Record child events** – Log events for all children of the kit and the kit itself.
- **Allow Kit Condition Statuses** – If an instance of a kit doesn't have an instance of all the child tools assigned to it, a status of Kit Mismatch will be applied to it. If a tool is missing from the kit at return

it will have a Kit Incomplete status assigned to it. If a consumable tool in the kit has less than the minimum quantity, it will have a Kit Low Quantity status assigned to it.

7. Set the options how you would like them and create an instance of the kit in the Tool Crib so that it can be issued out.
8. Once the Instance is created, you need to create or move tool instances for the child tools. In this exercise, create new instances for the tools. First, go to the Instance properties and then the kit tab.



Editing Kit001

Kit001
Standard Tool Kit
Top Level/Tool Crib

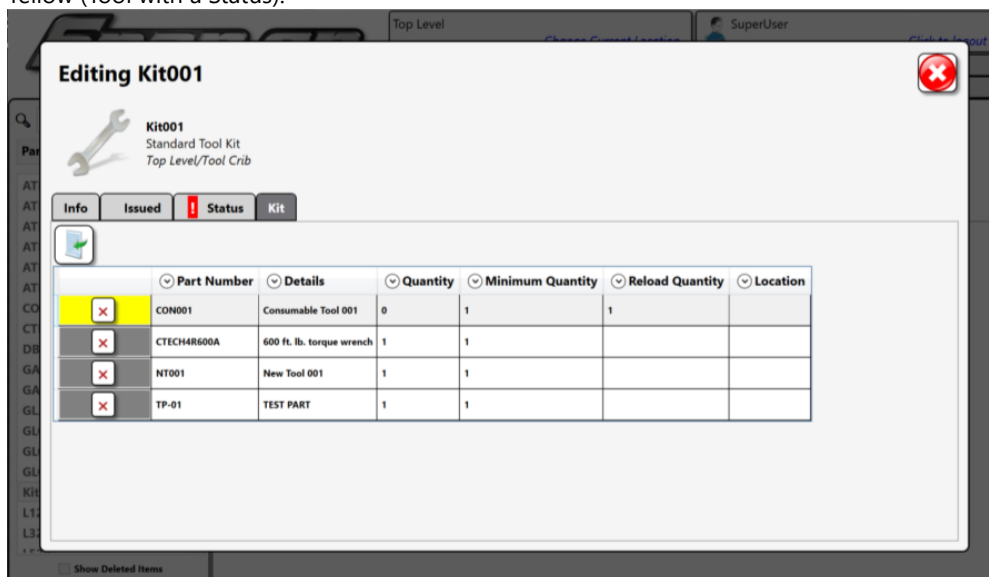
Info Issued Status **Kit**

Kit Mismatch Update: Master Template Create: Tools

	Part Number	Details	Quantity	Minimum Quantity	Reload Quantity	Location
✖	CON001	Consumable Tool 001		1	1	
✖	CTECH4R600A	600 ft. lb. torque wrench		1		
✖	NT001	New Tool 001		1		
✖	TP-01	TEST PART		1		

Show Deleted Items

9. You will see a Kit Mismatch section here. You have two options:
 - **Update: Master Template** – Change the Template on the Master tool based on the Instance.
 - **Create: Tools** – Create tool instances based on the Master Tool Template.
10. Click on **Create: Tools** you will see the color change from RED (Missing instance) to Grey (Present) and Yellow (Tool with a Status).



Editing Kit001

Kit001
Standard Tool Kit
Top Level/Tool Crib

Info Issued **Status** Kit

Create: Tools

	Part Number	Details	Quantity	Minimum Quantity	Reload Quantity	Location
✖	CON001	Consumable Tool 001	0	1	1	
✖	CTECH4R600A	600 ft. lb. torque wrench	1	1		
✖	NT001	New Tool 001	1	1		
✖	TP-01	TEST PART	1	1		

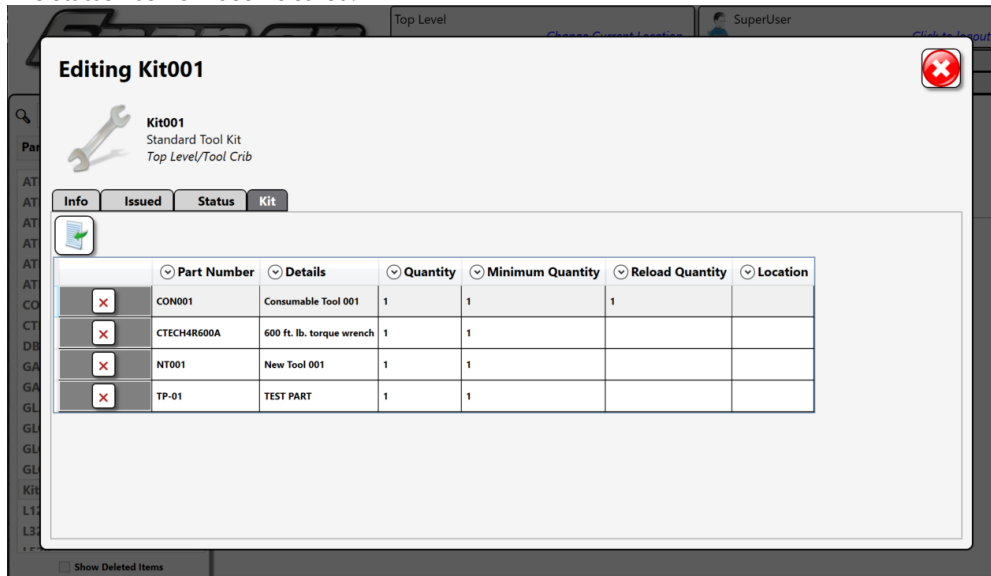
Show Deleted Items

The yellow is a Tool Status for the consumable since there isn't any quantity of the tool in the kit, and it

needs to be reloaded. Double-click **CON001** and set its Quantity to 1, click the SAVE button, then CLOSE.



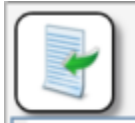
The status has now been cleared.



	Part Number	Details	Quantity	Minimum Quantity	Reload Quantity	Location
	CON001	Consumable Tool 001	1	1	1	
	CTECH4R600A	600 ft. lb. torque wrench	1	1		
	NT001	New Tool 001	1	1		
	TP-01	TEST PART	1	1		

Importing a Tool Kit Template

If you already have a list of tools you want to add to a kit, you can import them to the Instance by clicking the **IMPORT** button.



You will need to create a new Kit Master. Then create an instance of that Master. Go to the kit tab within the instance properties and use the **IMPORT** button. Once imported, you can then click on Update: Master Template. That will then push the list of tools to the Tool Master Template.



L5 Connect User Manual

Tool Tags

Master tools and tool instances can have tags assigned to them. This is either a 1D or 2D barcode, or it can also be an RFID tag. A tag on a master tool could be used in a crib for a bin of multiple instances of that tool type. Then the attendant could scan a copy of that tag on the bin to issue one of the instances of that tool type. A tag could be applied to specific instances of tools that need to be tracked individually for maintenance purposes, such as torque wrenches. RFID tags are also used to uniquely track tool instances inside of RFID devices such as the ATC Portal and ATC Locker.

15 Snap-on L5 Connect Admin Client, v9.12.8.1219

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

Part Number

10MA-SGHF616BR
1410 NO KEY
1650
1AM1541
1DA221HP NO WRENCHES
208CCP
235605
3852T43
434HDC
47ACP
5970000374158
6T-SGHF614BR
87CF
8MA-SGHF615BR
8R-SGHF614BR
91ACP
96CF
97CCP
A2A
ACSB
AT380
AT1429A-1
AT1429A-2
AT1429A-3

☐ Show Deleted Items

QD2R100
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive

Info Instances Maintenance Contained In Quantity Monitoring Attachments Optical Toolbox

Part Number QD2R100
Description Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive

Issue Behavior Durable

Units

Tag MT100014

Verifications

Issued Issued Verification

Return

Optical Toolbox

Default Tolerance

Editing QD2R100

QD2R100
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive

Top Level/Maintenance/Tool Crib East

Info Issued Status Maintenance Attachments

Customer ID

Serial Number (Tool)

Additional Info

User Label 2

Tag

Color ID Tag

Kit Kit Master / A tool that is a kit

ToolID 102960

Default Part # / Desc. QD2R100 / Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive

You can manually enter a tag value by typing it into the text box. This value must be unique in the system. You could also click the **Pencil** button and then scan the tag, using a supported tag scanner to import the tag value. Alternatively, you can click the **Auto generate value** button to have the system assign a generated tag value. Then you will need to click the blue **Save** button to save the change.

Tag	<input type="text"/>					
Tag	T102960					

Once you have a valid tag created, you can then use the print button to print that tag. This requires that you have previously installed and configured an L5 approved barcode printer for your system. Otherwise, the print button will not be enabled.

Tag	T102960				
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L5 Connect User Manual

Importing Tools from Spreadsheet

When setting up an ATC device for the first time or adding several new tools to the inventory, it can be very time-consuming to input all that information one tool at a time. Tool importing would cut that time down significantly, allowing you to be more productive.

You can use the Tool Import wizard if you have a list of the tools in an Excel format (.xlsx). To start, you must be logged into the Administration Client and have the appropriate permission to import tools.

The tool properties that can be imported are:

- **Compartment (Kiosk only)** - Door/drawer number of the tool's desired kiosk
- **Customer ID** – Custom ID defined by the customer
- **Description** – The Tool Name or short description of the tool
- **Issue Behavior** – The type of tool (See Tool section of Administration Guide)
- **Location** – The sub-location within the Crib that the tool will reside
- **Parent** – For Kits, this is the Parent (Key) in which this tool belongs to
- **Parent (Key)** – For Kits, this is the ID to identify a kit Parent (Must be unique)
- **Part Number** – The Part Number of the Tool
- **Quantity** – the number of instances that needs to be created
- **Serial Number** – the serial number of the tool
- **Tag** – RFID or Barcode for the tool
- **Units** – the amount of something that is given to an Employee on a single issue

Note: When attempting to import a tool in which a MASTER already exists in the system, you will instead add an additional instance of that tool.



L5 Connect User Manual

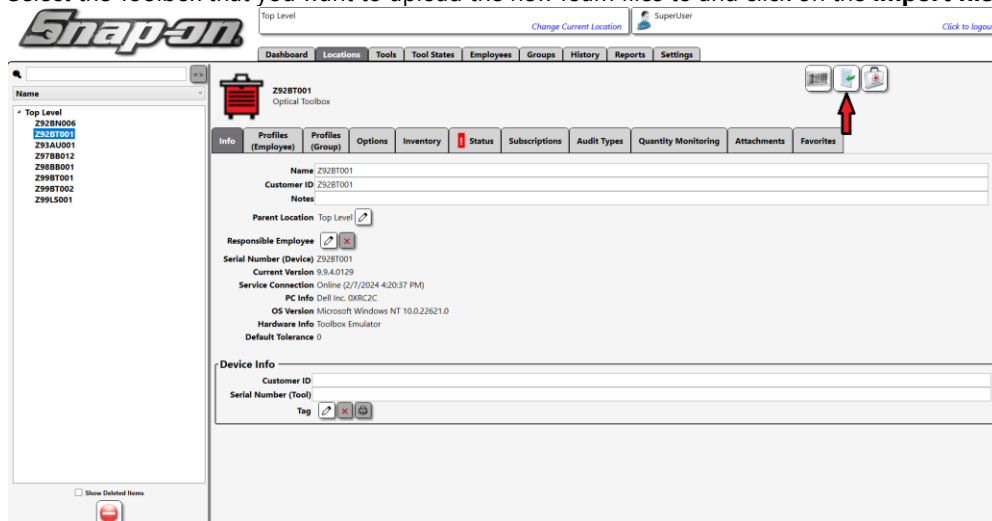
Via Admin Client

ATC Toolbox

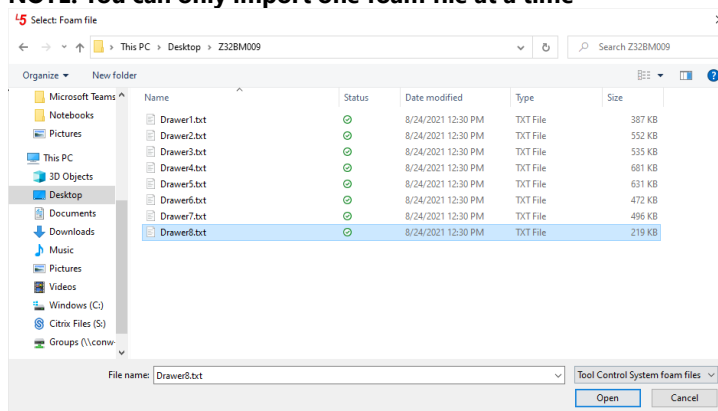
To use the Toolbox, you will need to train it to detect the tools within it. We do this by utilizing a Foam File that tells the Toolbox where to look to find the tool in the drawer. You will need to import the foam file to the Toolbox.

NOTE: Tools on the Toolbox cannot be imported through an excel sheet, instead a foam file must be uploaded. You will have one foam file for every drawer that the toolbox has. If you do not have any foam files, please contact your Snap-on representative.

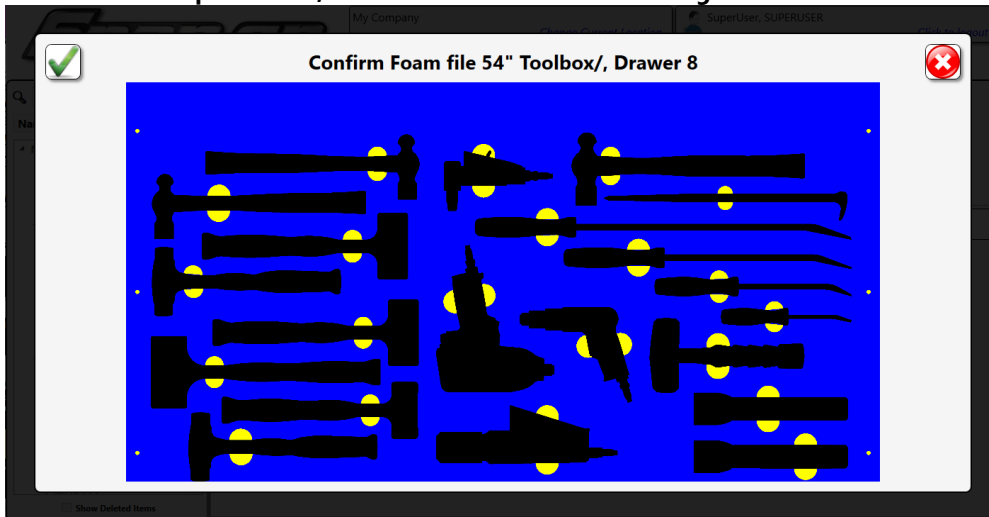
1. From the L5 Connect™ Admin Client, click on the **locations** tab.
2. Select the Toolbox that you want to upload the new foam files to and click on the **import file button**.



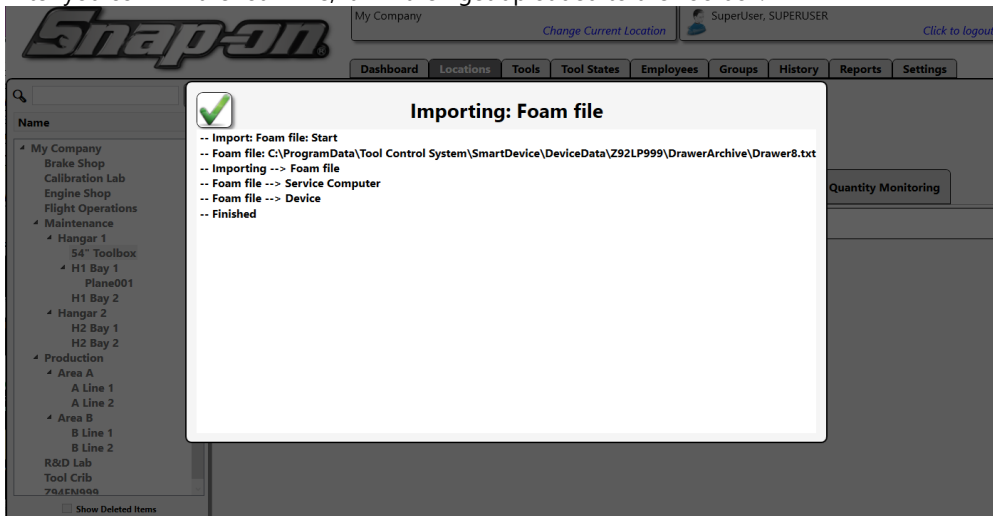
3. Browse to the file and click **Open**.
NOTE: You can only import one foam file at a time



4. You will then be asked to confirm that the foam file is correct. **NOTE: The foam file should look exactly like the drawer it is uploaded to, if not click on the red X on the right.**



5. After you confirm the foam file, it will then get uploaded to the Toolbox.



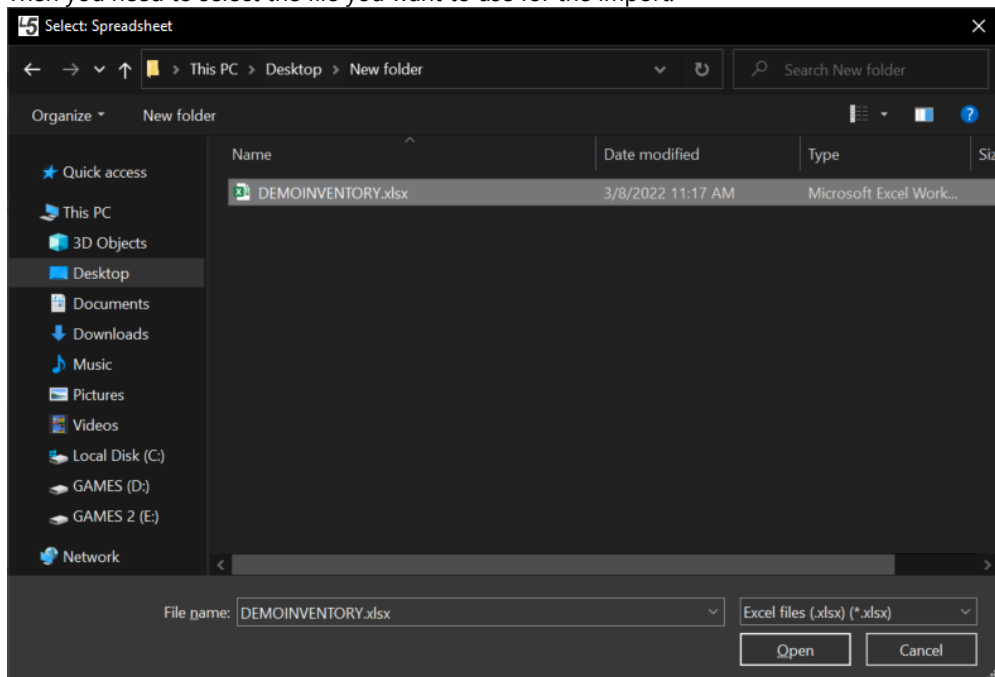


L5 Connect User Manual

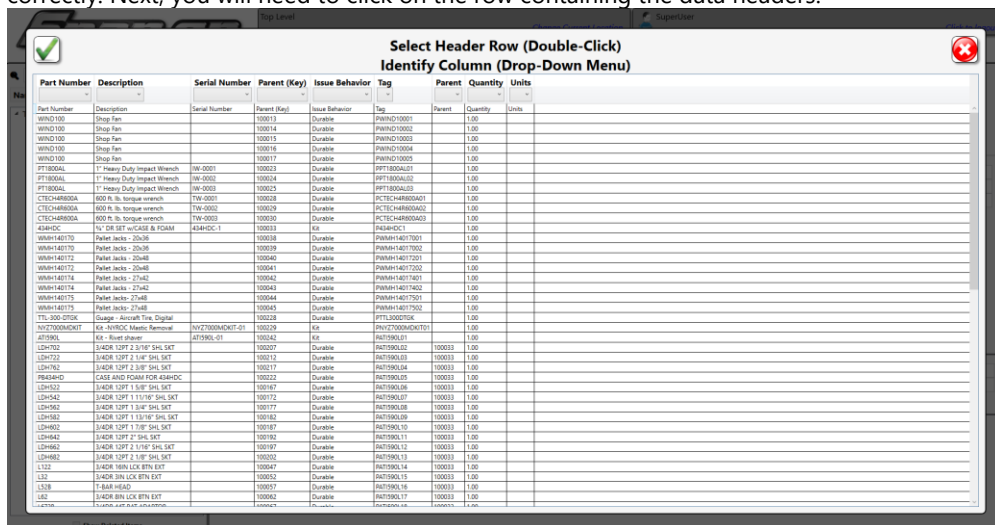
Other Devices

NOTE: Only 100 tools can be imported at a time from the admin client. However, larger numbers of tools can be imported directly on certain devices. (See below)

1. On the Location Tab, select the device on the left that you want to import tools into, then click the Import Tools Button open the import wizard.
2. Then you need to select the file you want to use for the import.



3. Once you have selected the file, the wizard will want you to define some data on the screen so it can read it correctly. Next, you will need to click on the row containing the data headers.





L5 Connect User Manual

Then you will need to use the pull-downs and select what the headers are.

Select Header Row (Double-Click) Identify Column (Drop-Down Menu)									
Part Number	Description	Serial Number	Parent (Key)	Issue Behavior	Tag	Parent	Quantity	Units	
Part Number	Description	Serial Number	Parent (Key)	Issue Behavior	Tag	Parent	Quantity	Units	
WIND100	Shop Fan	100013	Durable	PWIND10001			1.00		
WIND100	Shop Fan	100014	Durable	PWIND10002			1.00		
WIND100	Shop Fan	100015	Durable	PWIND10003			1.00		
WIND100	Shop Fan	100016	Durable	PWIND10004			1.00		
WIND100	Shop Fan	100017	Durable	PWIND10005			1.00		
PT1800AL	1" Heavy Duty Impact Wrench	18-0001	Durable	PPT1800AL01			1.00		
PT1800AL	1" Heavy Duty Impact Wrench	18-0002	Durable	PPT1800AL02			1.00		
PT1800AL	1" Heavy Duty Impact Wrench	18-0003	Durable	PPT1800AL03			1.00		
CTECH4890DA	600 ft. lb. torque wrench	TW-0001	Durable	CTECH4890DA01			1.00		
CTECH4890DA	600 ft. lb. torque wrench	TW-0002	Durable	CTECH4890DA02			1.00		
CTECH4890DA	600 ft. lb. torque wrench	TW-0003	Durable	CTECH4890DA03			1.00		
434HDC	1/2" DS SET w/CASE & FOAM	434HDC-1	Kir	RS434HDC1			1.00		
WMH140170	Pallet Jacks - 20x36		Durable	PWMH14017001			1.00		
WMH140170	Pallet Jacks - 20x36		Durable	PWMH14017002			1.00		
WMH140172	Pallet Jacks - 20x48		Durable	PWMH14017201			1.00		
WMH140172	Pallet Jacks - 20x48		Durable	PWMH14017202			1.00		
WMH140174	Pallet Jacks - 27x42		Durable	PWMH14017401			1.00		
WMH140174	Pallet Jacks - 27x42		Durable	PWMH14017402			1.00		
WMH140175	Pallet Jacks - 27x48		Durable	PWMH14017501			1.00		
WMH140175	Pallet Jacks - 27x48		Durable	PWMH14017502			1.00		
TL100-250K	Gauge - Absolute Time Digital		Durable	PTTL10007004			1.00		
NVZ7000MDKIT	Kir - AXNDC Mastle Removal	NVZ7000MDKIT-01	Kir	PNVZ7000MDKIT01			1.00		
41709L	Kir - Avert Shaver	41709L-01	Kir	RA1709L01			1.00		
LDH760	3/4CDR 12PT 2 1/8" SHL SKT	100107	Durable	RA1709L02	100013		1.00		
LDH722	3/4CDR 12PT 2 1/8" SHL SKT	100112	Durable	RA1709L03	100013		1.00		
LDH760	3/4CDR 12PT 2 1/8" SHL SKT	100117	Durable	RA1709L04	100013		1.00		
PR434HDC	CASE AND FOAM FOR 434HDC	100122	Durable	RA1709L05	100013		1.00		
LDH532	3/4CDR 12PT 1 5/8" SHL SKT	100167	Durable	RA1709L06	100013		1.00		
LDH560	3/4CDR 12PT 1 11/16" SHL SKT	100171	Durable	RA1709L07	100013		1.00		
LDH560	3/4CDR 12PT 1 3/4" SHL SKT	100177	Durable	RA1709L08	100013		1.00		
LDH560	3/4CDR 12PT 1 13/16" SHL SKT	100182	Durable	RA1709L09	100013		1.00		
LDH680	3/4CDR 12PT 1 7/8" SHL SKT	100187	Durable	RA1709L10	100013		1.00		
LDH680	3/4CDR 12PT 2" SHL SKT	100192	Durable	RA1709L11	100013		1.00		
LDH680	3/4CDR 12PT 2 1/8" SHL SKT	100197	Durable	RA1709L12	100013		1.00		
LDH680	3/4CDR 12PT 2 1/8" SHL SKT	100202	Durable	RA1709L13	100013		1.00		
L322	3/4CDR 16IN LCK BTH EXT	100047	Durable	RA1709L14	100013		1.00		
L32	3/4CDR 3IN LCK BTH EXT	100052	Durable	RA1709L15	100013		1.00		
L328	1" 6IN HEAD	100057	Durable	RA1709L16	100013		1.00		
L62	3/4CDR 8IN LCK BTH EXT	100062	Durable	RA1709L17	100013		1.00		

- Once you have selected these, you can click on the Import Button ✓, or you can click on the X to cancel. The tools should now be added to the device.



L5 Connect User Manual

Direct Device Import

Tool Crib

NOTE: Importing tools directly on the Tool Crib allows for imports of greater than 100 tools at once

1. On the True-Crib™ Dashboard, click on the Import Tools Button to import your tools. You will then be prompted to log in with your admin username and password.

The screenshot displays the Snap-on True-Crib dashboard. At the top, there is a header with the Snap-on logo and a user profile for 'Attendant SuperUser' with a 'Click to logout' link. Below the header is a section titled 'SCAN EMPLOYEE BADGE TO START' with several icons. The main content area is divided into four panels. The top-left panel shows 'System Status' with a table of filtered and total counts for various system metrics. The top-right panel shows 'Device Status' and 'Work Location Status', both with 'Hide OK Items' checkboxes and 'Alerts' sections. The bottom-left panel contains three sub-sections: 'Top Employees with Issued To', 'Top Work Locations with Issued To', and 'Top Devices with Issued Tools'. The bottom-right panel shows 'Recent Events' with a table of activity logs.

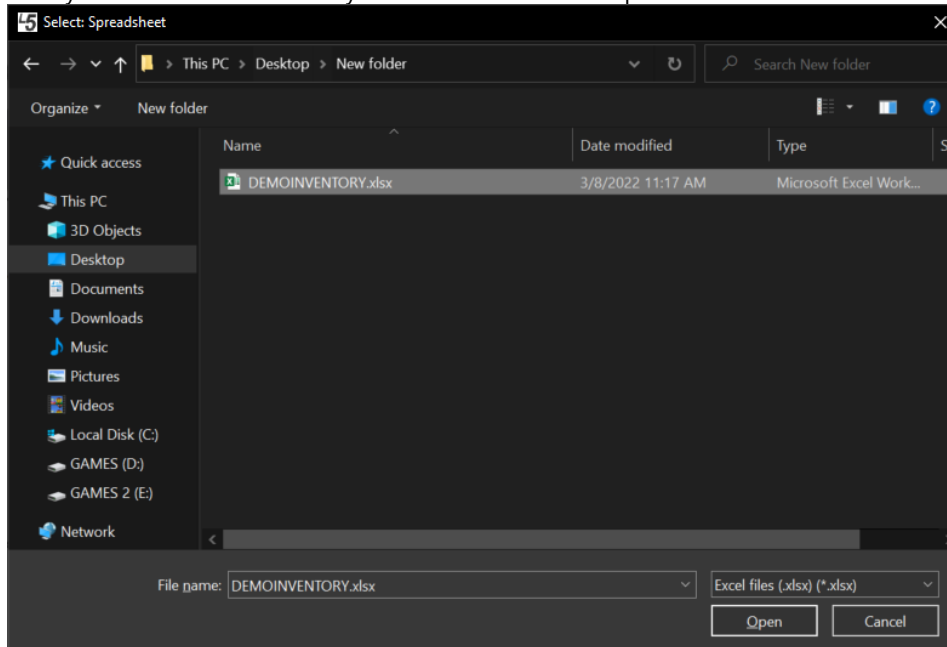
System Status	Filtered	Total
Devices Online :	1	1
Devices Offline :	0	0
Tools Issued :	0	0
Users with Tools Issued :	0	0
Devices with Tools Issued :	0	0
Tools Issued with Alerts :	0	0
Managed Tools Out :	0	0
Tools Managed :	0	1

Name	Alerts	Issued	Issued Users	Mngd Out	Alert	Device	Tool
Tool Crib	0	0	0	0			

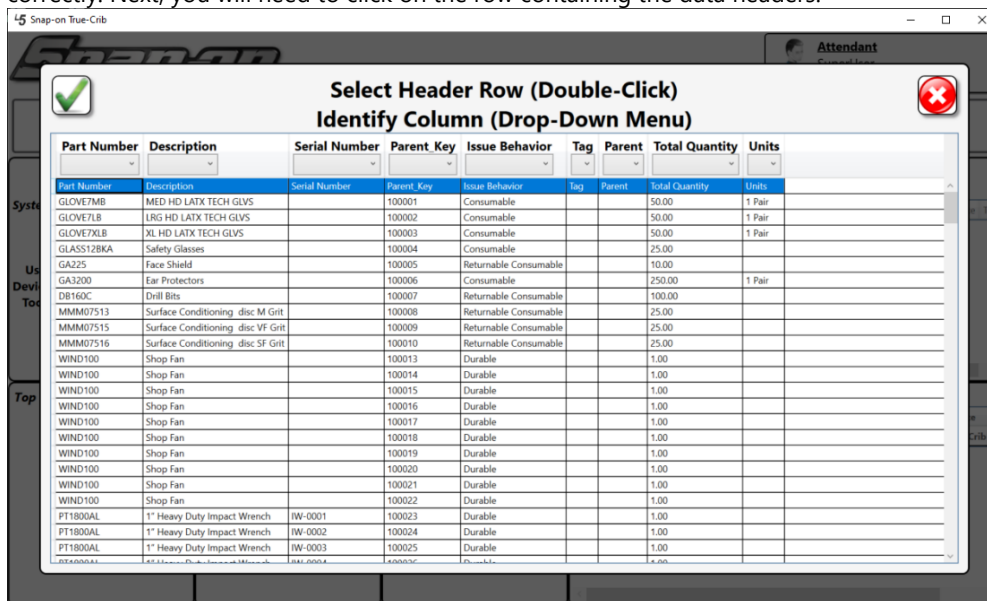
Name	Alerts	Issued	Issued Users	Issued Devices	Mngd Out	Alert	Device	Tool
------	--------	--------	--------------	----------------	----------	-------	--------	------

Time	Action	Part Number	Employee	Source
4/11/2022 12:51:30 PM	Tool Crib Attendant Login		SuperUser	Tool Crib

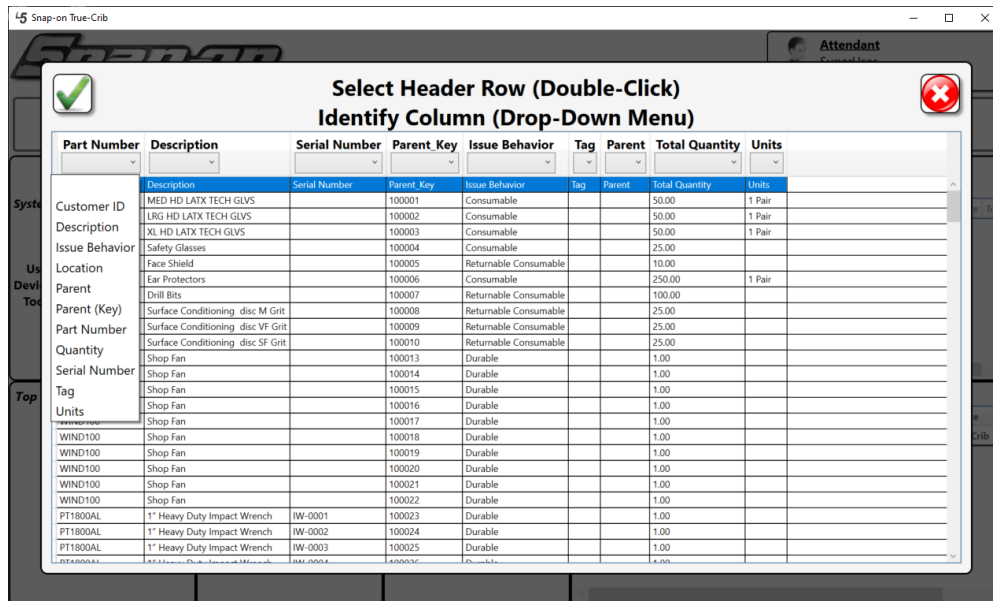
- Then you need to select the file you want to use for the import.



- Once you have selected the file, the wizard will want you to define some data on the screen so it can read it correctly. Next, you will need to click on the row containing the data headers.



Then you will need to use the pull-downs and select what the headers are.

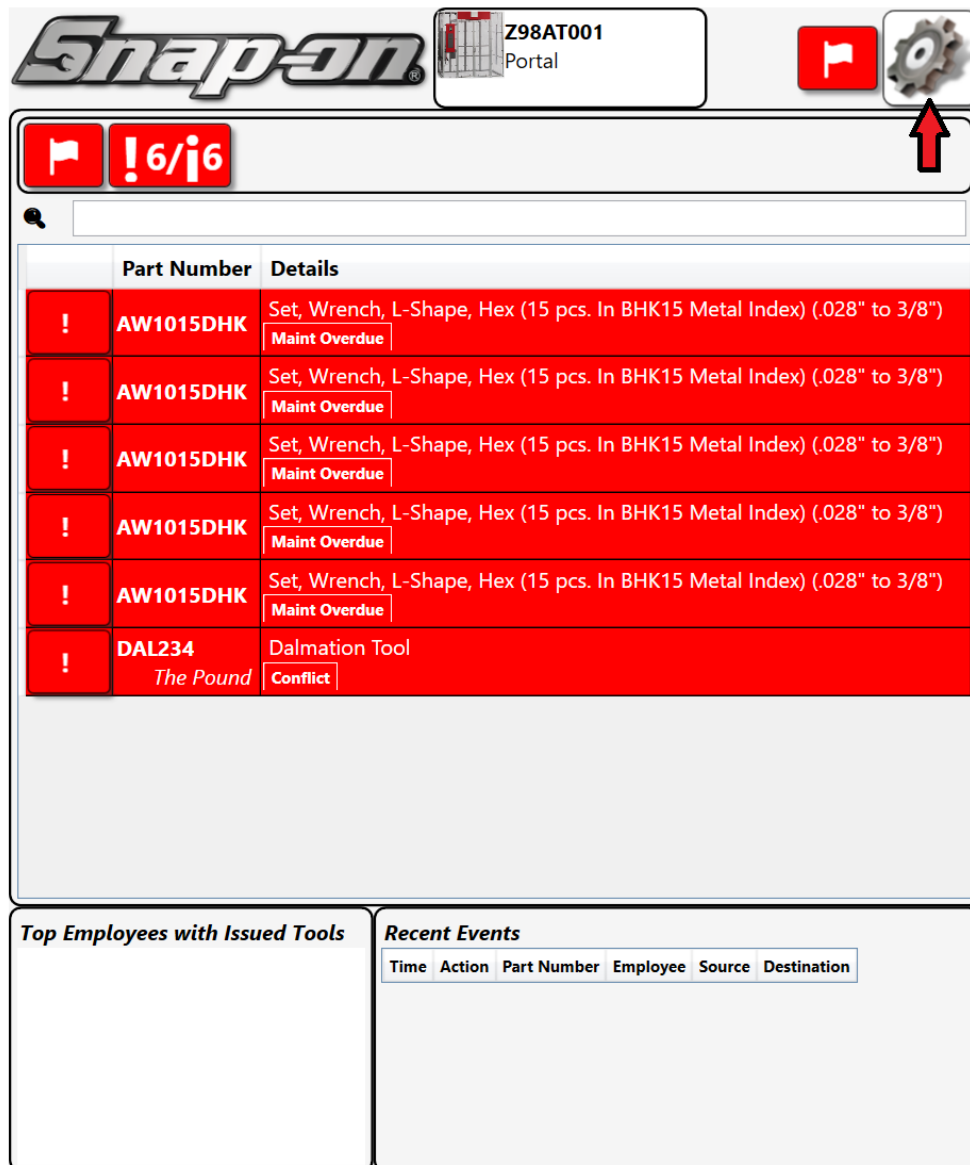


Once you have this selected, you can click on the Import Button ✓, or you can click on the X to cancel. The tools should now be added to the crib.

Portal

As of version 9.13.8.0314, you can import tools directly into the Portal and the number of tools can be greater than 100.

1. On the main screen of the portal, click the **Main Menu** button, which looks like a gear.



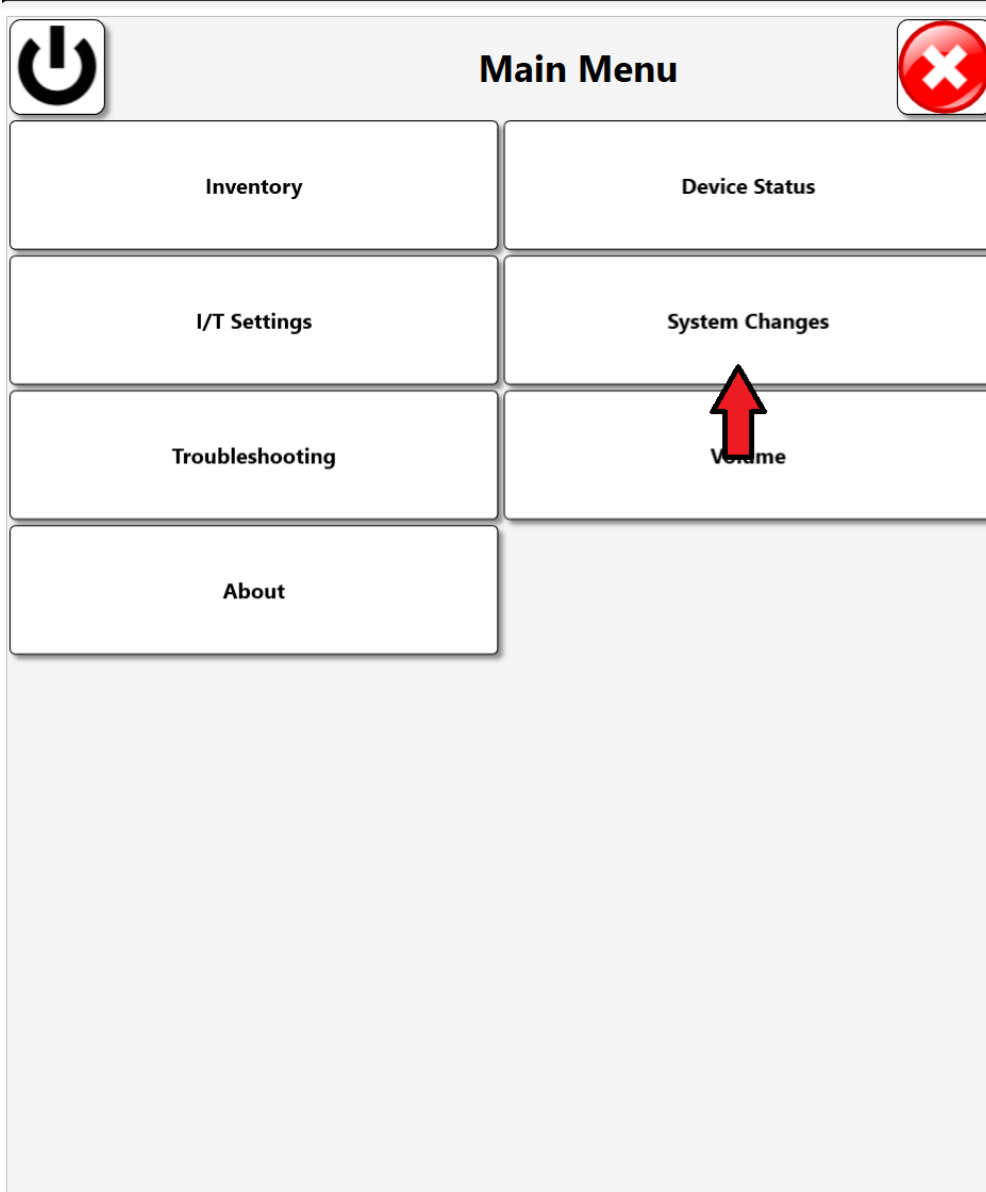
	Part Number	Details
!	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue
!	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue
!	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue
!	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue
!	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue
!	DAL234 The Pound	Dalmation Tool Conflict

Top Employees with Issued Tools

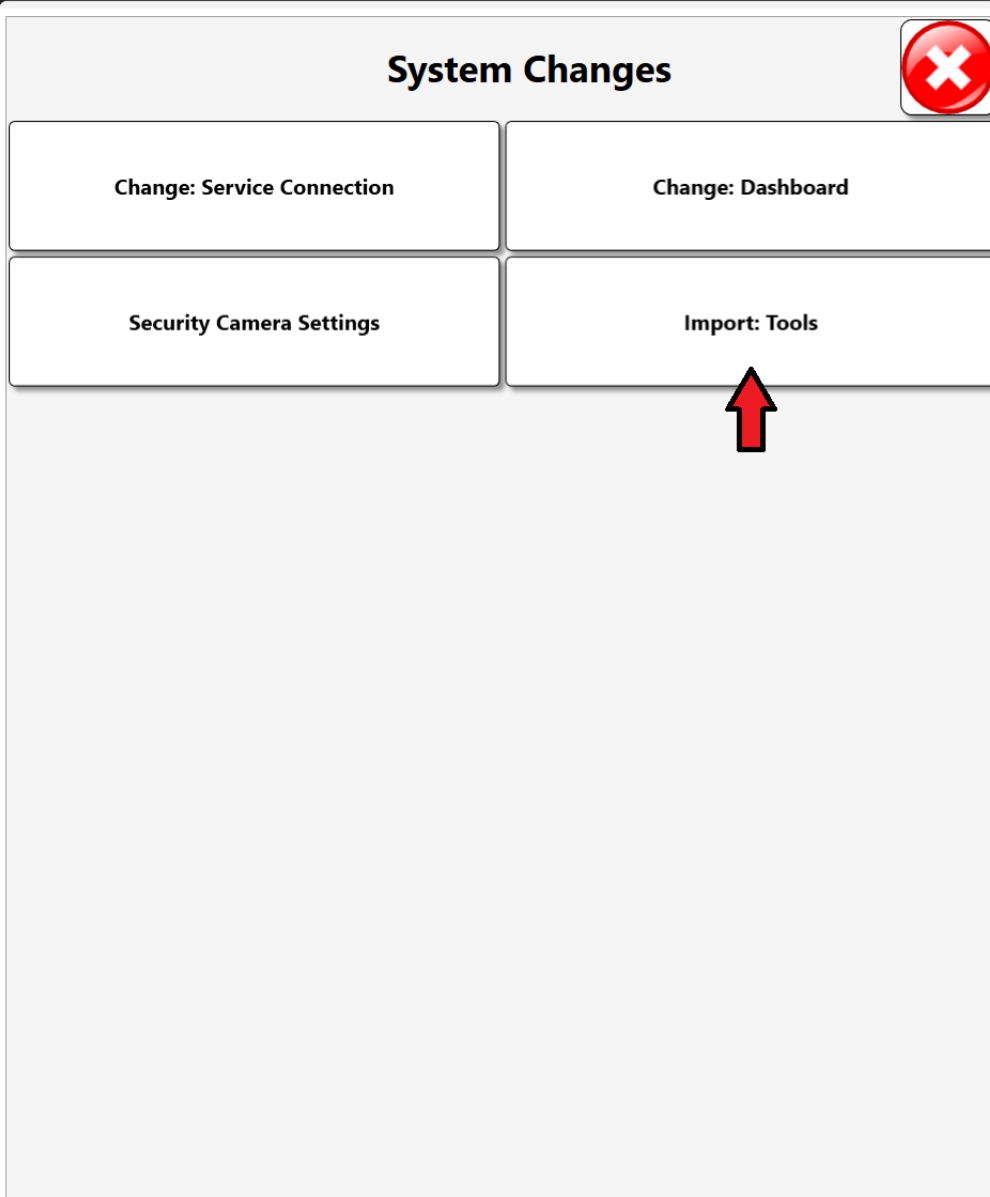
Recent Events

Time	Action	Part Number	Employee	Source	Destination
------	--------	-------------	----------	--------	-------------

2. Then click the **System Changes** button.



3. Then click the **Import Tools** button.



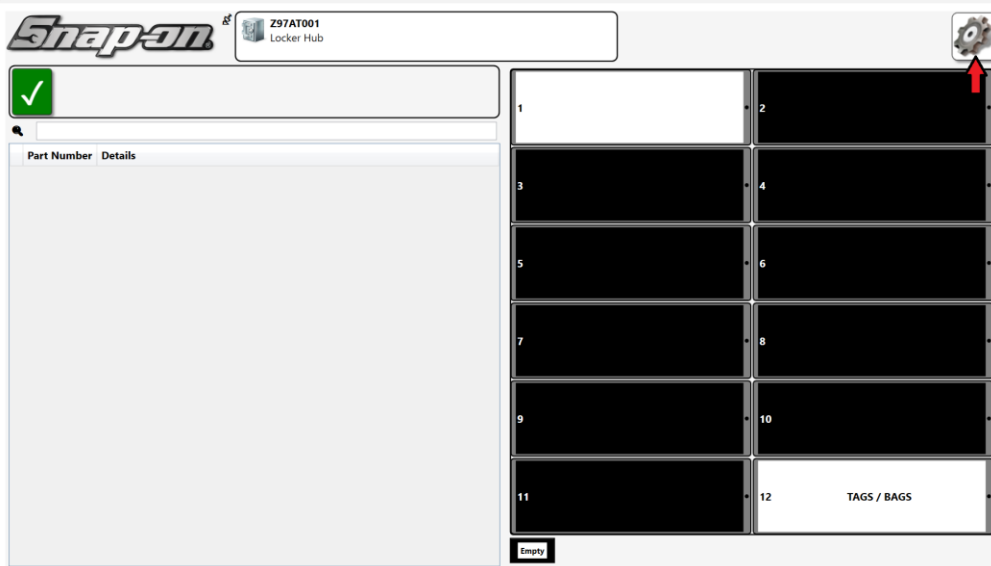
The screenshot shows a 'System Changes' dialog box. The title bar at the top is light gray and contains the text 'System Changes' in bold black font, followed by a red circular button with a white 'X'. Below the title bar is a white area containing four buttons arranged in a 2x2 grid. The buttons are labeled 'Change: Service Connection', 'Change: Dashboard', 'Security Camera Settings', and 'Import: Tools'. A red arrow with a black outline points upwards to the 'Import: Tools' button.

4. At this point you should be prompted to enter your admin credentials, and the process will be the same as in the Tool Crib section.

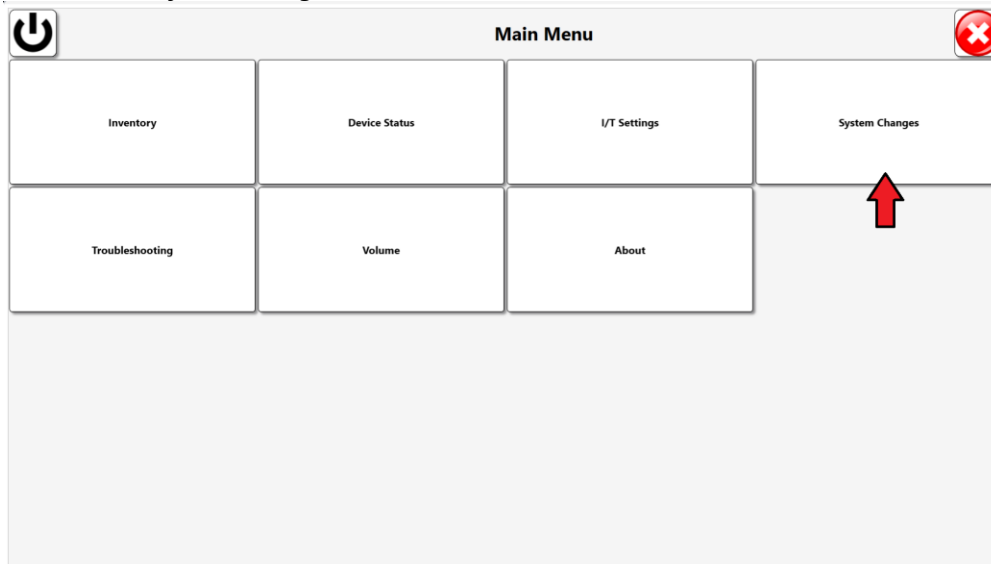
FlexHub

As of version 9.13.8.0314, you can import tools directly into the FlexHub and the number of tools can be greater than 100.

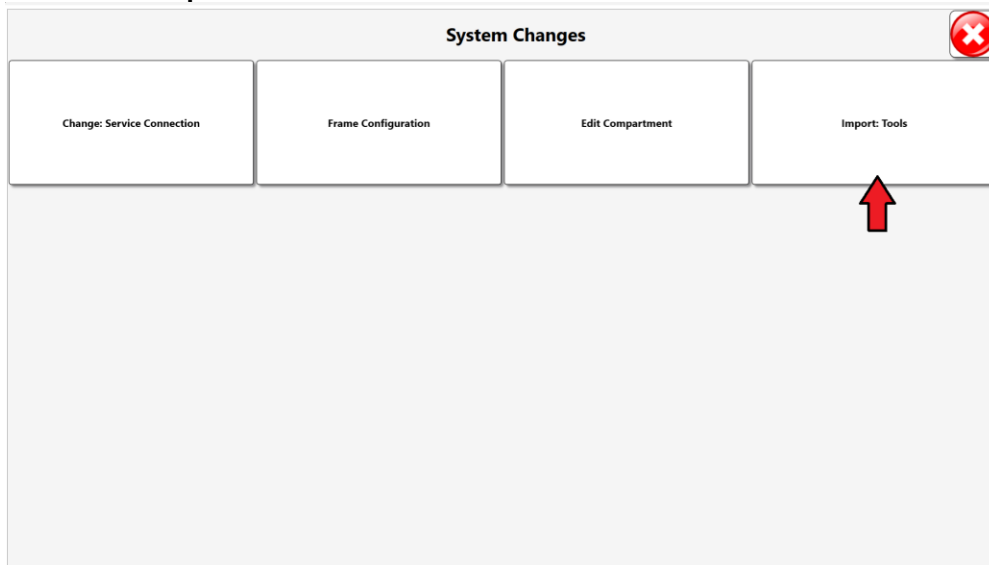
1. On the main screen of the FlexHub, click the **Main Menu** button, which looks like a gear.



2. Then click the **System Changes** button.



3. Then click the **Import Tools** button.



4. At this point you should be prompted to enter your admin credentials, and the process will be the same as in the Tool Crib section.

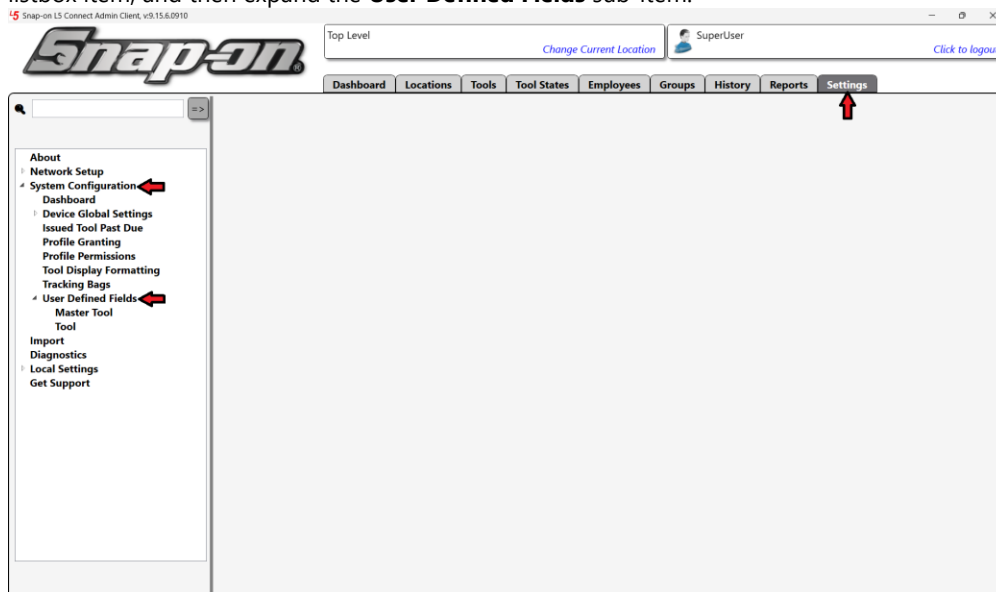
User Defined Fields

Sometimes a customer will want to have a field on a tool or master tool that is specific to their application. The L5 Connect system provides user defined fields that can be configured with customer specific titles for both tools and master tools. This document will explain the process of setting up user defined fields in the L5 Connect system.

Tool Instance User Defined Fields

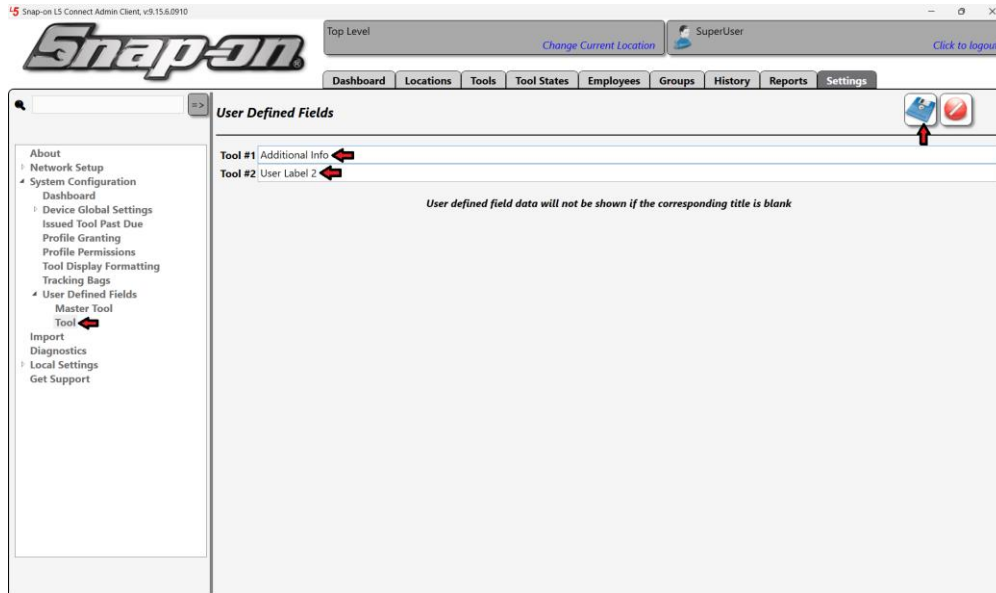
There are two user defined fields for tool instances. These can be configured to have a custom label.

1. To configure these, open the Admin application, select the **Settings** tab, expand the **System Configuration** listbox item, and then expand the **User Defined Fields** sub-item.

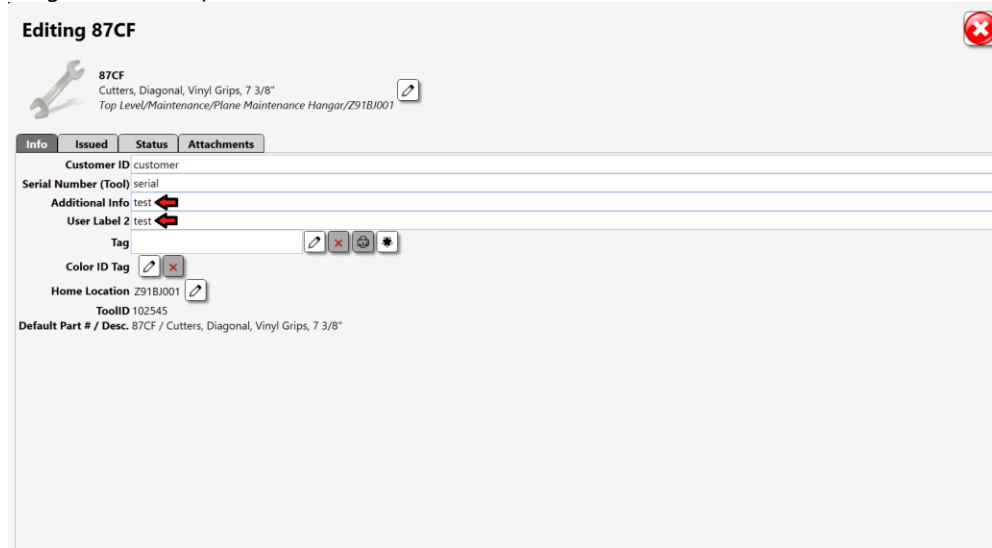


2. Under the **User Defined Fields** sub-tab, select **Tool**. In the **Tool #1** textbox, enter the label you want for the first user defined field. In the **Tool #2** field, enter the label you want for the second user defined field. Then

click the save button that looks like a blue disk.



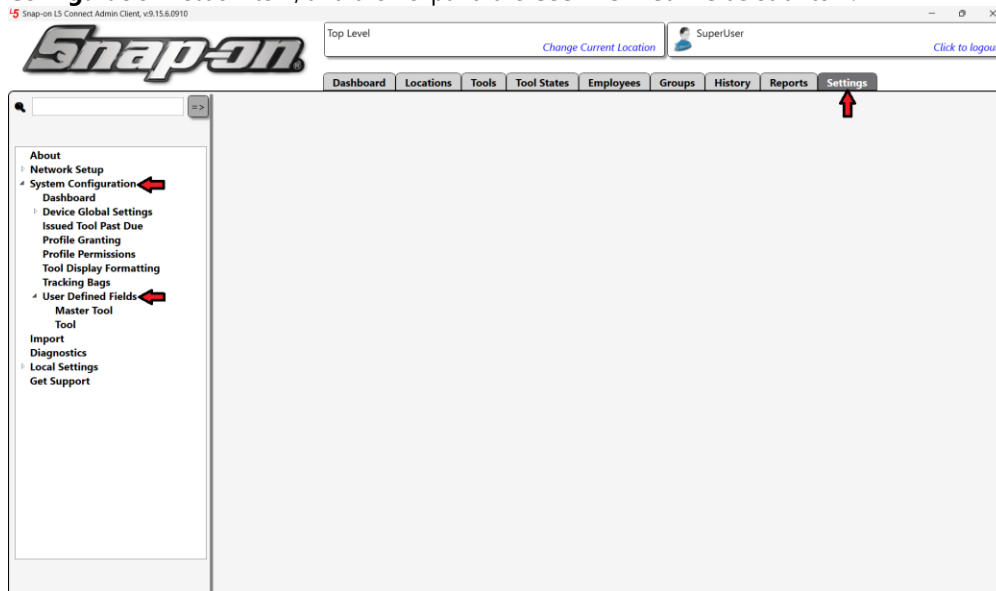
- If you go to the **Info** sub-tab of a tool instance, you will see your user defined fields with the labels you assigned. You can provide values for these fields here.



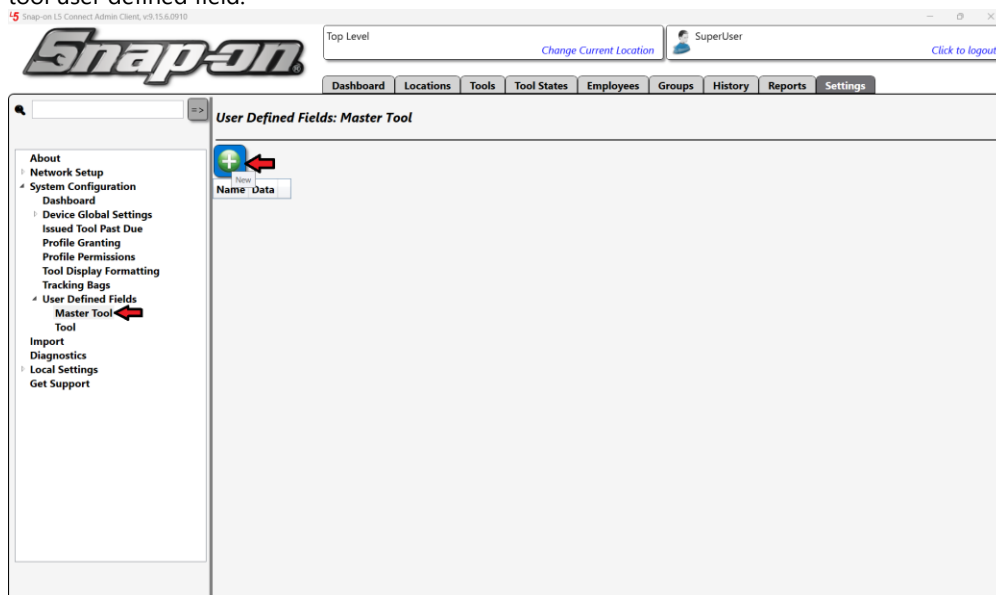
Master Tool User Defined Fields

The L5 Connect system also supports adding up to twenty master tool user defined fields.

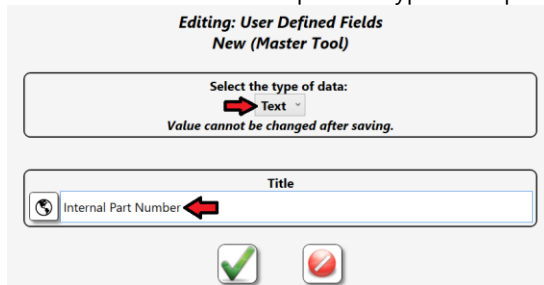
1. To add a master tool user defined field, in the Admin application go to the **Settings** tab, expand the **System Configuration** listbox item, and then expand the **User Defined Fields** sub-item.



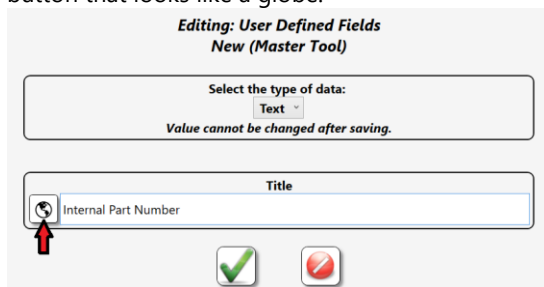
2. Under the **User Defined Fields** sub-tab, select **Master Tool**. Then click the **New** button to add a new master tool user defined field.



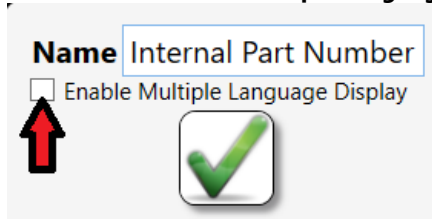
3. Select the type of data the user defined field should hold from the pull-down menu. This forces the data put into that field to be of the specified type. Then provide a title for the user defined field.



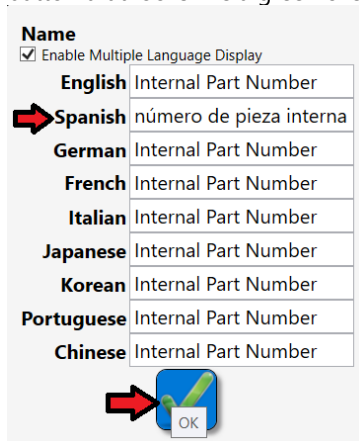
4. If you need to support more than one language, you can do this by clicking the **Edit Multiple Languages** button that looks like a globe.



5. Then click the **Enable Multiple Language Display** checkbox.



6. You can now add translations for any other language supported by the L5 Connect system. Then click the **OK** button that looks like a green checkmark.






Name	Translation
English	Internal Part Number
Spanish	número de pieza interna
German	Internal Part Number
French	Internal Part Number
Italian	Internal Part Number
Japanese	Internal Part Number
Korean	Internal Part Number
Portuguese	Internal Part Number
Chinese	Internal Part Number

7. Then click the **OK** button.

Editing: User Defined Fields
New (Master Tool)

Select the type of data:
Text
Value cannot be changed after saving.

Title
Internal Part Number





8. Finally click the **Save** button, which looks like a blue disk.

Snap-on L5 Connect Admin Client, v5.15.6.0910

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

User Defined Fields: Master Tool

Name	Data
Internal Part Number	Text

About
 Network Setup
 System Configuration
 Dashboard
 Device Global Settings
 Issued Tool Past Due
 Profile Granting
 Profile Permissions
 Tool Display Formatting
 Tracking Bags
 User Defined Fields
 Master Tool
 Tool
 Import
 Diagnostics
 Local Settings
 Get Support

Now if you go to the **Tools** tab and select a master tool and look at the **Info** sub-tab, you will see your newly created user defined field.















Snap-on L5 Connect Admin Client, v5.15.6.0910

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations **Tools** Tool States Employees Groups History Reports Settings



Part Number: 235605
Epoxy Adhesive, 1.69 oz., Gray, Work Life: 3 min.

Info Instances Maintenance Contained In Quantity Monitoring Attachments Certifications Optical Toolbox

Part Number: 235605
Description: Epoxy Adhesive, 1.69 oz., Gray, Work Life: 3 min.
Issue Behavior: Consumable
Units:  
Tag: X003YKB09J    
Internal Part Number:  
Verifications
Issued:  
Return:  
Photo:  

10MA
 10MA-SGHF616BR
 1410 NO KEY
 1650
 1AM1541
 1DA221HP NO WRENCHES
 208CCP
 235605
 3852T43
 388CF
 434HDC
 47ACP
 47CF
 597000037415B
 61ACP
 6T
 6T-SGHF614BR
 87CF
 8MA
 8MA-SGHF615BR
 8R
 8R-SGHF614BR
 91ACP

☐ Show Deleted Items



L5 Connect User Manual

Tool Statuses

Statuses in the L5 Connect system exist to tie important information to a tool or device. This information can be about the general state of the ATC device or information that pertains to a specific instance of a tool, like tool needs calibration, tool lost, replacement requested, etc. This article will cover how to set up statuses within the L5 connect software and how to add and clear statuses on a device-by-device basis.

Setup Tool Statuses within the L5 Connect Admin Client

Statuses within the L5 Connect system allow users to add additional information about the current state of an instance of a tool or device. Information such as, device offline, tool lost, calibration requested, etc. To set up and use these statuses, they must first be set up within the L5 Connect Admin client. Some status types are created with the installation of the admin client, and some of these status types cannot be edited. There are also custom statuses provided for customer use that can be edited.

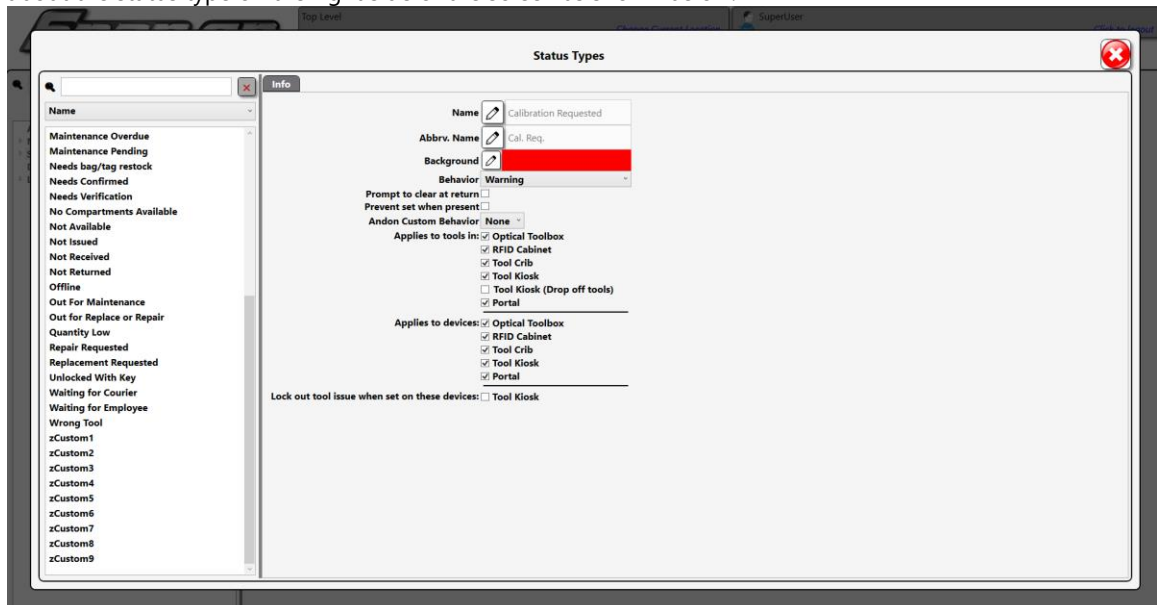
Required Permission: Admin login to L5 Connect Admin Client & Superuser profile at the root location

When to use

1. Initial device setup at customer site
2. If the user needs additional statuses not created in the initial installation and setup of the ATC device.

Procedure

1. Open the L5 Connect Admin Client, and login using an Admin account. Navigate to the **Status types** screen, **Settings/System Configuration/Status Types**
2. Within the status types sub screen the user will see a list of status types to the left. The user will then click on the status type in which they desire to modify. After clicking on a status type the user will see information about the status type on the right side of the screen as shown below.



3. On this screen the user can modify many aspects of the status type including the name, background color, behavior, prompting the user, and what the status applies to whether tools in a device or the device itself. **NOTE: The names and Abbreviated name on some statuses cannot be changed, as they are a default status type within the L5 Connect System.**



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There are also some placeholder statuses that can be changed by the user to fit any status type they may need, shown above as zCustom1-9

Follow along below for a brief description of the settings that can be changed about a specific status type:

- **Behavior:** A Status Type Behavior determines how the system alerts and reports the status when applied.
 - **Info Only**
 - Causes status indicator to appear on device tool lists (white Background with ⓘ symbol; the symbol looks different with the device font)
 - Status abbreviation appears under the tool details on device tool lists
 - Status details appear in the tool's details screens
 - **Managed Out of Box**
 - Includes all "Info Only" behaviors
 - The tool is controlled outside of the device, and its alerts and issued conditions can be "suppressed."
 - Gray Background and @ symbol appear when a condition is being "covered")
 - **Warning**
 - Includes all "Info Only" behaviors
 - It plays an audio warning when issued
 - **Alert**
 - Includes all "Warning" behaviors
 - Shown on dashboards, front screens, etc.
 - Red Background with the ! symbol is displayed for tools with an alert status
- **Prompt to clear on return:** If checked, it will prompt the user to clear the status upon returning a tool to the device
- **Prevent set when present:** If checked it will prevent this status type from being set if the tool is still present within the device.
- **Andon Custom Behavior:** Allows the user to select the behavior of the Andon Light; either none, solid, or blink.
- **Applies to Tools in:** If a device is checked this status type can be applied to any tools within the checked device
- **Applies to Devices:** If a device is checked this status type can be applied to the checked device.
NOTE: a device must be online to set a status
- **Lock out tool issue when set on these devices:** **NOTE: This feature is currently only offered on the Tool Kiosk.** If checked applying this status to a tool/tool(s) will lock out the tool, meaning the tool cannot be issued until the status is cleared.

After making modifications to the status type click the **Save** icon.



L5 Connect User Manual

Modifying Tool Statuses within the L5 Connect Admin Client

1. To modify tool statuses within the L5 Admin Client, navigate to either the **Tools menu, tool states menu, dashboard recent events, and the history tab.**
2. Double click the instance of a tool in which a user wishes to modify the statuses. This will open the Tool details window, proceed to the status sub-menu.
3. Another way to get to the tool details window is by right clicking on an instance of a tool.

Device Specific Procedures

Listed below are the device specific procedures for applying and clearing a status to a tool.

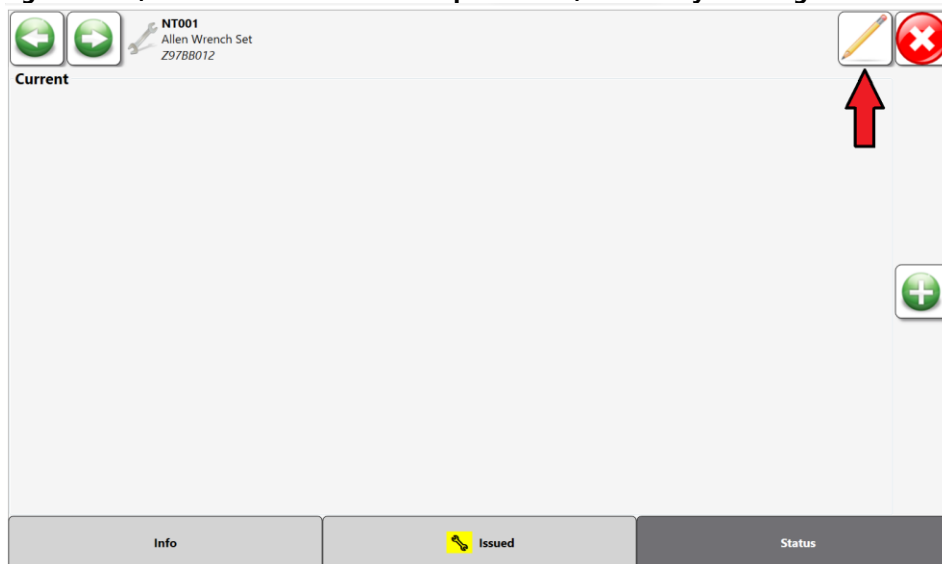
NOTE: Any statuses applied by an admin user must be cleared by an admin user.

Required Permissions: Device User

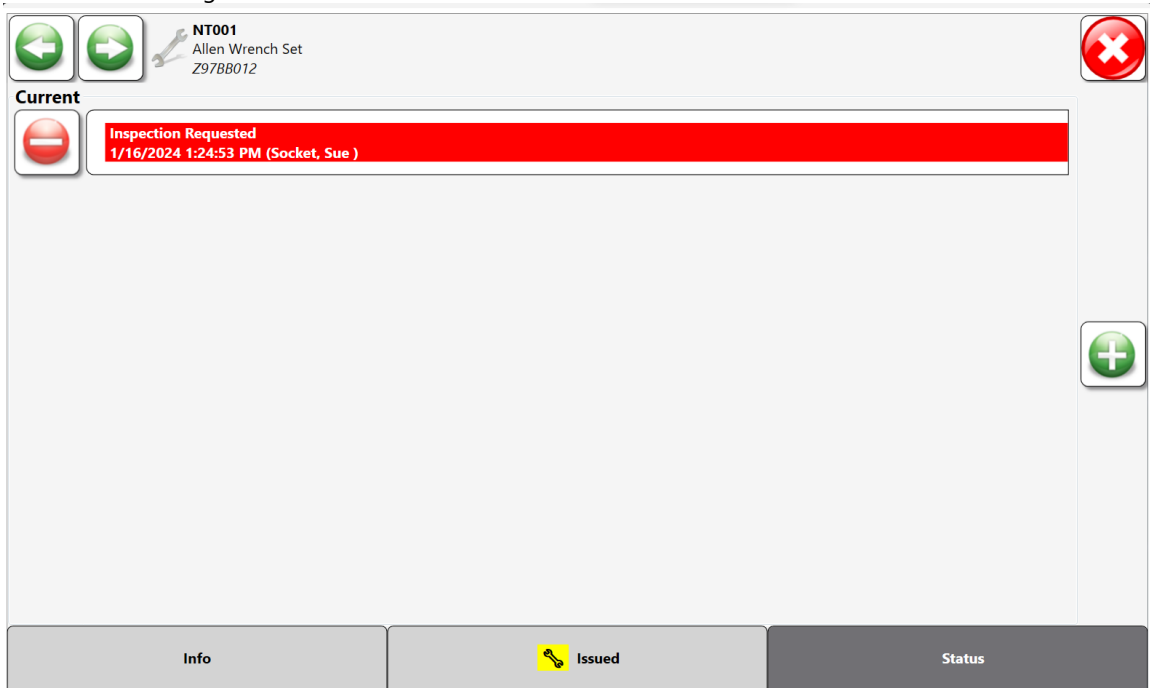
Kiosk

There are two ways a user of the Kiosk can apply or remove a status from a tool:

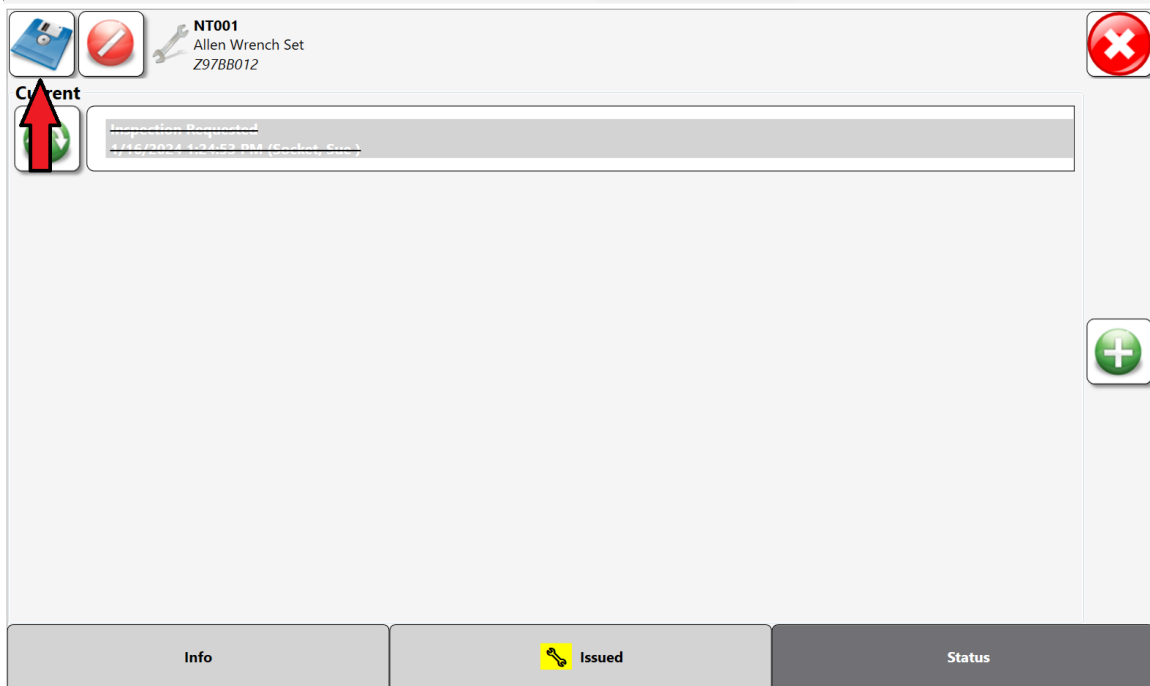
1. For the first, login to the Kiosk and then click the settings button and navigate to inventory screen, **Kiosk Menu/Settings/Inventory**. The user will then click on the tool in which they wish to apply or remove a status. **NOTE: If the user has not logged in at the Kiosk dashboard they will see a pencil icon in the top right corner, shown below. Click on the pencil icon, and scan your badge for to edit statuses.**



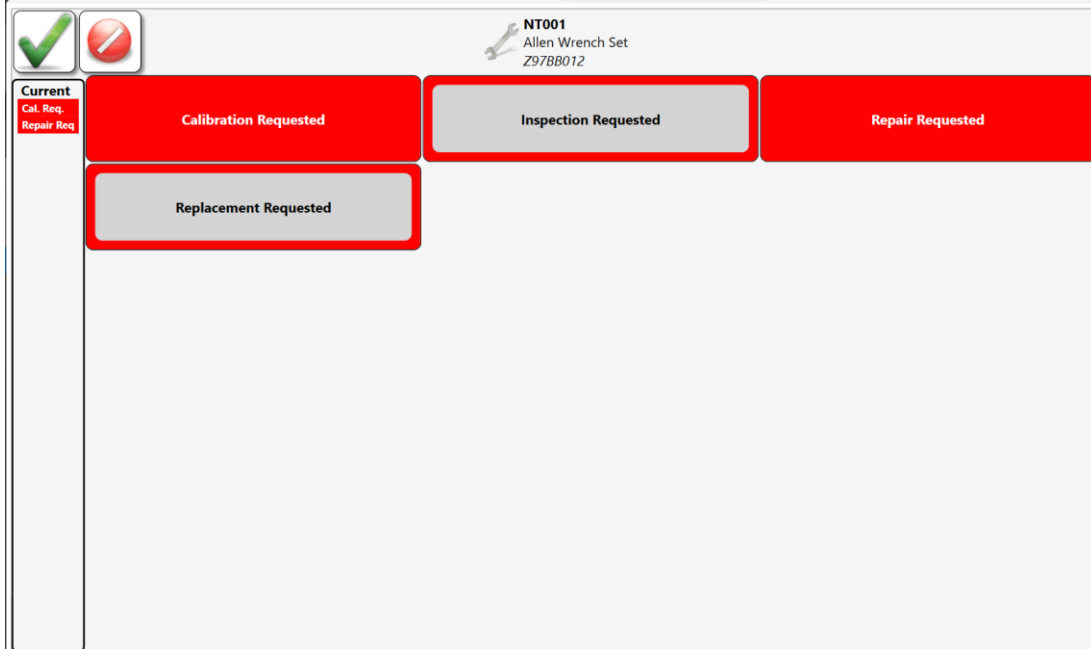
After the user has logged in at the dashboard or scanned their badge for edit access, the user can then edit tool statuses, seeing a similar screen to that shown below.



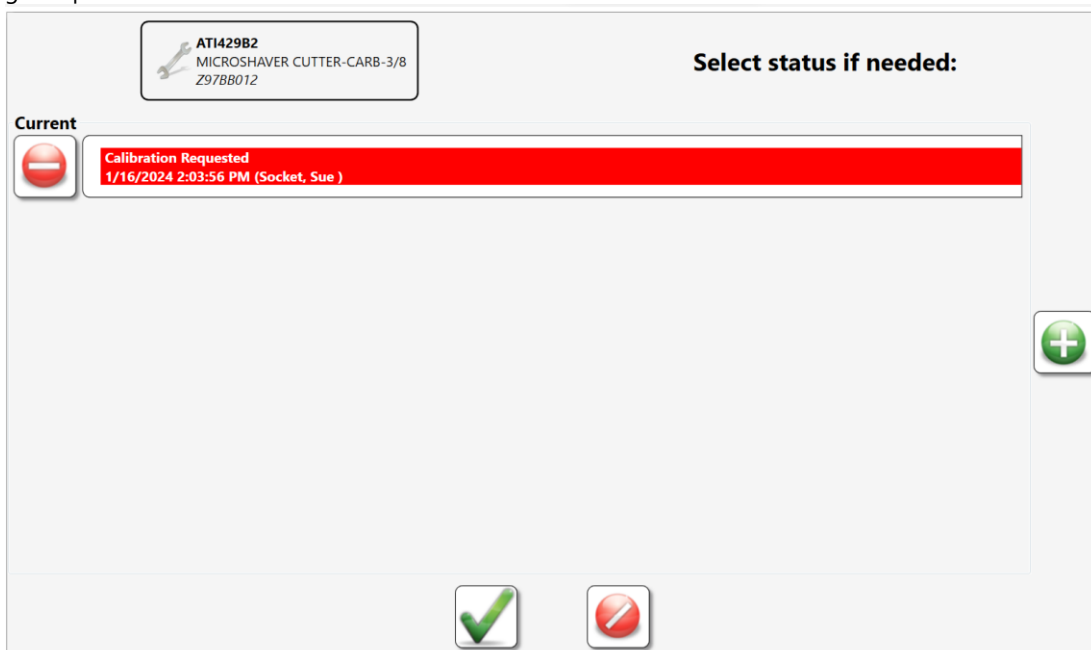
If the user wishes to remove a currently applied status click on the delete button which is displayed as a red circle, this will grey out and strikethrough the status type. Finally click save.



If the user wishes to add a status, click the green plus sign on the right side of the screen which will display the status types that can be applied to the tool. Select whichever status type applies, then click on the green checkmark to apply this status.



- For the second method of adding or removing a status we will be returning a tool to the kiosk. Login to the kiosk and select the workflow option **Return**. Select an item to be returned to the kiosk and click the green check mark. The user will be met with the following screen, allowing the user to add a status by clicking the green plus.

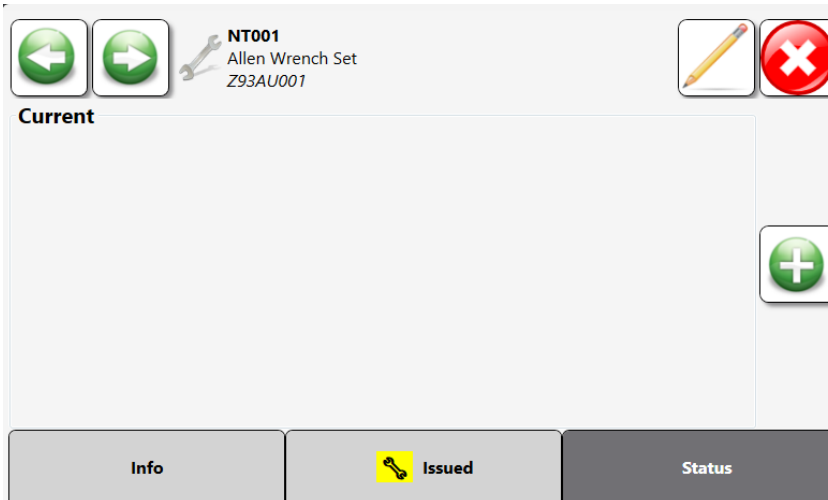


To remove a status click on the red circle to the left of the current status. Click the green checkmark at the bottom of screen when finished.

Locker

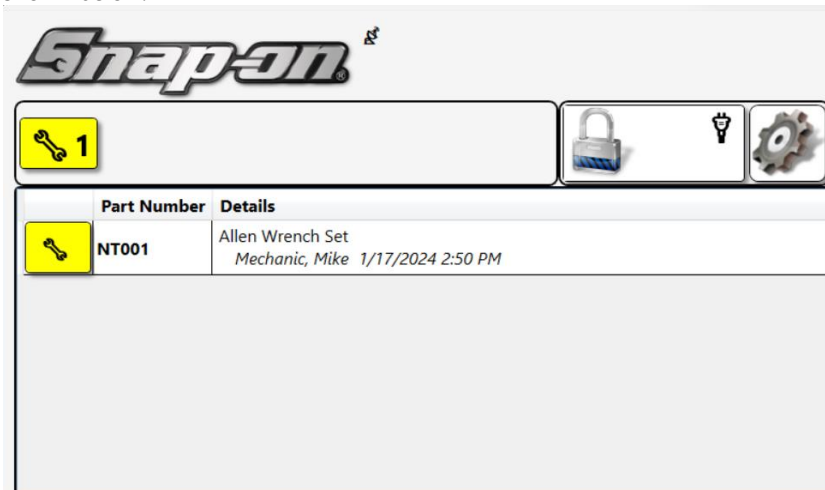
There are two ways a user of the Locker can apply or remove a status from a tool.

1. For the first method of adding or removing a status, log into the Locker and click on the settings button, navigating to the inventory screen. The user will then select the tool in which they wish to apply or remove a status. **NOTE: If the user has not logged in at the Locker dashboard, they will see a pencil icon in the top right corner, shown below. Click on the pencil icon and scan your badge to edit the statuses. Shown below.**



Click on the green plus to add a status or the red circle next to the status to remove. When completed, click the save icon.

2. The second method involves changing the tool status on the dashboard of the locker. For this method a tool must be issued from the locker. If a tool is on issue from the locker, it will be displayed on the dashboard as shown below.



Login to the locker and double click on the tool to modify the status applied. **NOTE: If the user has not logged in at the Portal dashboard, they will see a pencil icon in the top right corner. Click on the pencil icon and scan your badge to edit statuses.** After entering their credentials, the user can click on the




L5 Connect User Manual


green plus to add a status or the red circle next to the status to remove. When completed, click the save icon.


Portal

There are three ways a user of the Portal can apply or remove a status from a tool.

1. For the first, login at the Portal dashboard. Then click the settings button and navigate to inventory screen. The user will then click on the tool in which they wish to apply or remove a status. After selecting the tool, the user will see any status types currently tied to the tool. An example of this screen is shown below.









NT001

Allen Wrench Set

Z98BB001




Current



Calibration Requested

1/17/2024 10:42:57 AM (Socket, Sue)





Info


Issued



Status

NOTE: If the user has not logged in at the Portal dashboard they will see a pencil icon in the top right


corner, shown below. Click on the pencil icon and scan your badge to edit the statuses. Shown below.



**NT001**
Allen Wrench Set
Z98BB001



Current






Info

Issued

Status

If the user wants to remove a status click on the delete button to the left of the current status. If adding a status click on the green plus on the right side of the screen. The user will see a similar screen to that shown below.


NT001
 Allen Wrench Set
 Z98BB001

Current

Calibration Requested

Inspection Requested

Lost

Not Issued

Not Received

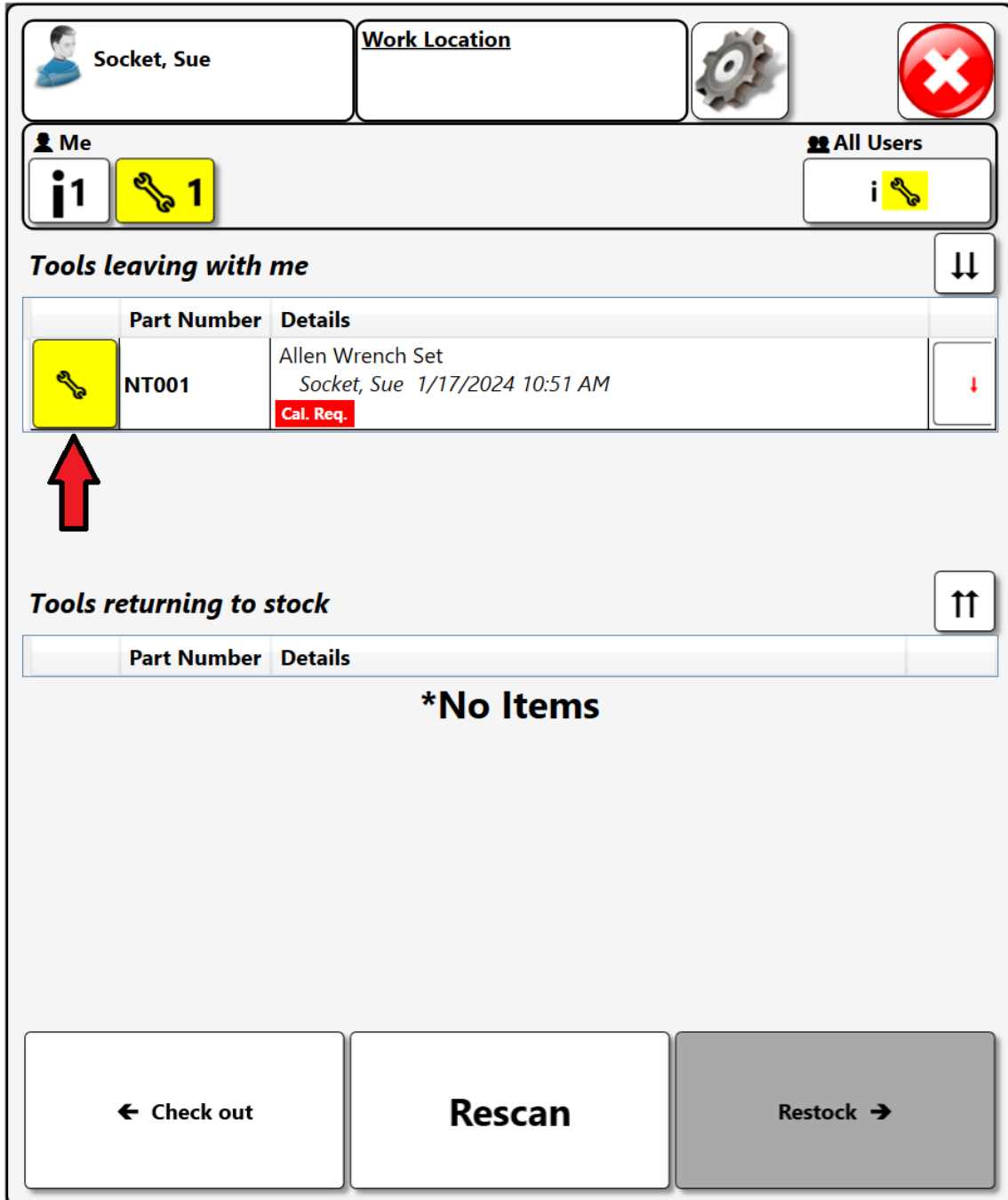
Not Returned

Repair Requested

Replacement Requested

When completed, click the save icon.

- The second way a user can add or remove a status on a tool is by issuing or returning a tool to the portal. After logging into the portal, the dashboard will display either a list of tools leaving with the user or a list of tools to be returned to the portal. Either double click the tool or click the box to the left of the part number as shown below.



The screenshot shows the L5 Connect user interface. At the top, there's a header bar with a user profile for 'Socket, Sue', a 'Work Location' field, a gear icon, and a red 'X' icon. Below this is a navigation bar with 'Me' and 'All Users' tabs. The 'Me' tab is active, showing a wrench icon and the number '1'. The 'All Users' tab shows a wrench icon and the number '1'. The main content area is divided into two sections: 'Tools leaving with me' and 'Tools returning to stock'. The 'Tools leaving with me' section has a double arrow icon and a table with columns 'Part Number' and 'Details'. The table contains one row for 'NT001' with details 'Allen Wrench Set' and 'Socket, Sue 1/17/2024 10:51 AM'. A red arrow points to a yellow box with a wrench icon next to the part number. The 'Tools returning to stock' section has a double arrow icon and displays '*No Items'. At the bottom, there are three buttons: 'Check out', 'Rescan', and 'Restock'.

Part Number	Details
NT001	Allen Wrench Set Socket, Sue 1/17/2024 10:51 AM Cal. Req.

*No Items

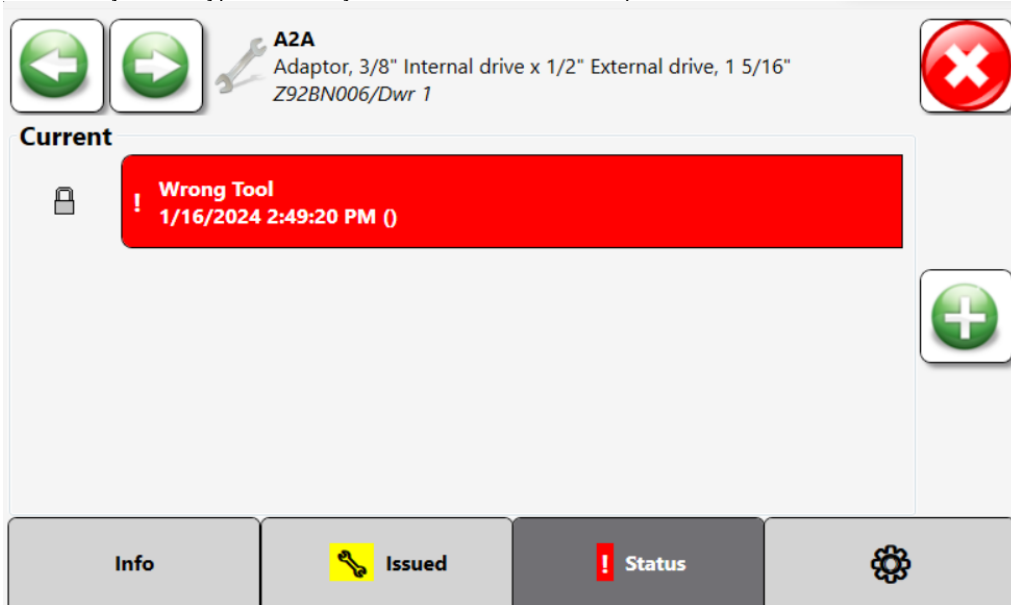
← Check out Rescan Restock →

- The third way a status can be added or removed is from the portal dashboard. Without logging in the user can see a list of all tools on issue from the portal. From here the user can tap the wrench icon next to the tool to add a status. From this point the workflow of adding or removing a status is like that of method 2 described above.

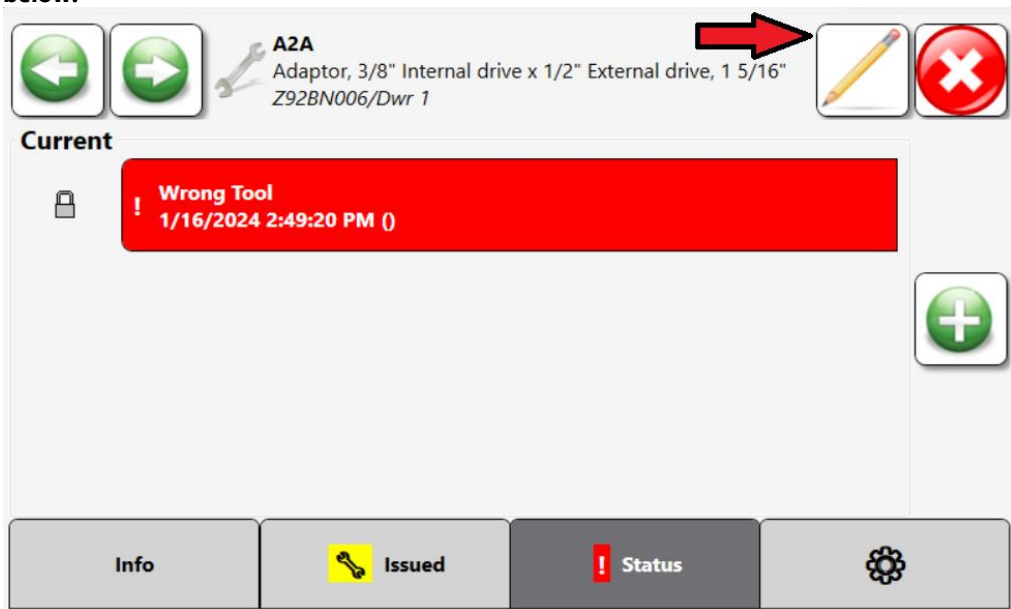
Toolbox

There are three ways a user of the Toolbox can apply or remove a status from a tool:

1. For the first, login to the Toolbox. Then click the settings button and navigate to inventory screen. The user will then click on the tool in which they wish to apply or remove a status. After selecting the tool, the user will see any status types currently tied to the tool. An example of this screen is shown below.

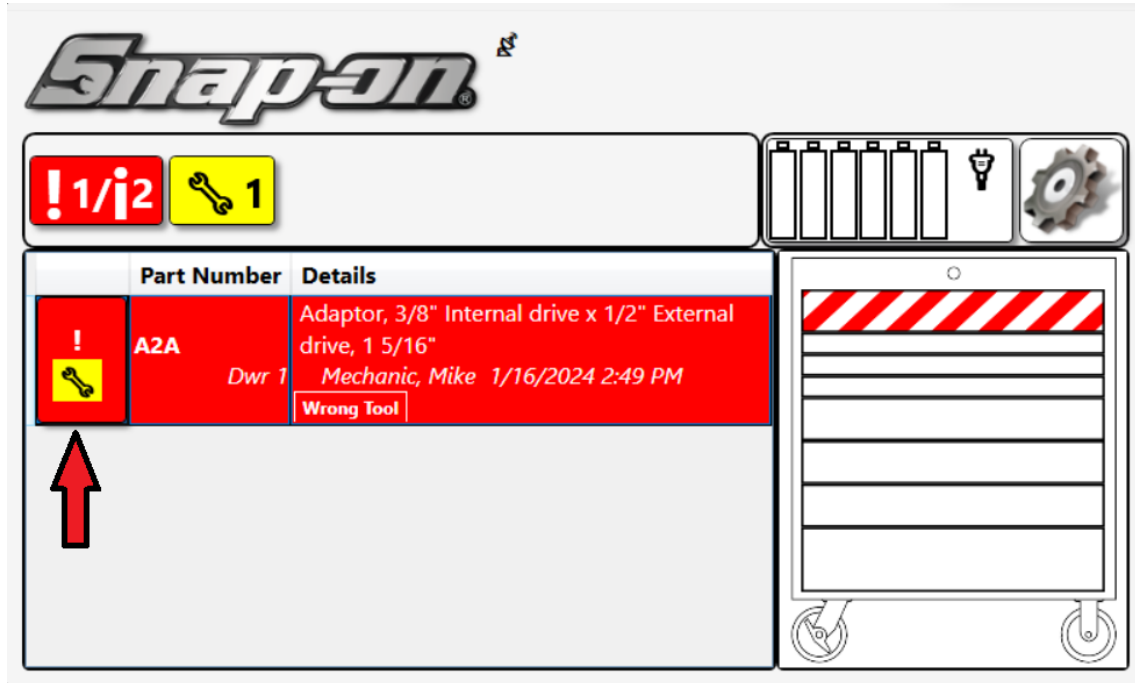


NOTE: If the user has not logged in at the Toolbox dashboard they will see a pencil icon in the top right corner, shown below. Click on the pencil icon and scan your badge to edit the statuses. Shown below.



The user can click on the green plus to add a status or the red circle next to the status to remove. When completed, click the save icon.

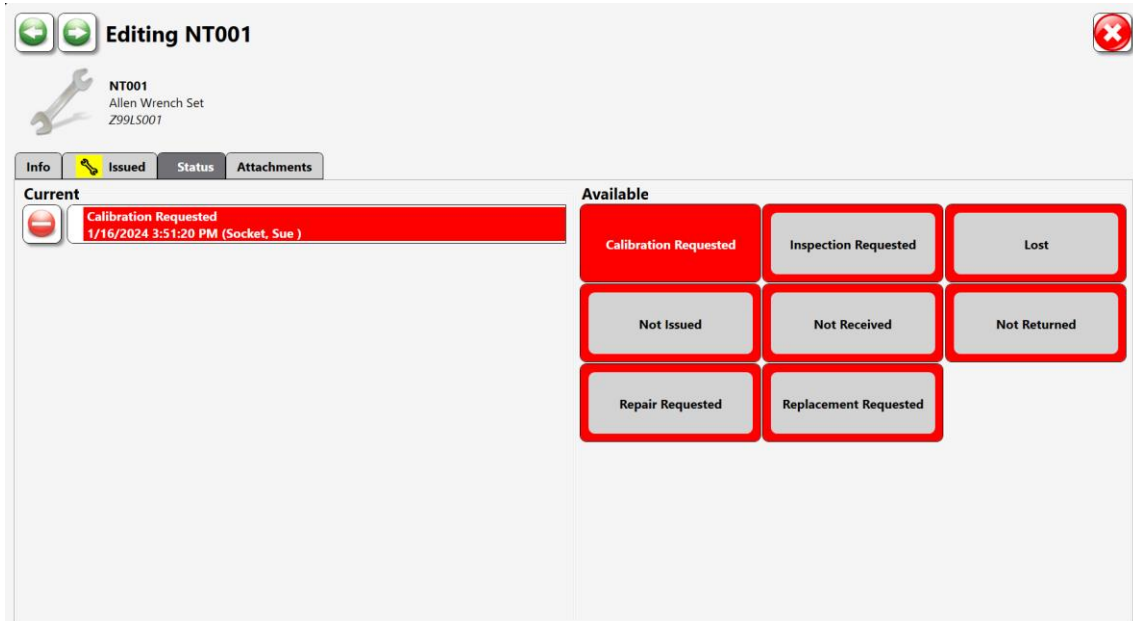
- The second method of adding or removing a status to a tool can be found on the main dashboard of the Toolbox. This dashboard shows any tool currently checked out from the box along with any statuses applied to that tool. Click on the yellow wrench icon to the left of the part number as shown below. The user can also click on the red square with the exclamation point below the **Snap-on** logo to see all tools with statuses attached. Then the user can add or remove a status like shown in the methods above.



Tool-Crib

There are two ways for a user to apply or remove statuses from a tool. The first can be done by any device user, while the second can only be done by a user with an attendant login.

1. Login to the Tool-Crib, and from the dashboard select the tool in which the user wishes to add or remove a status. Double click on an issued or present tool to attach or remove a status. The user will see the following screen.



To remove a status, look under the current column for any statuses currently applied and click on the delete button. To add a status, click on one or more of the statuses listed under the available column.

2. The second method of applying statuses or removing statuses from a tool can be done through the attendant login. First use an attendant login to access the Tool-Crib, and then click on the settings button. Next the user will navigate to the inventory screen, where every item in the Tool-Cribs inventory will be displayed. Select the item in which the user wishes to add or remove a status, the user will be met with a similar screen to what is shown in the first method. To remove a status, look under the current column for any statuses currently applied and click on the delete button. To add a status, click on one or more of the statuses listed under the available column.



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Tool Status Reports


The Tool States screen is a real-time view of the system. Unlike the Dashboard, these views are generated using the reporting engine of the system and thereby can be filtered. You can also apply a custom report to some views to find the exact information you want in real-time. There are two ways to access these reports within the admin client.


Access Point: L5 Connect Admin Client

Required Permission: Admin login to L5 Connect Admin Client

1. To access the tool status reports login to the L5 Connect Admin Client, and from the dashboard click on the **Tool States** tab. The user will see a similar screen to that shown below.

L5 Snap-on L5 Connect Admin Client, v9.12.1.1001






Top Level [Change Current Location](#)  SuperUser [Click to logout](#)

Dashboard Locations Tools **Tool States** Employees Groups History Reports Settings

Status Issued Inventory Maintenance In Process

Filtering

Custom Reports 

Storage Location Name	Part Number	Description	Drawer	Tool ID	Status	Employee	Date Applied
Tool Crib East	CTECHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1-20 ft - lb)		102959	Maintenance Overdue		2/23/2023 4:01:29 PM
Tool Crib East	CTECHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1-20 ft - lb)		102916	Maintenance Overdue		2/23/2023 4:01:29 PM
Tool Crib East	CTECHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1-20 ft - lb)		100123	Maintenance Overdue		2/23/2023 4:01:29 PM
Tool Crib East	CTECHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1-20 ft - lb)		100005	Maintenance Overdue		2/23/2023 4:01:29 PM
Tool Crib East	DBTBM1	1 mm ThunderBit® Metric High Speed Steel 135° Split Point Drill Bit		100012	Repair Requested	Plane Maintenance Hangar, Preston	4/15/2021 3:33:24 PM
Tool Crib East	DBTBM12	12 mm ThunderBit® Metric High Speed Steel 135° Split Point Drill Bit		100015	Repair Requested	Plane Maintenance Hangar, Preston	7/14/2022 9:01:51 AM
Tool Crib East	FAM11E	Socket Driver, Metric, Hex, Standard, 11 mm		226864	Maintenance Overdue		10/10/2024 10:35:20 AM
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive		103069	Maintenance Overdue		2/23/2023 4:01:29 PM
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive		102972	Maintenance Overdue		10/10/2024 3:20:12 PM
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive		102960	Maintenance Overdue		10/10/2024 3:20:12 PM
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive		102917	Maintenance Overdue		10/10/2024 3:20:12 PM
Tool Crib East	QD2R1000	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive		100001	Maintenance Overdue		2/23/2023 4:01:29 PM
Tool Crib East	QD3R250	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 50-250 ft. lb., 1/2" drive		100002	Maintenance Overdue		10/13/2021 4:14:51 PM
Tool Crib East/Bottom	BADJCB	Wrench, Adjustable, Composite Handle, Blue-Point®, 8"		102884	Repair Requested	Plane Maintenance Hangar, Preston	12/21/2021 2:39:30 PM
Tool Crib East/Row 1/Bin 1	QD3RM30	Torque Wrench, Adj. Click-type, Metric, Fixed-Ratchet, 6-30 kgm, 1/2" drive		100003	Maintenance Overdue		10/13/2021 4:15:04 PM
Top Level	LSATCPORTAL	RFID Portal Emulator		226865	Offline		10/15/2024 11:23:15 AM
Top Level	LSATCPORTAL	RFID Portal Emulator		225864	Offline		2/29/2024 2:11:04 PM
Top Level	LSATCPORTAL	RFID Portal Emulator		225864	Hardware Error		2/29/2024 2:07:34 PM
Top Level	LSATCPORTAL	RFID Portal Emulator		225767	Offline		3/6/2024 2:18:53 PM
Top Level	SimulatorRFIDCab	RFID Cabinet Simulator		225777	Offline		10/14/2024 2:18:48 PM
Top Level	SimulatorRFIDCab	RFID Cabinet Simulator		225459	Offline		11/6/2023 4:19:54 PM
Top Level	SimulatorToolbox36	Toolbox Simulator 36		102458	Offline		10/14/2024 3:54:17 PM
Top Level	SimulatorToolbox36	Toolbox Simulator 36		102458	Maintenance Overdue		6/20/2022 3:52:54 PM
Top Level	SimulatorToolKiosk	Tool Kiosk Simulator		225765	Offline		10/23/2024 4:20:53 PM
Top Level	SimulatorToolReturn	Tool Return Simulator		102843	Offline		8/30/2022 7:59:46 AM
Top Level	ToolCrib	Tool Crib		225460	Offline		1/11/2024 4:21:45 PM
Top Level	ToolCrib	Tool Crib		215070	Offline		10/14/2024 1:55:44 PM
Top Level	ToolCrib	Tool Crib		100000	Calibration Requested	Plane Maintenance Hangar, Preston	4/25/2022 11:29:49 AM
Top Level/Maintenance/Helicopter M	LSA36xxx	36" Optical Toolbox - AC - Generation 3		100125	Offline		2/2/2022 2:32:34 PM
Top Level/Maintenance/Helicopter M	LSA36xxx	36" Optical Toolbox - AC - Generation 3		100125	Bad Drawer/Door State		12/2/2021 4:10:22 PM
Z91BJ001	AW101SDHK	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8")	7	225427	Maintenance Overdue		10/14/2024 3:52:37 PM
Z91BJ001	CTECHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1-20 ft - lb)		102909	Maintenance Pending		10/14/2024 3:52:37 PM

If the user wishes to export this list, click on the Save icon. This will export the list as an excel spreadsheet.



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- The second way a user can access the tool status reports is by navigating to the **Reports** tab within the L5 Connect Admin Client. On the left-hand side of the screen click on **Tool Status**, which will bring the user to the screen shown below. Click the run button to generate the report. **Note: Generating this report may take a minute or two**

The screenshot displays the Snap-on L5 Connect Admin Client interface. The top navigation bar includes the Snap-on logo, a location dropdown (Top Level), a user profile (SuperUser), and a 'Click to logout' link. Below this is a secondary navigation bar with tabs: Dashboard, Locations, Tools, Tool States, Employees, Groups, History, Reports, and Settings. The 'Reports' tab is active, and the 'Report Configuration' window is open. This window has a 'Description' field stating 'This report lists the tools with statuses and what statuses they currently have.' and a list of fields to include: Storage Location Fields, Tool Fields, Status, Employee Fields, and Date Applied. A red arrow points to the 'Storage Location Fields' checkbox. Below the configuration window, the 'Tool Status' report is displayed. It features a 'Filtering' section with 'Sticky Filters: Location = Top Level' and 'Run Time: 10/24/2024 9:14 AM : Central Standard Time'. The report table has columns for Storage Location Name, Part Number, Description, Drawer, Tool ID, Status, Employee, and Date Applied. The table lists various tools and their current statuses, such as 'Maintenance Overdue', 'Repair Requested', and 'Offline'. At the bottom right of the report, there are buttons for 'Auto-Refresh' and 'Xlsx' (export).

Storage Location Name	Part Number	Description	Drawer	Tool ID	Status	Employee	Date Applied
Tool Crib East	CTECH1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque		100005	Maintenance Overdue		2/23/2023 4:01:29 PM
Tool Crib East	DBTBM1	1 mm ThunderBit® Metric High Speed Steel 135° Split Point Drill Bit		100012	Repair Requested	Plane Maintenance Hangar, Preston	6/15/2021 3:33:24 PM
Tool Crib East	DBTBM12	12 mm ThunderBit® Metric High Speed Steel 135° Split Point Drill Bit		100015	Repair Requested	Plane Maintenance Hangar, Preston	7/14/2022 9:01:51 AM
Tool Crib East	FAM11E	Socket Driver, Metric, Hex, Standard, 11 mm		226864	Maintenance Overdue		10/10/2024 10:35:20 AM
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" d		103069	Maintenance Overdue		2/23/2023 4:01:29 PM
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" d		102972	Maintenance Overdue		10/10/2024 3:20:12 PM
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" d		102960	Maintenance Overdue		10/10/2024 3:20:12 PM
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" d		102917	Maintenance Overdue		10/10/2024 3:20:12 PM
Tool Crib East	QD2R1000	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8"		100001	Maintenance Overdue		2/23/2023 4:01:29 PM
Tool Crib East	QD3R250	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 50-250 ft. lb., 1/2" d		100002	Maintenance Overdue		10/13/2021 4:14:51 PM
Tool Crib East/Bottom	BADJCB	Wrench, Adjustable, Composite Handle, Blue-Point®, 8"		102884	Repair Requested	Plane Maintenance Hangar, Preston	12/21/2021 2:39:30 PM
Tool Crib East/Row 1/Bin 1	QD3RM30	Torque Wrench, Adj. Click-type, Metric, Fixed-Ratchet, 6-30 kgm, 1/2" dr		100003	Maintenance Overdue		10/13/2021 4:15:04 PM
Top Level	LSATPORTAL	RFID Portal Emulator		226865	Offline		10/15/2024 11:23:15 AM
Top Level	LSATPORTAL	RFID Portal Emulator		225864	Offline		2/29/2024 2:11:04 PM
Top Level	LSATPORTAL	RFID Portal Emulator		225864	Hardware Error		2/29/2024 2:07:34 PM
Top Level	LSATPORTAL	RFID Portal Emulator		225767	Offline		3/6/2024 2:18:53 PM
Top Level	SimulatorRFIDCab	RFID Cabinet Simulator		223777	Offline		10/14/2024 2:18:48 PM
Top Level	SimulatorRFIDCab	RFID Cabinet Simulator		225459	Offline		11/6/2023 4:19:54 PM
Top Level	SimulatorToolbox36	Toolbox Simulator 36		102458	Offline		10/14/2024 3:54:17 PM
Top Level	SimulatorToolbox36	Toolbox Simulator 36		102458	Maintenance Overdue		6/20/2023 3:52:54 PM
Top Level	SimulatorToolKiosk	Tool Kiosk Simulator		225765	Offline		10/23/2024 4:20:53 PM
Top Level	SimulatorToolReturn	Tool Return Simulator		102843	Offline		8/30/2022 7:59:46 AM
Top Level	ToolCrib	Tool Crib		225460	Offline		1/11/2024 4:21:45 PM
Top Level	ToolCrib	Tool Crib		215070	Offline	Plane Maintenance Hangar, Preston	10/14/2024 1:55:44 PM
Top Level	ToolCrib	Tool Crib		100000	Calibration Requested		4/25/2022 11:29:49 AM
Top Level/Maintenance/Helicopter M	LSA36xxx	36" Optical Toolbox - AC - Generation 3		100125	Offline		2/2/2022 2:32:34 PM
Top Level/Maintenance/Helicopter M	LSA36xxx	36" Optical Toolbox - AC - Generation 3		100125	Bad Drawer/Door State		12/2/2021 4:10:22 PM
2918.001	AW101SDHK	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8")	7	225427	Maintenance Overdue		10/14/2024 3:52:37 PM
2918.001	CTECH1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque		102909	Maintenance Pending		10/14/2024 3:52:37 PM
2918.001	FAM11E	Socket Driver, Metric, Hex, Standard, 11 mm		225173	Maintenance Overdue		9/9/2024 1:36:07 PM
2918.001	OEX14B	Wrench, Combination, Standard Length, 7/16", 12-Point	2	225227	Maintenance Overdue		10/14/2024 3:52:37 PM
7918.001	OEX20B	Wrench, Combination, Standard Length, 5/8", 12-Point	2	225228	Maintenance Pending		10/14/2024 3:52:37 PM

The user can then export or print the report from this page, using the **Export** button that looks like a blue disk after selecting the file type.



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Tool Status Notifications

When a device has issues, you may not be around to see it. Subscriptions allow you to stay informed about what is happening with your L5 Connect™ service. Subscriptions are automated messages that are generated based on status. These automated messages are sent via e-mail. **The system also supports SMS Text Message (US Carriers ONLY FOR TEXT) however this feature is being sunset due to phone carriers eliminating texts through email. If you are currently using text message base notifications you will still be able to do that, but they may not work depending on the carrier. Once you no longer have text message based notifications in your system, you will no longer have the option to use this feature.**

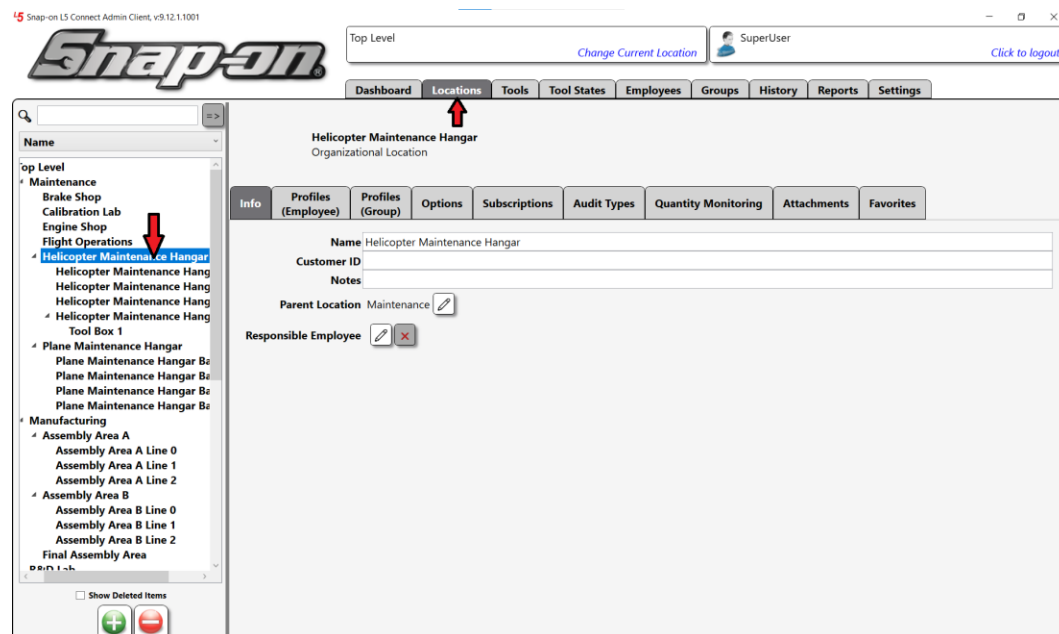
NOTE: You will need to have set up the SMTP settings and email addresses of the intended recipients beforehand if these notifications are e-mailed. See the SMTP Configuration. document for more details.

Tool status notifications can be setup from multiple places in the L5 Connect™ admin application, but the process always consists of first picking the part of the location tree for which you want notifications and then selecting who should receive the notifications. The second part of the process consists of defining how the notification will be delivered and what statuses will actually trigger the notifications.

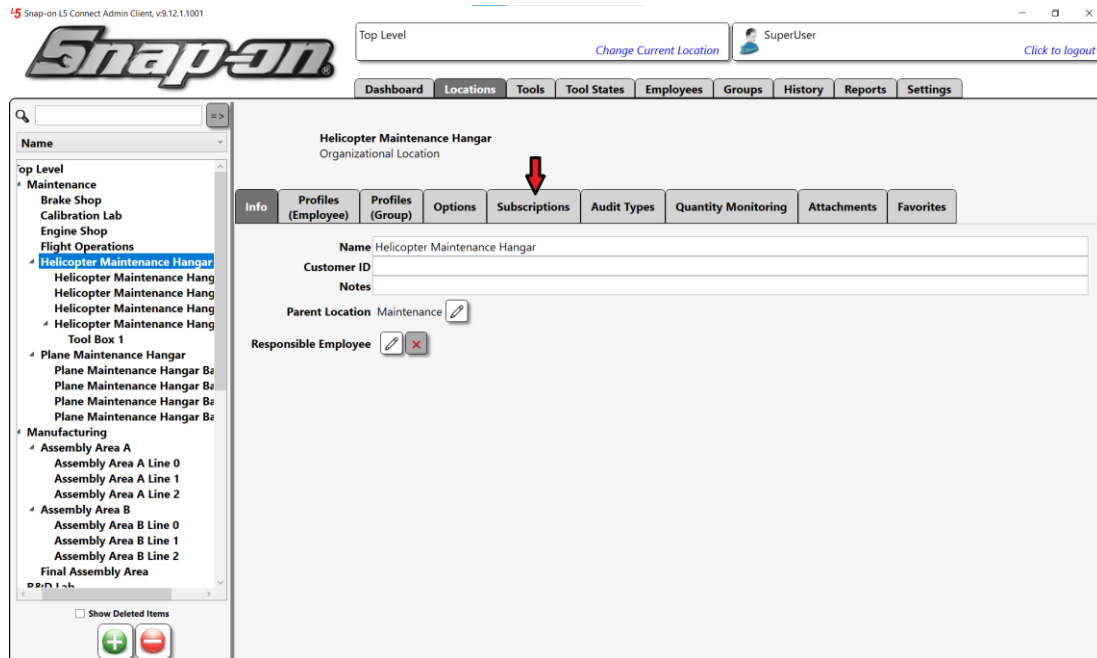
Configuration from Locations Tab

If you wanted to set up tool status for a certain part of your organizational tree, you could create a tool status notification from the locations tab. For instance, if you were the manager of the **Helicopter Maintenance Hangar**, you could create a notification to notify you any time a tool under that location was tagged as lost.

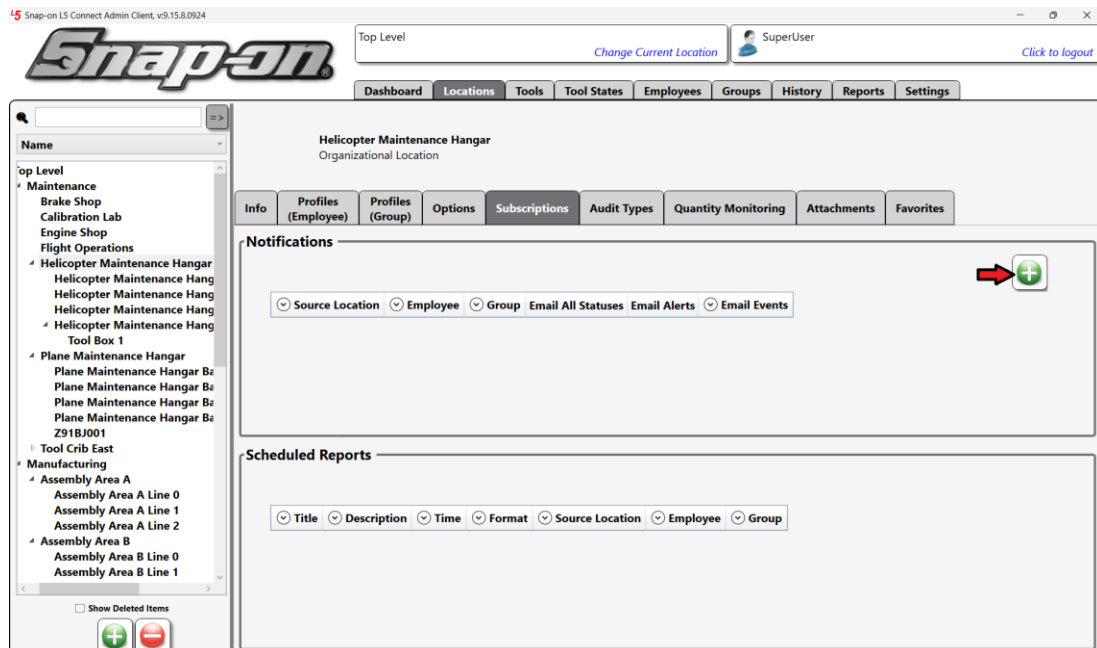
Log into the admin application and go to the **Locations** tab. Then select the **Helicopter Maintenance Hangar** location from the locations tree.



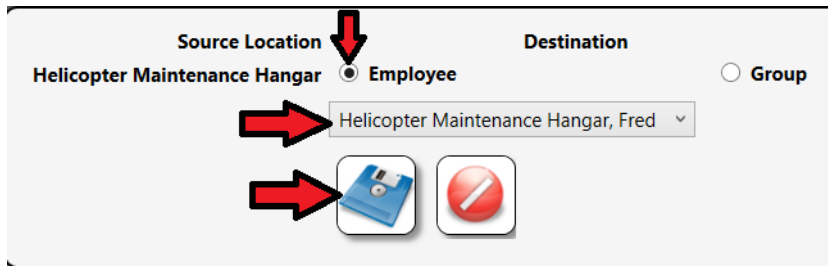
Then select the **Subscriptions** sub-tab for that location.



Click the **New** button.



Now you need to select whether you want to notify an **Employee** or a **Group** of employees. In this case we will choose to notify an **Employee**. After selecting the radio button for **Employee** select the specific employee from the pull-down list of employees. Finally click the blue **Save** button.



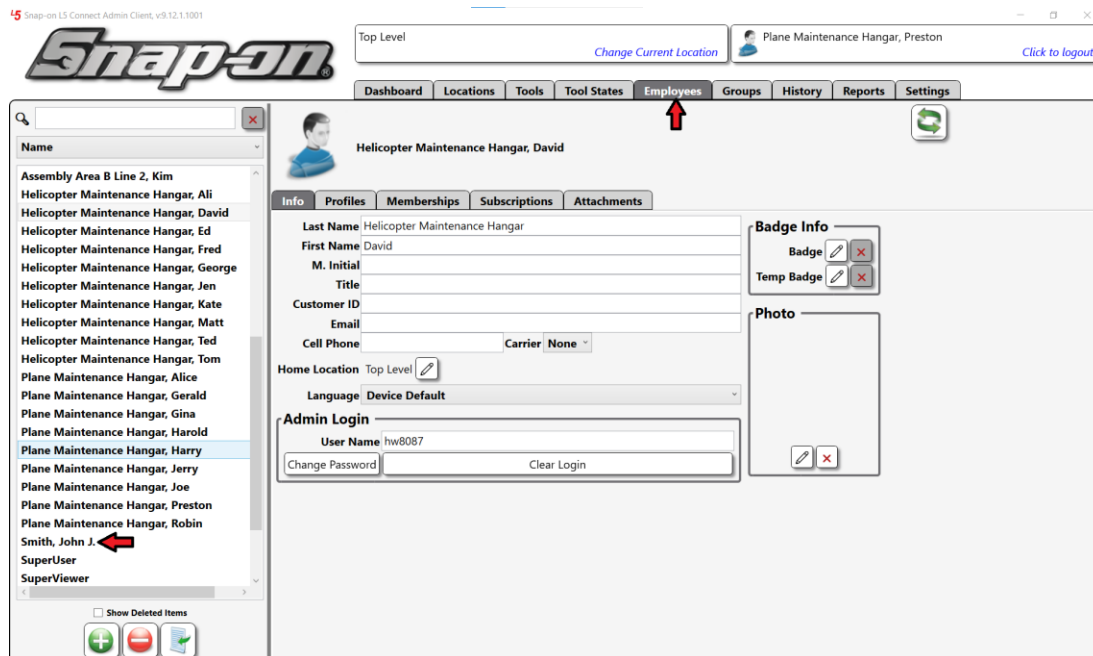
The screenshot shows a configuration window with two main sections: "Source Location" and "Destination".

- Source Location:** Contains the text "Helicopter Maintenance Hangar".
- Destination:** Contains two radio buttons: "Employee" (which is selected) and "Group".
- Dropdown Menu:** Below the "Employee" radio button is a dropdown menu showing "Helicopter Maintenance Hangar, Fred".
- File Upload:** Below the dropdown menu are two icons: a blue floppy disk icon (with a red arrow pointing to it) and a red circle with a white diagonal line (prohibited sign).

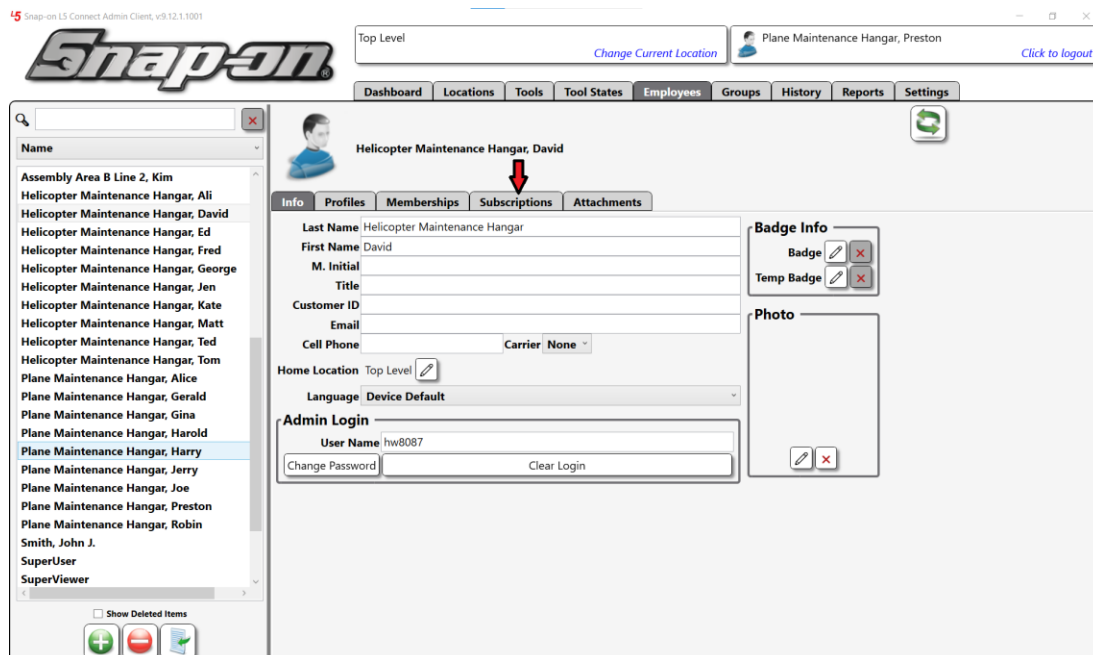
Now follow the procedure in the Configuration of Notification Delivery and Triggers section.

Configuration from Employees Tab

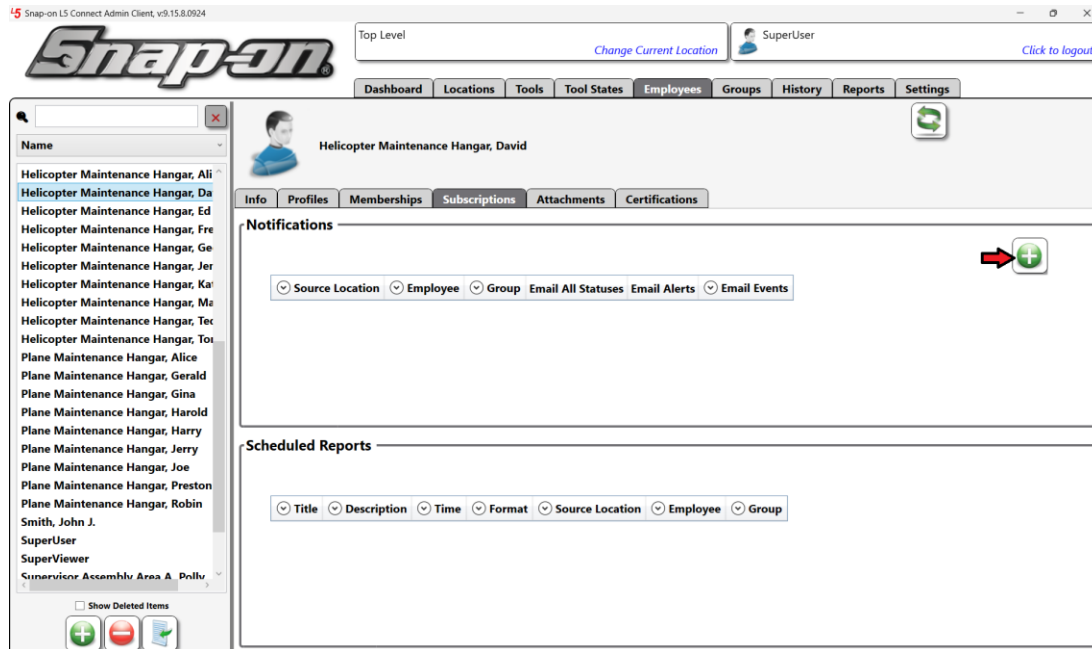
If you wish to create a notification for a specific employee, you can do that from the **Employees** tab. Go to the **Employees** tab and then select the employee to whom you wish to assign a notification.



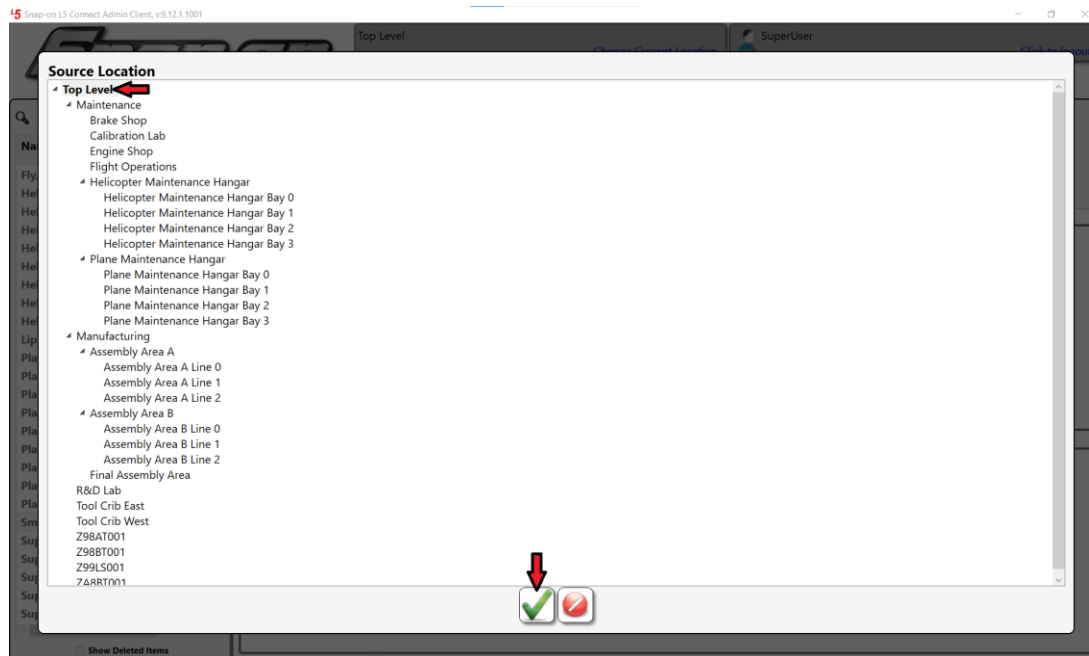
Then select the **Subscriptions** sub-tab.



Click the **New** button.



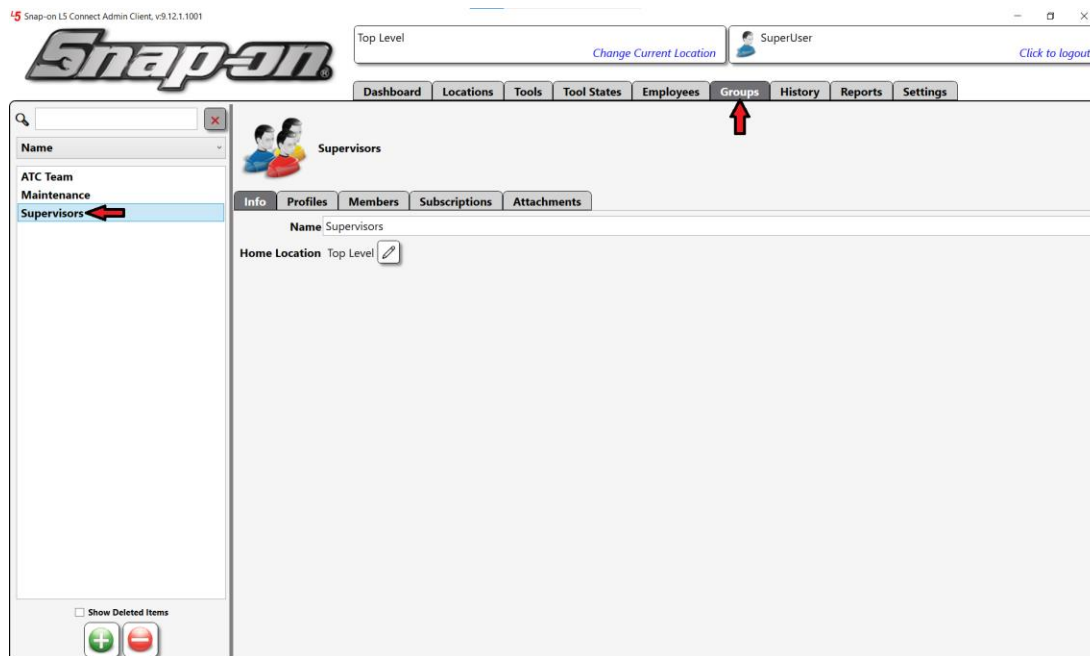
Select the location in the location tree that corresponds to the part of the system for which you want to receive notifications. Then click the **OK** button that looks like a green checkmark.



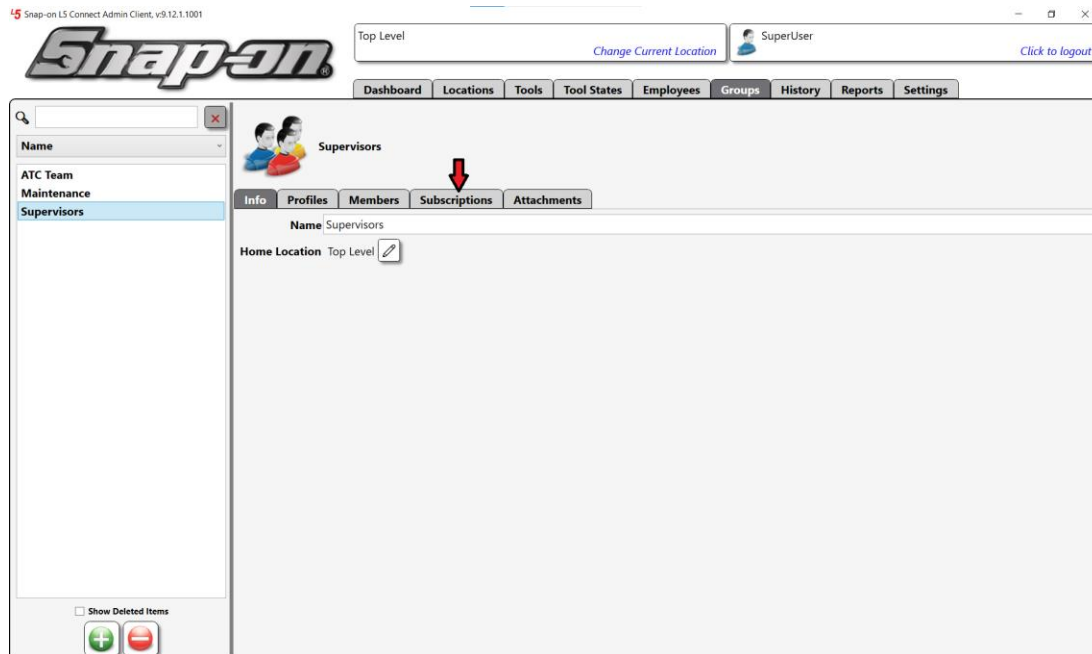
Now follow the procedure in the Configuration of Notification Delivery and Triggers section.

Configuration from Groups Tab

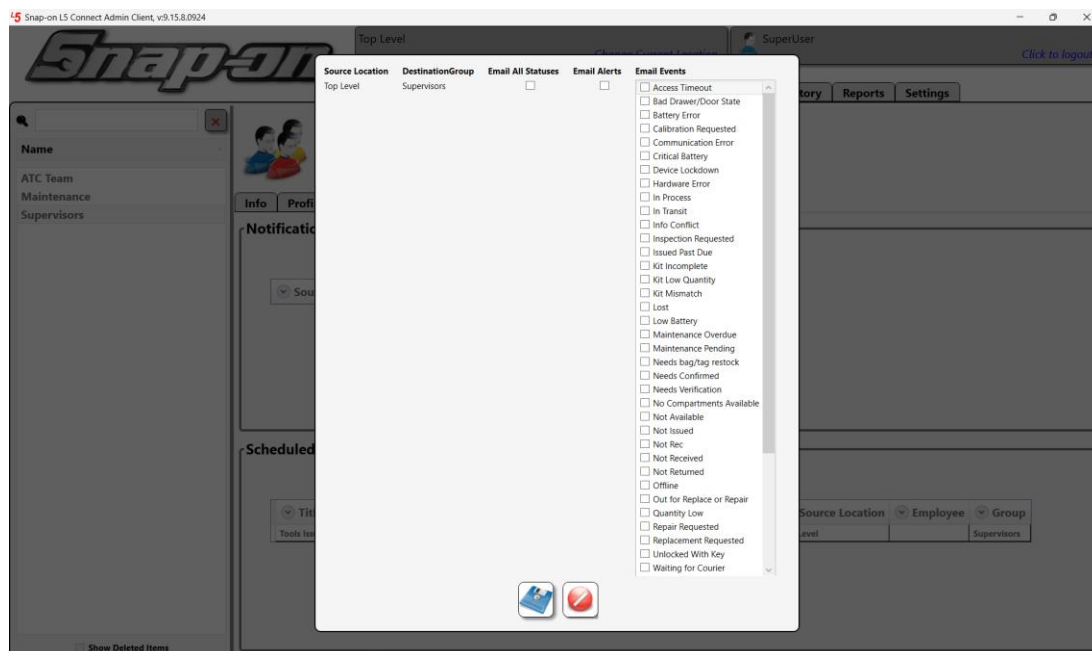
If you wish to create a notification for a group of employees, you can do that from the **Groups** tab. Go to the **Groups** tab and then select the group to which you would like to assign a notification. The employees in the group will need to have their personal information configured properly to receive email notifications.



Then select the **Subscriptions** sub-tab.



Click the **New** button. Notice that in this case you aren't required to select a location from the location tree for the notification as with the employee tab scenario. The group notification will be applied to the current location filter of the admin creating the notification automatically.



Now follow the procedure in the Configuration of Notification Delivery and Triggers section.





Configuration of Notification Delivery and Triggers

Whether you create a notification from the locations tab, the employees tab, or the groups tab, you will eventually have to configure how the notifications will be delivered and what statuses will trigger the notifications. This section will cover that part of the process.

You can configure the notification to send email messages. You can select to receive notifications about all statuses, all statuses that cause an alert, or individually select specific statuses.

For this example, we will choose to receive email notifications about tools that have a **Lost** status applied to them. In the **Email Events** status list, select the checkbox for the **Lost** status. Then click the blue **Save** button to save your new notification.

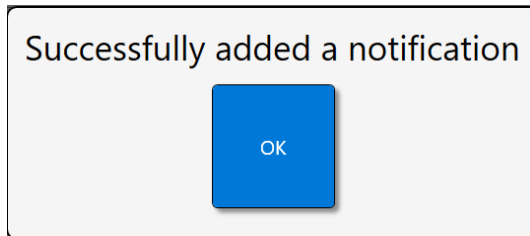
Source Location	DestinationEmployee	Email All Statuses	Email Alerts	Email Events
Top Level	Smith, John J.	<input type="checkbox"/>	<input type="checkbox"/>	<div> <input type="checkbox"/> Access Timeout <input type="checkbox"/> Bad Drawer/Door State <input type="checkbox"/> Battery Error <input type="checkbox"/> Calibration Requested <input type="checkbox"/> Communication Error <input type="checkbox"/> Critical Battery <input type="checkbox"/> Device Lockdown <input type="checkbox"/> Hardware Error <input type="checkbox"/> In Process <input type="checkbox"/> In Transit <input type="checkbox"/> Info Conflict <input type="checkbox"/> Inspection Requested <input type="checkbox"/> Issued Past Due <input type="checkbox"/> Kit Incomplete <input type="checkbox"/> Kit Low Quantity <input type="checkbox"/> Kit Mismatch <input checked="" type="checkbox"/> Lost <input type="checkbox"/> Low Battery <input type="checkbox"/> Maintenance Overdue <input type="checkbox"/> Maintenance Pending <input type="checkbox"/> Needs bag/tag restock <input type="checkbox"/> Needs Confirmed <input type="checkbox"/> Needs Verification <input type="checkbox"/> No Compartments Available <input type="checkbox"/> Not Available <input type="checkbox"/> Not Issued <input type="checkbox"/> Not Rec <input type="checkbox"/> Not Received <input type="checkbox"/> Not Returned <input type="checkbox"/> Offline <input type="checkbox"/> Out for Replace or Repair <input type="checkbox"/> Quantity Low <input type="checkbox"/> Repair Requested <input type="checkbox"/> Replacement Requested <input type="checkbox"/> Unlocked With Key <input type="checkbox"/> Waiting for Courier </div>



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Click the **OK** button.



We have configured this notification to send an email notification any time a tool in a device under the selected location gets marked with a **Lost** status.

NOTE: For e-mail notifications to be sent, the L5 Connect system must be configured for an SMTP server as stated above and the employee must have been configured to have an email address.

Verifications

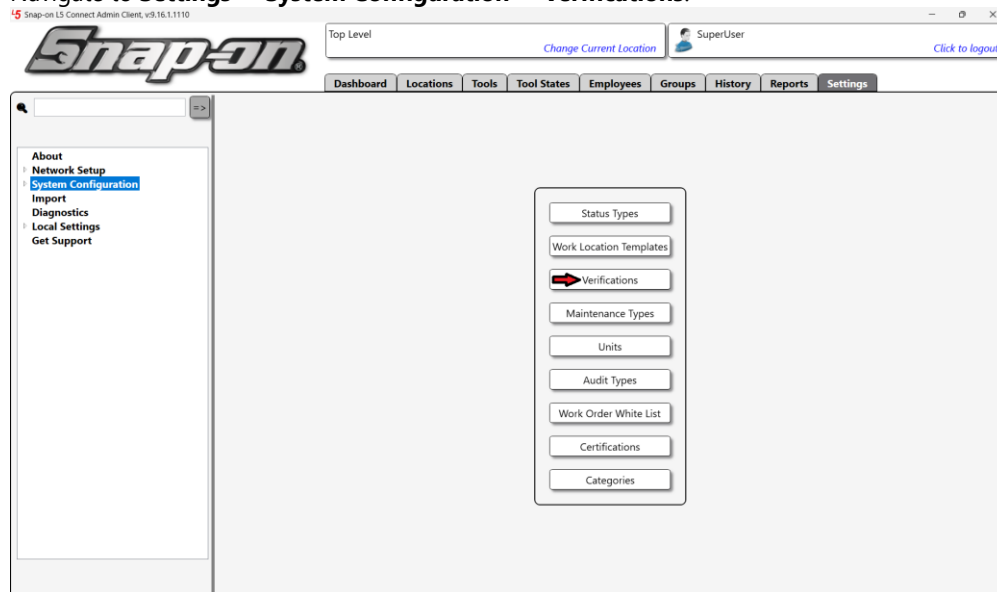
The goal of the camera verification process is to allow administrators/superusers of the L5 Connect Admin Client to require visual verification of any tool(s) or kit(s) condition when issued and/or returned to its device. For example, these steps could be ensuring that the settings are reset on a tool or cleaned before returning it. It could also verify that a kit being issued or returned is not missing anything. **Currently Image verification is only supported for the ToolCrib and ToolCrib SEAT devices.**

NOTE: All Verifications are global and can be assigned to any Master once created.

Setup Verifications within L5 Admin Client

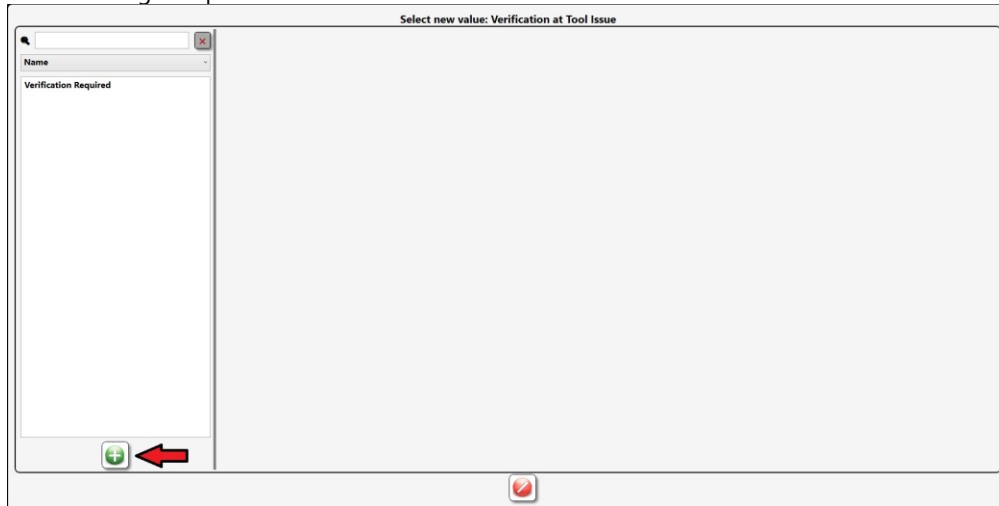
Creating Verifications

1. Open the L5 Admin Client, and complete User login
2. Navigate to **Settings=>System Configuration=>Verifications.**



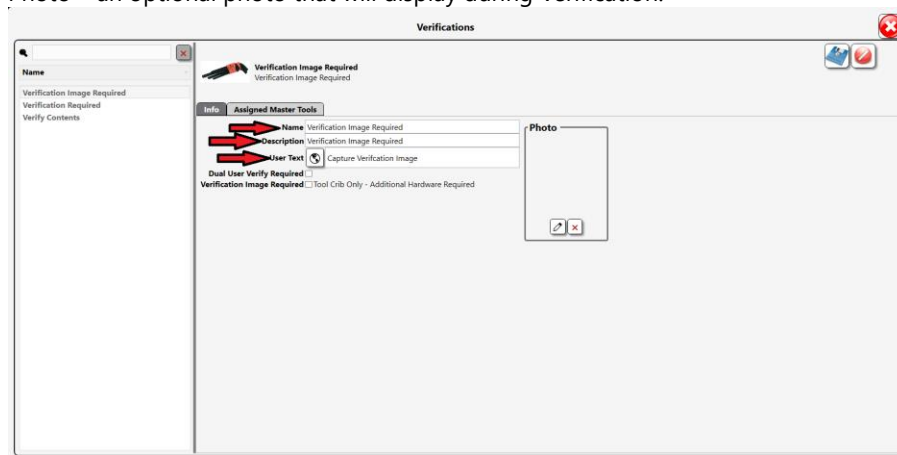
3. This will bring up the **Verifications Dialog Screen**. From this screen, you will need to create a new verification that instructs the employees on what you want them to do when they issue or return the item(s).

Click on the green plus button.

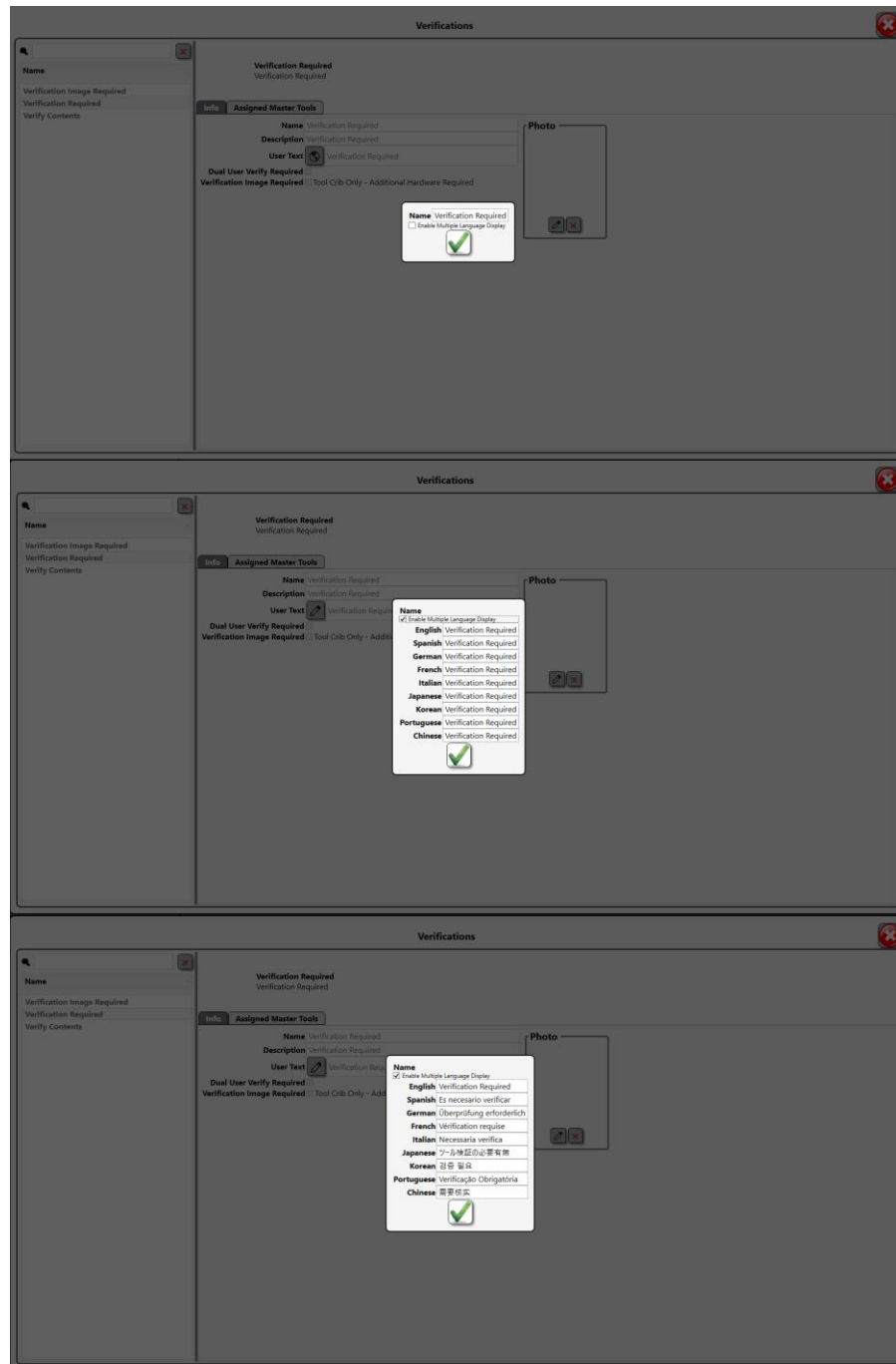


4. You will now see the Verification Creation Sub-screen. You can define several properties here:

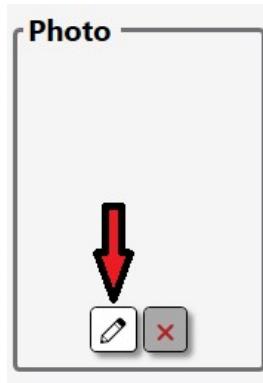
- Name – The Verification name that will show in the list on the left.
- Description – A description of what the Verification does.
- User Text – The text that will display when the Verification runs.
- Photo – an optional photo that will display during Verification.



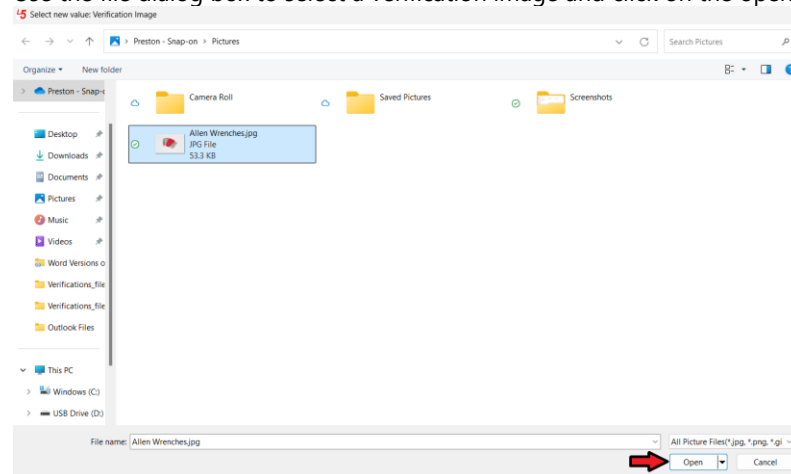
If the user wants to have text in multiple languages, press the globe button.



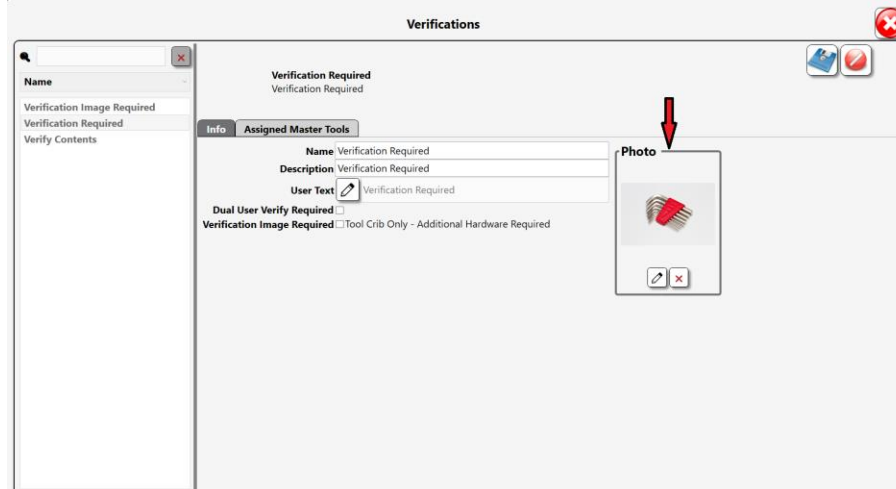
A photo is good to have so that when someone is issued the set, they can see what is supposed to be in it. To add a photo, click on the **pencil** button. You will then be prompted to select your image.



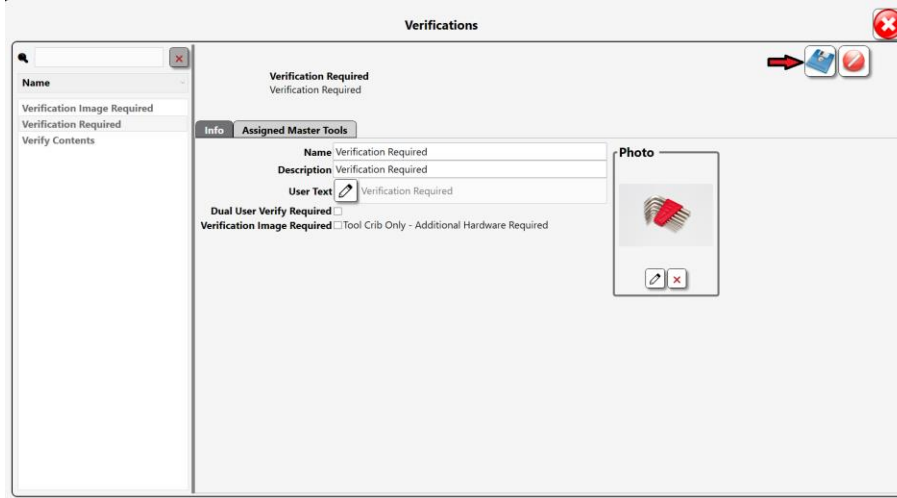
Use the file dialog box to select a verification image and click on the open button.



A preview of the uploaded image will be shown within the photo box as shown below.



The picture will then be shown on the verification screen. Click the Save button when you are done.



The screenshot shows the 'Verifications' window with the 'Verification Required' configuration. The left sidebar lists 'Name', 'Verification Image Required', 'Verification Required', and 'Verify Contents'. The main area has tabs for 'Info' and 'Assigned Master Tools'. Under 'Info', the 'Name' field is 'Verification Required', the 'Description' is 'Verification Required', and the 'User Text' is 'Verification Required'. There are checkboxes for 'Dual User Verify Required' and 'Verification Image Required'. A 'Photo' section on the right shows a red and white Snap-on logo. At the top right, there are icons for a red arrow, a blue document, and a red circle with a white 'X'.

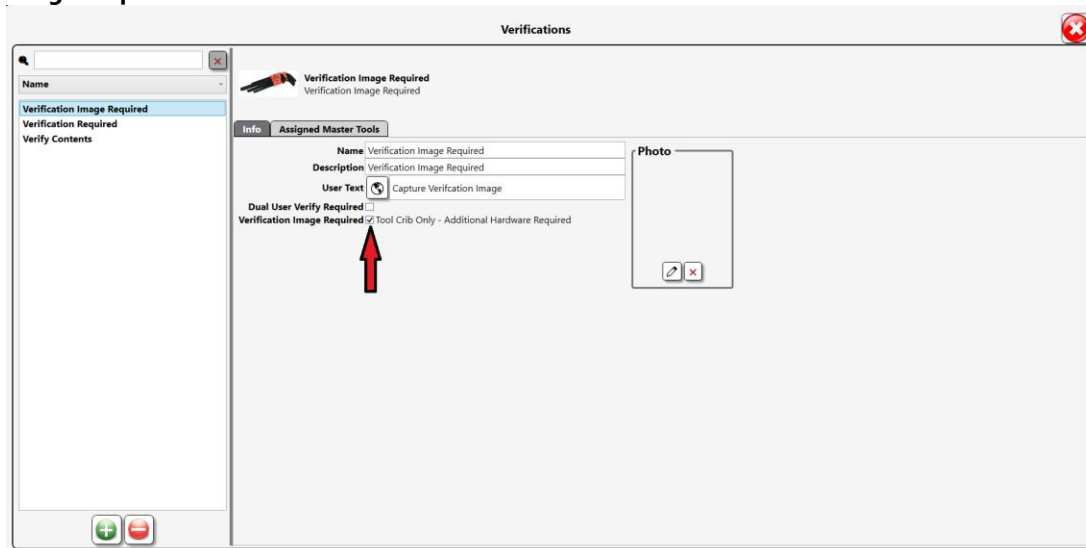
Dual User Verification

If the user needs to have a second person validate the Verification, check the box by **Dual User Verify Required** (Supported devices: Locker & Toolbox). This will require a second permissioned user to confirm the Verification.

Verification Image Required

The verification image feature uses an external camera to store an image of the tool(s) issued or returned by the user during verification. The images captured will be displayed within the **History** tab of the L5 Connect Admin Client.

NOTE: The Verification Image Required feature is currently only available on the Tool Crib and requires additional hardware (camera and mount). To add image verification to a verification type, click on the **Verification Image Required** checkbox.







The screenshot shows the 'Verifications' window with the 'Verification Image Required' configuration. The left sidebar lists 'Name', 'Verification Image Required', 'Verification Required', and 'Verify Contents'. The main area has tabs for 'Info' and 'Assigned Master Tools'. Under 'Info', the 'Name' field is 'Verification Image Required', the 'Description' is 'Verification Image Required', and the 'User Text' is 'Capture Verification Image'. There are checkboxes for 'Dual User Verify Required' and 'Verification Image Required'. A red arrow points to the 'Verification Image Required' checkbox. A 'Photo' section on the right is empty. At the bottom left, there are green and red buttons.

Special Installers

The Camera verification feature in a ToolCrib or ToolCrib SEAT device(s) will require the installation of additional libraries for functionality. Please follow along with the steps below for the installation procedure for these libraries.

1. Contact Snap-on Industrial Pro-Services to obtain a download link containing the required installer files. You will see **four** files shown below.

Name ▾	Modified ▾	Modified By ▾	+ Add column
 AdminClient_Camera_Support_Installer.msi	6 days ago	Lipsey, Matthew J	
 AdminClient_LocalUser_Camera_Support_Installer.msi	6 days ago	Lipsey, Matthew J	
 Installer_OpenCVS_Portal.msi	6 days ago	Lipsey, Matthew J	
 Installer_OpenCVS_ToolCrib.msi	6 days ago	Lipsey, Matthew J	

2. Download the file(s) that you need.

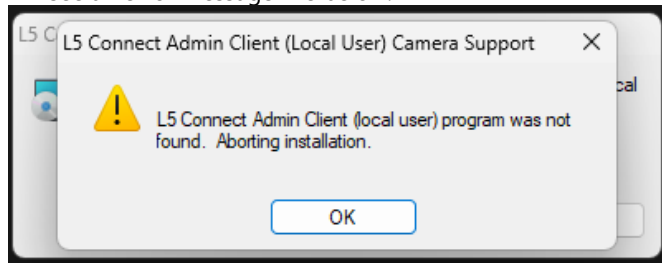
Tool Crib: Installer_OpenCVS_ToolCrib.msi (requires admin credentials)

Tool Crib seat (all users install): AdminClient_Camera_Support_Installer.msi (requires admin credentials)

Tool Crib seat (local user install): AdminClient_LocalUser_Camera_Support_Installer.msi

Note: the admin client support installers are ONLY required if the user is performing verifications on a tool crib seat launched through the admin client.

Double click to start the installation. If the main target program is not already installed on the machine, you will see an error message like below:



Camera Diagnostics

The camera diagnostics sub menu provides a live feed from the cameras on the device. This screen can be used for camera setup and adjustment.

Access Point(s)

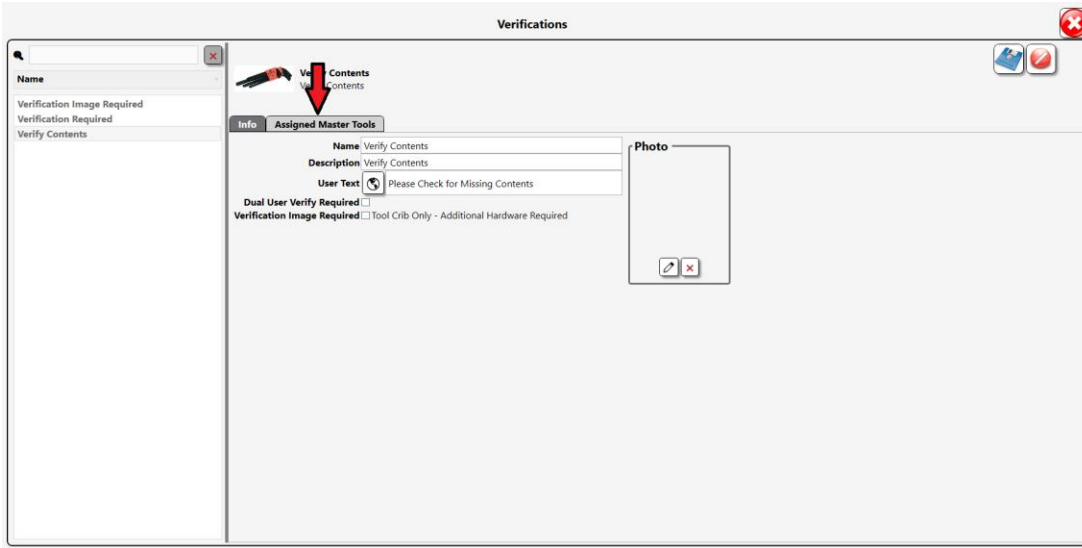
- L5 Connect Admin Client - **Admin Client Dashboard/Settings/Diagnostics/Diagnostics:Camera**
- L5 Connect TrueCrib - **After attendant login; TrueCrib Dashboard/Settings/Diagnostics/Diagnostics:Camera**

Required Permissions

- Admin Client Access Edit
- Diagnostics

Assigning Verifications to Tools

To view which tools have been assigned a given verification type click on the Assigned Master Tools tab within the Verification sub-screen as shown below.



The screenshot shows the 'Verifications' window with the 'Assigned Master Tools' tab selected. The main area displays the details for the 'Verify Contents' verification type. The fields are as follows:

- Name:** Verify Contents
- Description:** Verify Contents
- User Text:** Please Check for Missing Contents
- Dual User Verify Required:** ☐ Tool Crib Only - Additional Hardware Required
- Photo:** (Empty box with upload and delete icons)

This will show a list with four columns of data: Part number, Description, Issued, and Return. Any item that requires that specific verification type will have a checked box in the issued or returned column. **NOTE: Both Issued and return check boxes can be filled.** The user can also add verifications to other tools within this list by clicking the issued or return checkbox.

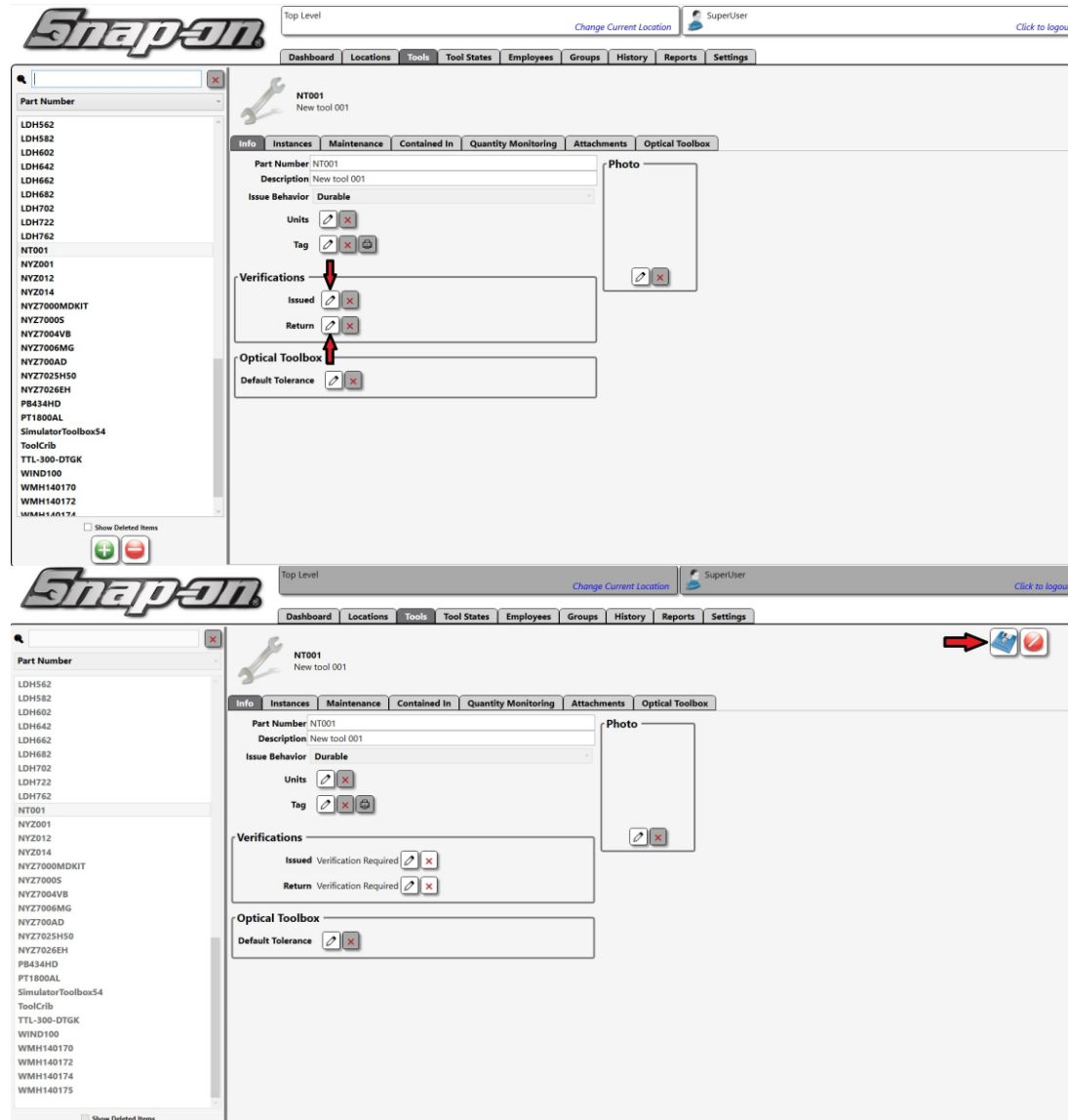
Verifications			
Capture + No Picture Verification Image			
<div>Info Assigned Master Tools</div>			
Part Number	Description	Issued	Return
LockerPN03	Locker Tool 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
LockerPN04	Locker Tool 4	<input type="checkbox"/>	<input type="checkbox"/>
LockerPN02	Locker Tool 2	<input type="checkbox"/>	<input type="checkbox"/>
LockerPN01	Locker Tool 1	<input type="checkbox"/>	<input type="checkbox"/>
00TestKit	Quick kit for test demos	<input type="checkbox"/>	<input type="checkbox"/>
A2A	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"	<input type="checkbox"/>	<input type="checkbox"/>
TestPN039	TestDesc039	<input type="checkbox"/>	<input type="checkbox"/>
TestPN040	TestDesc040	<input type="checkbox"/>	<input type="checkbox"/>

You can assign a single verification to multiple master tools from the verifications screen like shown above, or you can assign a verification to issue/return from the master tool screen as shown below.

Dual arrows on the Assigned Master Tools sub tab indicates that a different verification is already assigned to that master tool.

The issue and the return verification type can be different from one another if required.

NOTE: If verification is required on issue and return then repeat this process with whichever mode was not selected.

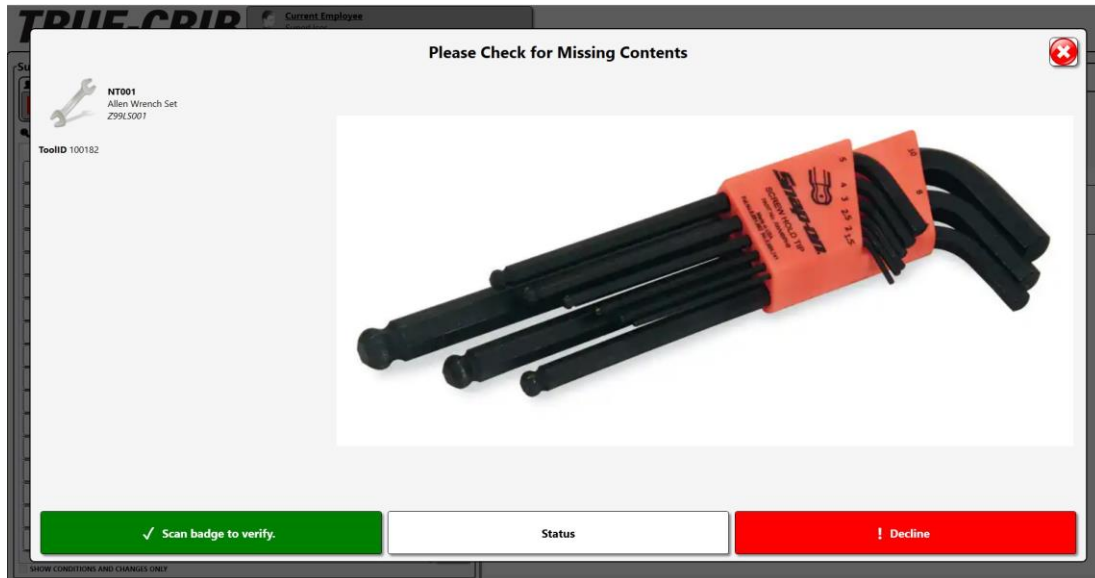


The image displays two screenshots of the Snap-on L5 Connect web application interface, showing the configuration of verifications for a master tool.

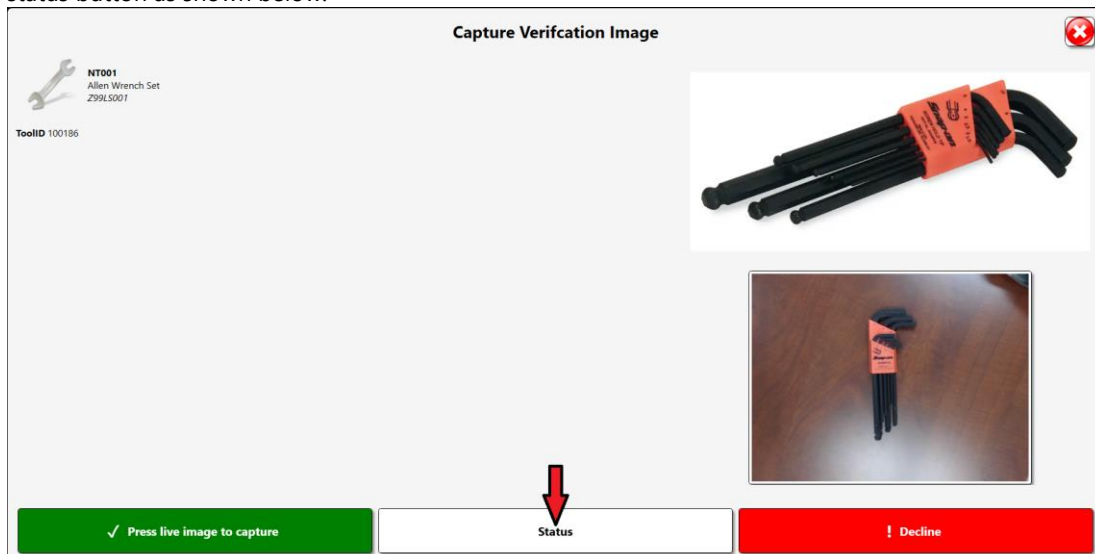
Top Screenshot: The interface shows the 'Master Tool' screen for 'NT001 New tool 001'. The 'Verifications' section is active, showing 'Issue' and 'Return' verification types. The 'Issue' verification is assigned to 'Durable' (indicated by a red arrow). The 'Return' verification is assigned to 'Durable' (indicated by a red arrow). The 'Optical Toolbox' section shows 'Default Tolerance' set to 'X'.

Bottom Screenshot: The interface shows the 'Master Tool' screen for 'NT001 New tool 001'. The 'Verifications' section is active, showing 'Issue' and 'Return' verification types. The 'Issue' verification is assigned to 'Verification Required' (indicated by a red arrow). The 'Return' verification is assigned to 'Verification Required' (indicated by a red arrow). The 'Optical Toolbox' section shows 'Default Tolerance' set to 'X'.

Once assigned, the Verifications will run each time this tool is issued or returned. **Verifications will be applied to all tool instances of the Master Tool in which verifications are assigned.** When the tool is issued or returned, the Employee will be prompted with an audio prompt warning and the following screen. Verification steps specific to each device type are contained in the Device Specific Procedures section below.



The tool status can also be cleared or changed by clicking on the status button on the verification screen. Click on the status button as shown below.




Now within the status tab the user can set or clear statuses on the tool being verified. To add a status to the tool being verified click any one or more of the status options listed under the available column. The status will now be shown under the current column with a red circular icon with a white strikethrough at a 45 degree angle.




L5 Connect User Manual

Editing NT001




NT001
Allen Wrench Set
Z99LS007


Current



Inspection Requested
1/2/2024 1:04:13 PM (Mechanic, Mike)



Repair Requested
1/2/2024 1:04:15 PM (Mechanic, Mike)



Replacement Requested
1/2/2024 1:11:29 PM (Mechanic, Mike)

Available

Calibration Requested

Inspection Requested

Lost

Not Available

Not Issued

Not Received

Not Returned

Out For Maintenance

Out for Replace or Repair

Repair Requested

Replacement Requested

To remove a status to the tool being verified click any one or more of red icons to the left of the status options listed under the current column. This will remove the status from the list of those currently applied to the tool on the left and back into the available tab on the right.

For Support/Service: INDPROSERVICES@snapon.com
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5 December 2025



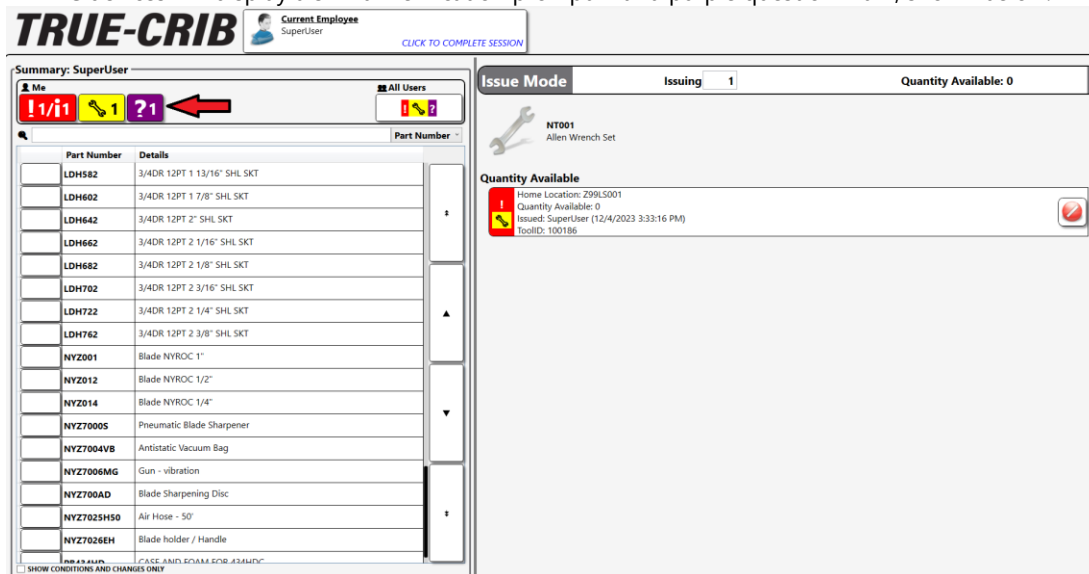
L5 Connect User Manual

Verification Operation

The workflow for verifications between devices is fairly similar. All device specific behaviors will be specified later in this document.

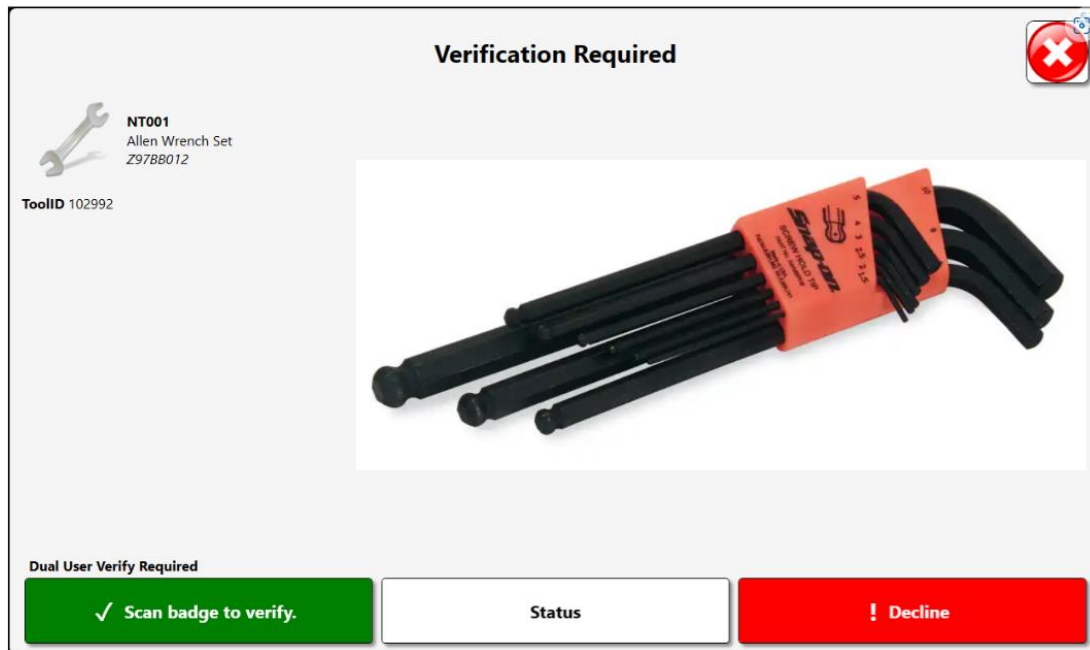
Verification Prompt

All ATC devices will display a similar verification prompt with a purple question mark, shown below.

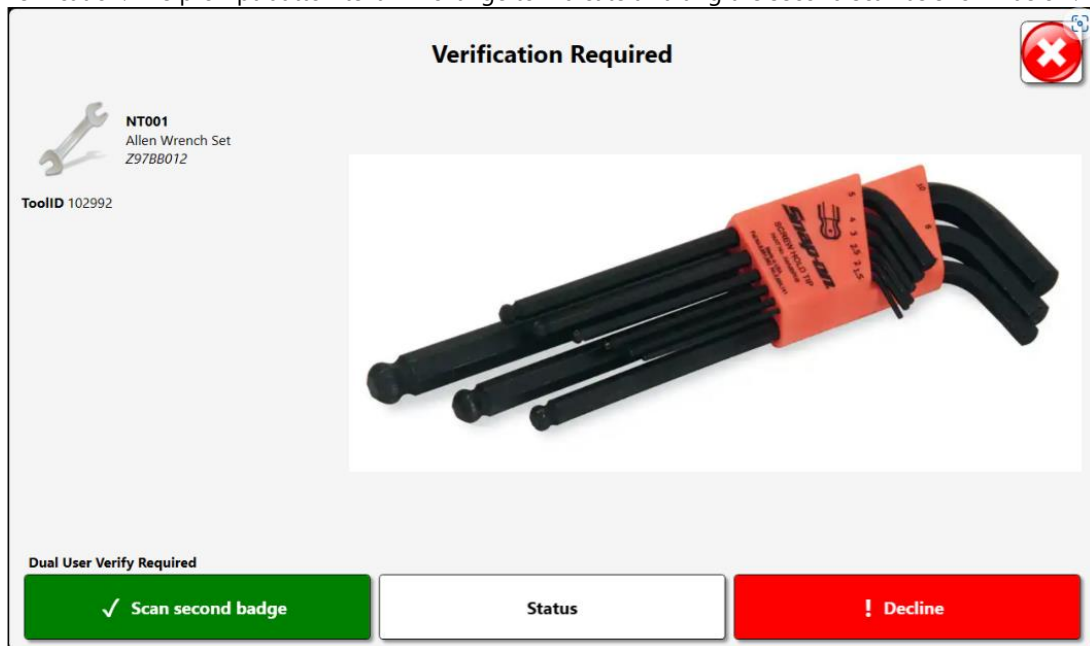


Dual User Verify Option

Issue or return a tool from an ATC device, an item tagged for Dual User Verify will require **two** users to scan their badge. The first being the user that issued or returned the tool, with that screen shown below.



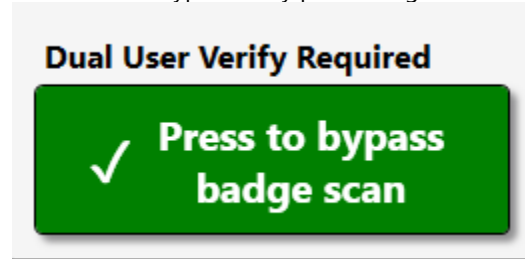
After the primary badge scan, a different user with machine access is required to scan their badge to complete the verification. The prompt button text will change to indicate awaiting the second scan as shown below.



Bypass Dual User Verify

Dual user verify can be bypassed by a privileged user, with **bypass second badge verify** permissions. After the initial verification badge scan, the button prompt will change as shown below. The process can be completed by pressing

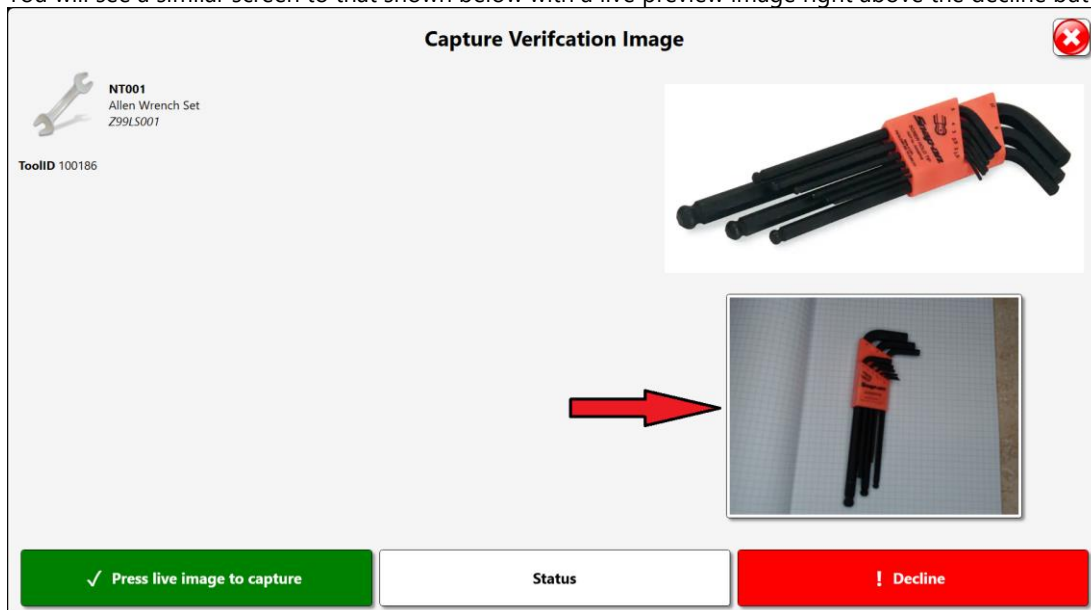
the button to bypass or by performing the second badge scan normally.




Verification Image Required

Issue or return a tool tagged for image verification from the Tool Crib, and click on the purple question mark shown above.

You will see a similar screen to that shown below with a live preview image right above the decline button.





Click on the live preview image to capture.




NT001
Allen Wrench Set
Z99LS001

ToolID 100186

Capture Verification Image



Scan badge or press live image to retake

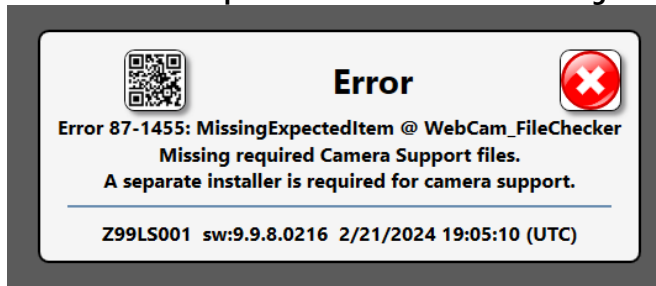
Status

Decline

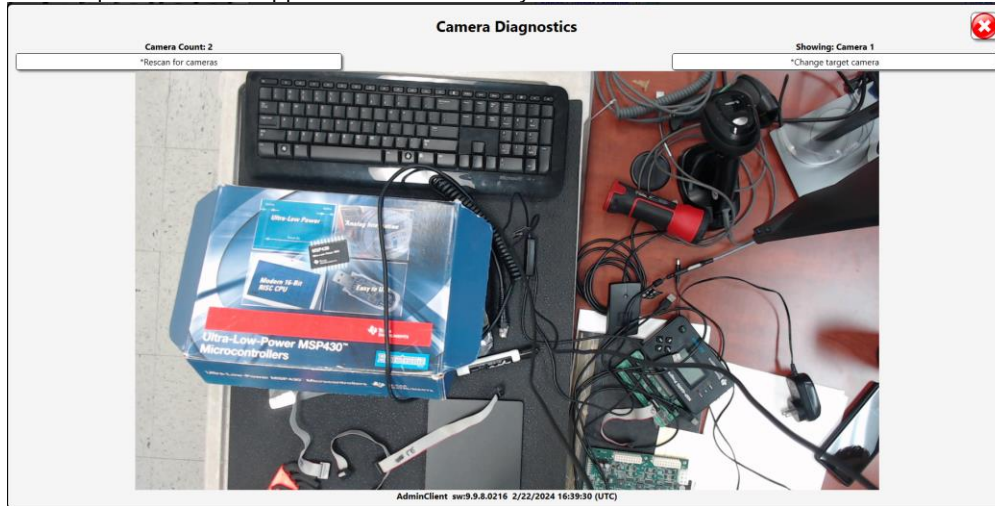
Either scan your badge to complete verification or press the live image to retake.

Switching Camera View in Admin Client/Tool Crib

1. Navigate to one Camera Diagnostics sub menu through one of the paths above..
NOTE: If you see the screen below it means no camera support files have been installed. Complete the installation of the special installers before continuing.



If the required camera support files are installed you will see a similar screen to that shown below.



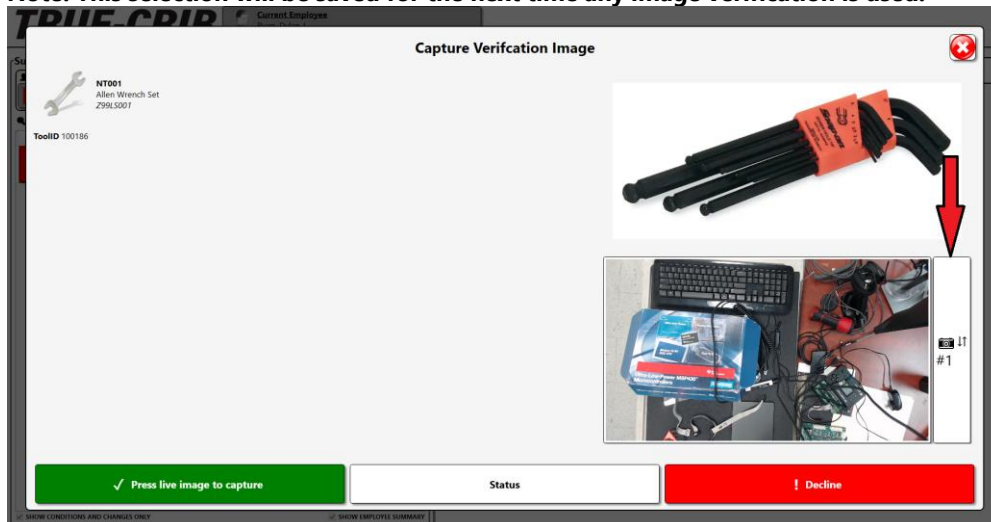
2. You will see a live camera preview as well as two buttons towards the top of the screen; **Rescan for cameras** & **Change target camera**.
 - Rescan for cameras: Will rescan for any cameras not immediately identified on system start up.
 - Change target camera: Will change the target of the camera preview to the other identified camera.

Switching Camera View

Note: On device start up the cameras may not be identified in the same order as previously

1. Switching camera view can be accomplished through the normal image verification process. To begin, issue or return a tool that requires image verification, and open the verification image sub menu.
2. To switch camera used for this verification click on the **Change target camera** button to the right of the camera preview (shown below).

Note: This selection will be saved for the next time any image verification is used.

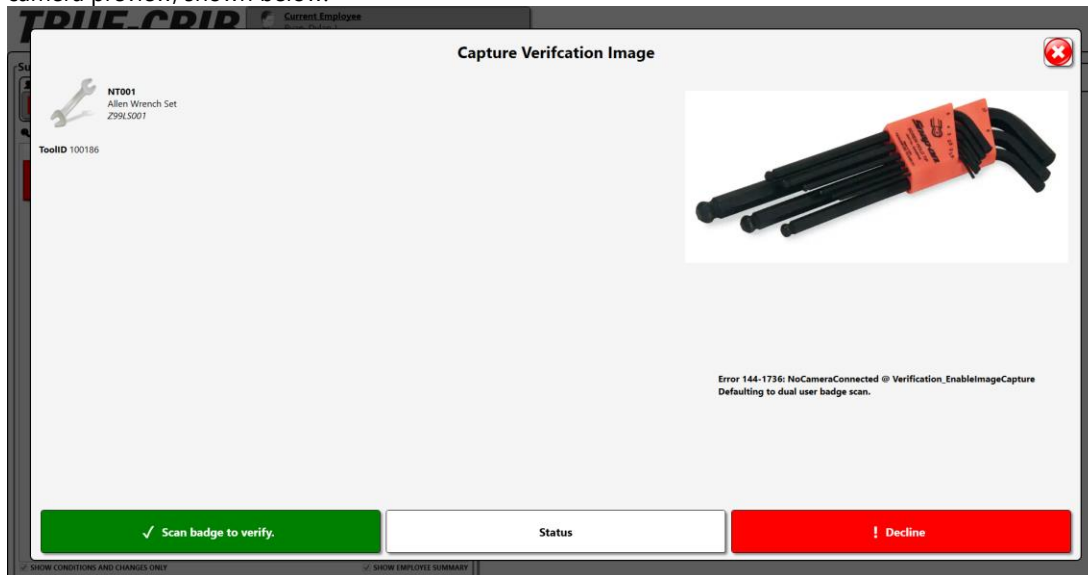


Unsupported Device Behavior

If you use a verification with verification images on an unsupported device the device will act just like the option is not enabled. **NOTE: The Verification Image Required feature is currently only available on the Tool Crib with the additional hardware (camera and mount).**

Missing Camera Behavior

If a device is missing a camera and image verifications is required you will see the following message in place of the camera preview, shown below.



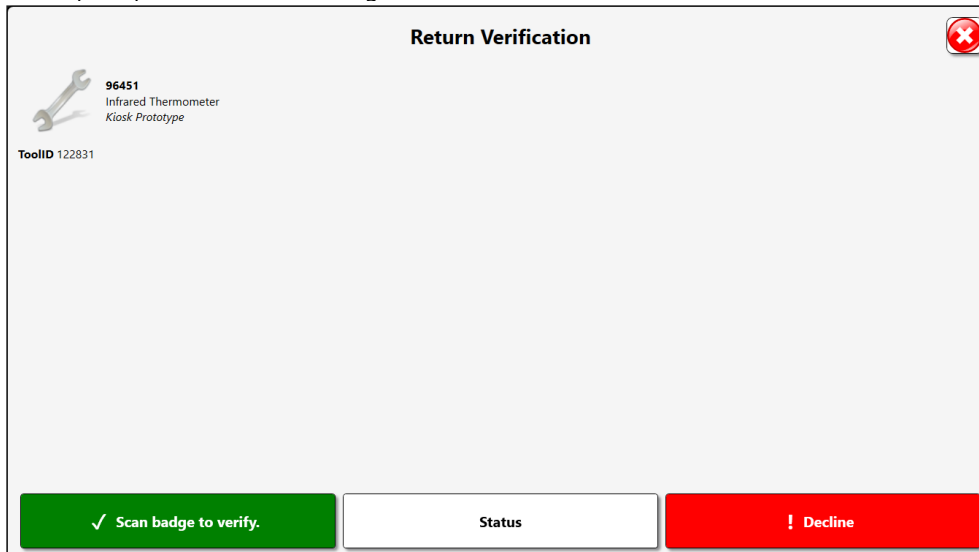
To complete verifications with a missing camera, continue with dual user verify.

Device Specific Behaviors

ATC FlexHub

Verification Required

1. Scan badge with RFID reader on the ATC FlexHub
2. Click on the tool/item(s) to issue or return to the ATC FlexHub. If an item is tagged for verification the user will be prompted with the following menu.



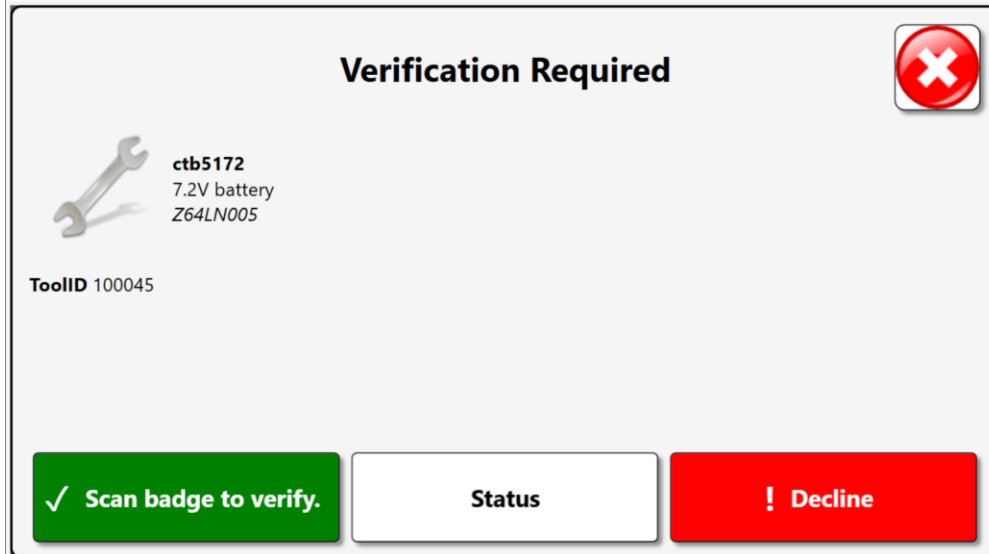
The dialog box is titled "Return Verification" and features a red close button in the top right corner. On the left, there is a wrench icon, the ID "96451", the description "Infrared Thermometer Kiosk Prototype", and the "ToolID 122831". At the bottom, there are three buttons: a green button with a checkmark and the text "Scan badge to verify.", a white button labeled "Status", and a red button with an exclamation mark and the text "Decline".

Locker

Verification Required

Issue

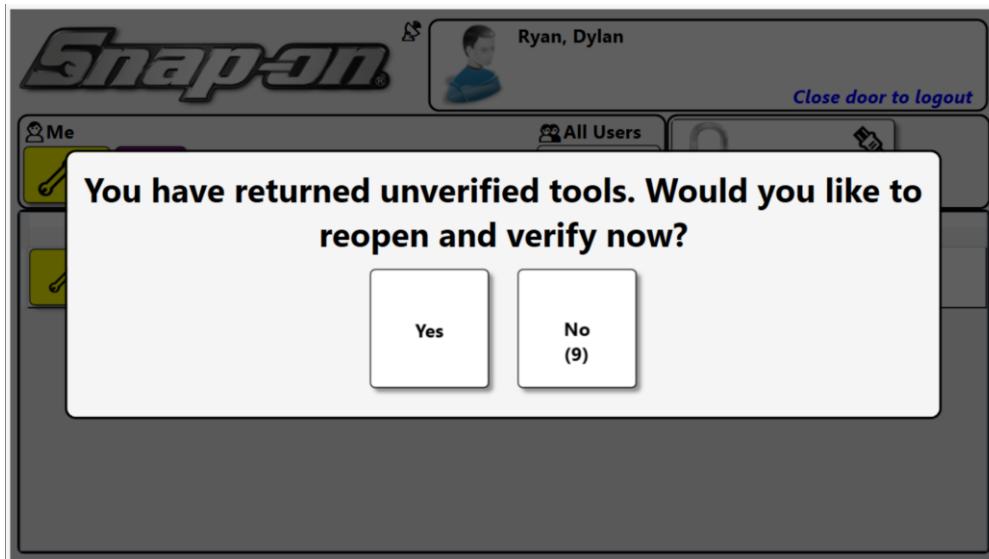
1. Scan badge with RFID reader on the locker, successful login will cause the door on the locker to open.
2. Remove an item from the locker and close the door. If any issued item is tagged for verification the user will be prompted with the following menu.



3. If for any reason the verification is declined or skipped the user can return to the verification screen. To return to the verification screen, scan badge with RFID reader and click on the purple box with a question mark on the locker dashboard like shown above.

Return

1. Scan badge with RFID reader on the locker, successful login will cause the door on the locker to open.
2. If there are any tools tagged for verification issued out to the user a purple box with a question mark will appear in the top left under the Snap-on logo on the Locker dashboard. Click on this purple box and the user will be met with the verifications screen. Scan badge to verify, return the tool to the locker, and close the door.
3. If for any reason the verification is declined or skipped, the user will be met with the following message after closing the door.




Click **Yes** to reopen the door and verify the tool(s) being returned like shown in the previous step. If **No** is selected or after the timer runs out the user will be logged out and the verification will be recorded as skipped.

Portal

Verification Required

1. Scan badge with RFID reader on the Portal
2. Scan item(s) to issue or return to the portal. If an item is tagged for verification the user will be prompted with the following menu.
3. If for any reason the verification is declined or skipped the user can return to the verification screen. To return to the verification screen, click on the purple box with a question mark on the portal dashboard.

Return Verification



CTB5172
Battery Pack, 7.2V DC - Snap-on (Red/Green)
Portal Prototype

ToolID 122827

✓ Scan badge to verify.

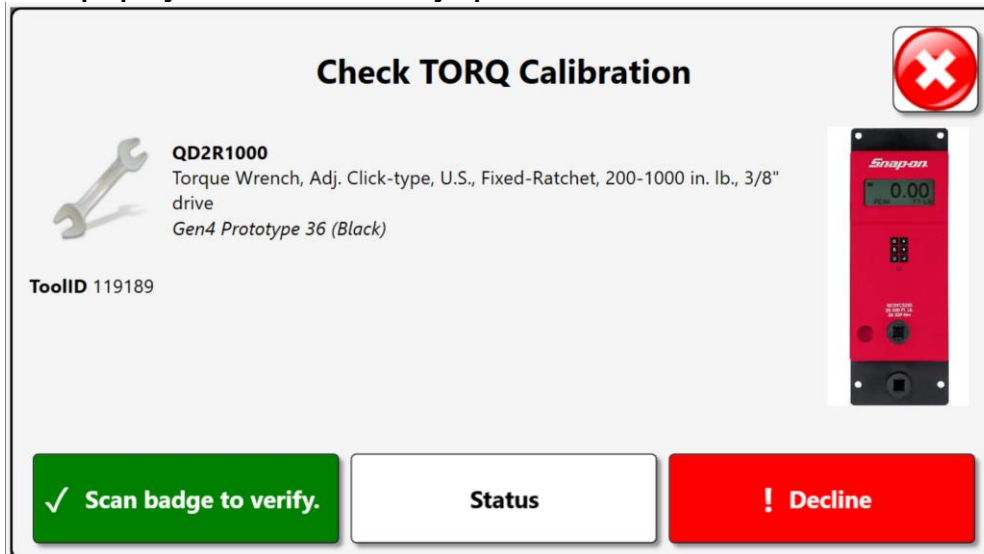
Status

! Decline

Toolbox

Verification Required

1. Scan badge on toolbox RFID reader.
2. Now issue or return a tool/kit to the toolbox. Upon closing the drawer, the user will be met with the Verification menu as shown below. From here the user will again scan the badge on the RFID reader. **NOTE: If the verification message is dismissed that will be reported in the devices log within the L5 Admin Client and a "Needs Verification" status will be applied to the tool. This status will remain until the tool is properly verified or is cleared by a permissioned user**

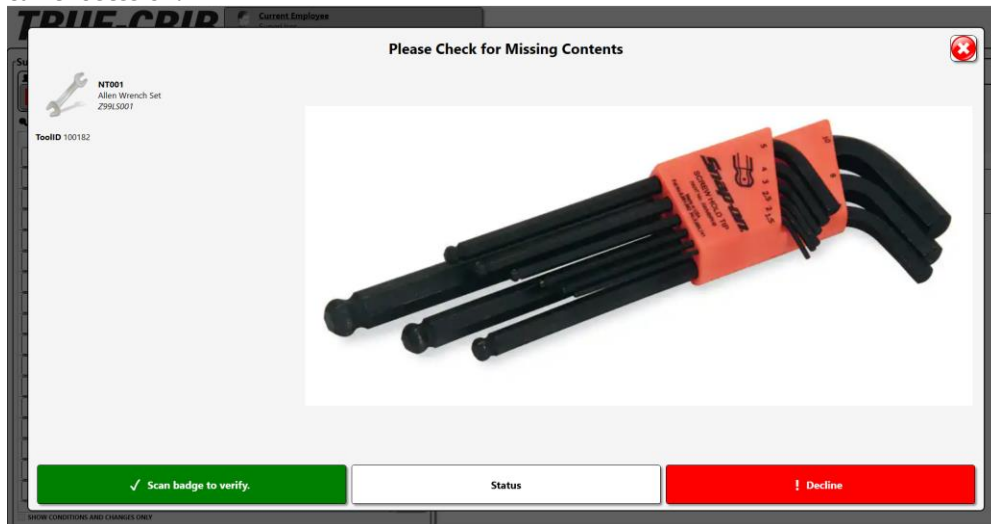


3. If for any reason the verification is declined or skipped the user can return to the verification screen. To return to the verification screen, reopen the drawer in which the issued or returned tool is assigned. Once the drawer is opened the user will be met with the following prompt. Click on the purple question mark icon to return to the verification prompt.

Tool-Crib

Verification Required

1. Scan badge with RFID reader on the Tool Crib.
2. Now issue or return a tool/kit to the Tool Crib. Once the item is issued or returned a purple question mark icon will appear on the left side of the screen. Click the purple box with a question mark.
3. When the tool is issued or returned, the Employee will be prompted with the following screen. **NOTE: The Tool-Crib forces the user to complete the verification process. Declining will return the user to their current session.**



If the user selected Image Verification Required, follow along with the above section)

4. Whenever the session is completed, the user will be prompted to address any pending verifications.



L5 Connect User Manual

Event Log

Any action taken on any device within the ATC system will be logged within the L5 Connect Admin Client, which can be found under the History tab. This event log will give the date, time, action taken, part number, Employee number, and the name of whatever device is accessed. This log will also show if the user completed the tool issue/return verification or not, showing this logged action with one of the following messages: **"Tool Issue Verified"**, **"Tool Return"**, **"Tool Issue Verification Skipped"**, and **"Tool Return Verification Skipped"**. Additionally on specific actions and devices an image may be saved and tied to that action taken, like the **verification images** on the **Tool-Crib**.

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups **History** Reports Settings

Hide: Archive Image Drawer Open Image Drawer Closed Image

Normal: Top Level Highlight: None 11/28/2023 - 12/5/2023

Date	Action	Dwr	Part Number	Employee	Affected Employee	Source Location	Destination Location	Group	Info	Data
12/5/2023 3:11:44 PM	Session started			SuperUser	SuperUser	Z99LS001				
12/5/2023 3:11:40 PM	Session completed			SuperUser	SuperUser	Z99LS001				
12/5/2023 3:11:35 PM	Tool Returned		NT001	SuperUser	SuperUser	Z99LS001				1 / 1
12/5/2023 3:10:31 PM	Tool Return Verified		NT001	SuperUser	SuperUser	Z99LS001				
12/5/2023 3:10:24 PM	Session started			SuperUser	SuperUser	Z99LS001				
12/5/2023 3:10:21 PM	Session completed			SuperUser	SuperUser	Z99LS001				
12/5/2023 3:10:16 PM	Tool Issued		NT001	SuperUser	SuperUser	Z99LS001				
12/5/2023 3:10:16 PM	Status Cleared		NT001	SuperUser	SuperUser	Z99LS001			Needs Verification	1
12/5/2023 3:09:45 PM	Tool Return Verified		NT001	SuperUser	SuperUser	Z99LS001				
12/5/2023 3:09:37 PM	Session started			SuperUser	SuperUser	Z99LS001				
12/5/2023 3:09:34 PM	Session completed			SuperUser	SuperUser	Z99LS001				
12/5/2023 3:09:29 PM	Tool Returned		NT001	SuperUser	SuperUser	Z99LS001				1 / 1
12/5/2023 3:09:26 PM	Tool Return		NT001	SuperUser	SuperUser	Z99LS001			Needs Verification	

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups **History** Reports Settings

Hide: Archive Image Verification Image

Normal: Top Level Highlight: None 12/21/2023 - 12/28/2023

Date	Action	Dwr	Part Number	Employee	Affected Employee	Source Location	Destination Location	Group	Info	Data
12/28/2023 1:28:14 PM	Session completed			Socket, Sue	Socket, Sue	Z99LS001				
12/28/2023 1:28:08 PM	Tool Issued		NT001	Socket, Sue	Socket, Sue	Z99LS001				1
12/28/2023 1:27:44 PM	Issue verification image captured		NT001	Socket, Sue	Socket, Sue	Z99LS001				
12/28/2023 1:27:44 PM	Tool Issue Verified		NT001	Socket, Sue	Socket, Sue	Z99LS001				
12/28/2023 1:20:57 PM	Session started			Socket, Sue	Socket, Sue	Z99LS001				
12/28/2023 1:11:59 PM	Session completed			Socket, Sue	Socket, Sue	Z99LS001				
12/28/2023 1:11:54 PM	Tool Issued		NT001	Socket, Sue	Socket, Sue	Z99LS001				1
12/28/2023 1:11:50 PM	Issue verification image captured		NT001	Socket, Sue	Socket, Sue	Z99LS001				
12/28/2023 1:11:50 PM	Tool Issue Verified		NT001	Socket, Sue	Socket, Sue	Z99LS001				
12/28/2023 1:01:33 PM	Session started			Socket, Sue	Socket, Sue	Z99LS001				



L5 Connect User Manual

Tool Maintenances

Some tools require regular maintenance or calibration. Keeping track of this can be cumbersome and tedious. Keeping accurate maintenance records can also prove challenging. L5 Connect™ provides the ability to set up automated tracking, notification, and capturing historical records for these important functions. It can track what tools need to be serviced and how long the tools have gone without service. This is done by creating tool maintenance instances.

This document will discuss the configuration and usage of tool maintenances in the L5 Connect system. It will cover how to setup a maintenance types and how that differs from an instance of a maintenance type. It will cover how these maintenances behave on devices and their related statuses.

Maintenance Types

A maintenance type describes what sort of maintenance is required to keep the tool functioning properly. It is assigned to a master tool in the L5 Connect system. Any instances of that master tool will then have this maintenance type applied to them. There are two built-in maintenance types in the system. Users can also create their own custom maintenance types.

Built In Maintenance Types

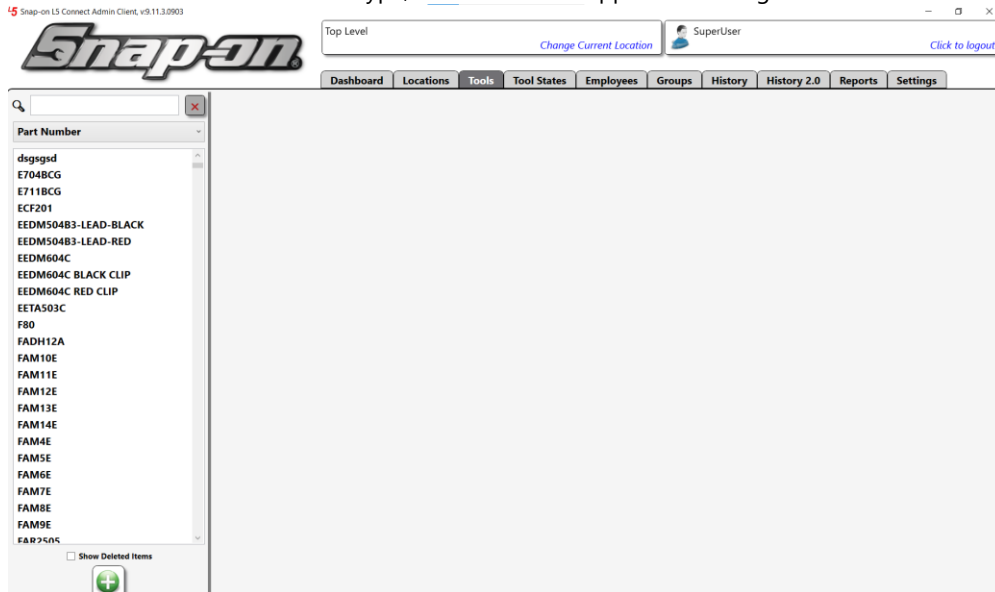
There are two built-in maintenance types in the L5 Connect system. These are calibration and inspection. Many tools require regular calibration such as torque wrenches or measuring gauges. Tool inspections can be common for tools that frequently get chipped or worn down. These maintenance types, like any other user created ones, can be applied to multiple master tool types across the system.

Custom Maintenance Types

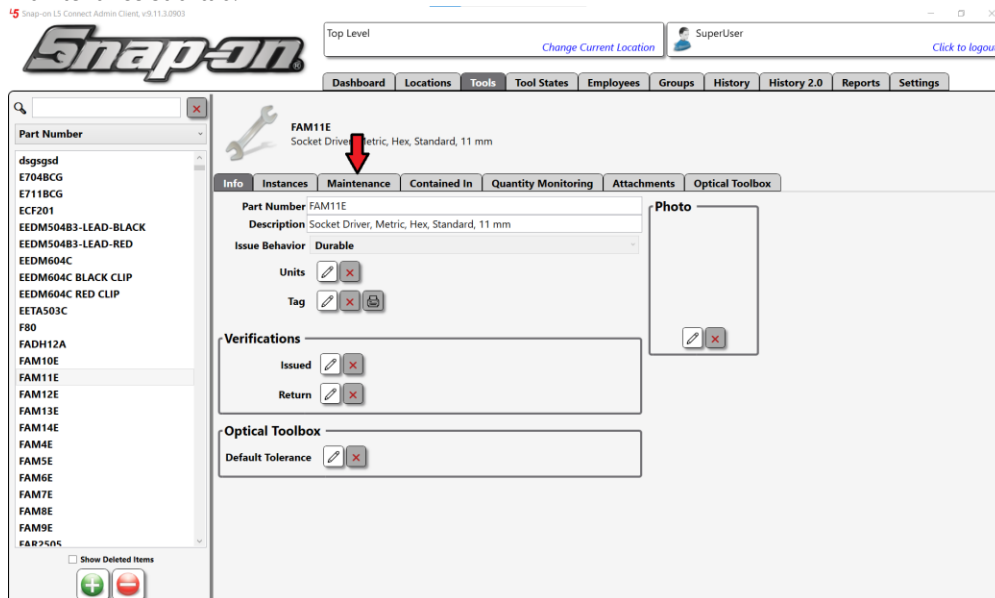
Users can create their own custom maintenance types for use in their L5 Connect system. There are two types of custom maintenances that can be created. There are maintenances based on dates and their maintenances based on the number of tool issues/returns. **NOTE: The tool issue/return type maintenances increment their count on the return of the issued tool.**

Custom Date Based Maintenance Types

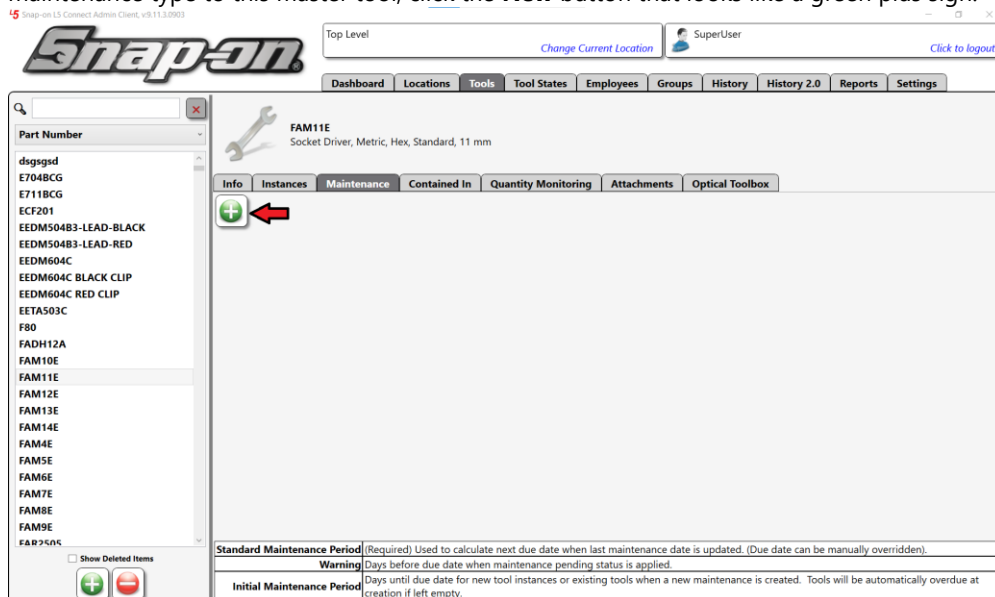
1. To create a custom maintenance type, start the Admin application and go to the **Tools** tab.



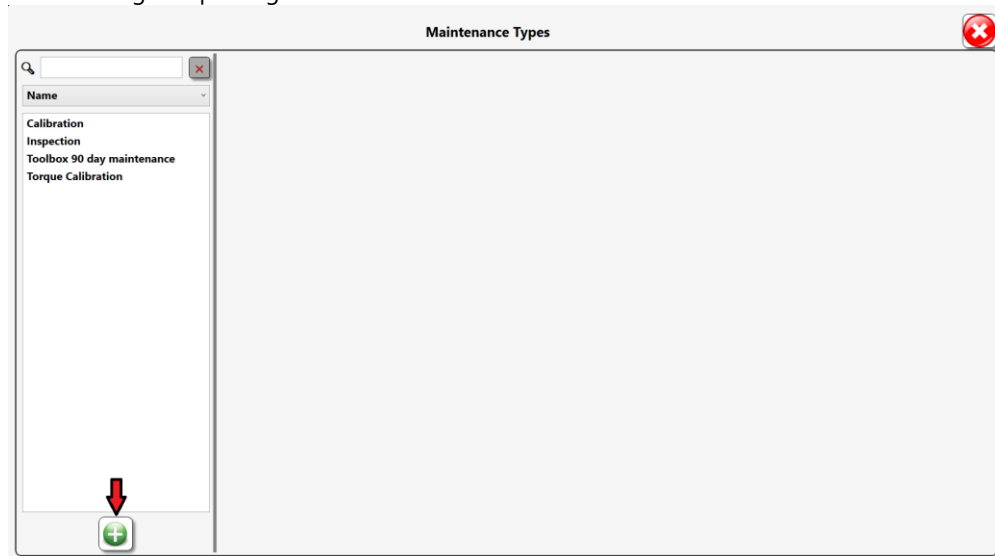
2. Select the master tool for which you would like to assign your custom maintenance type and then click the Maintenance sub-tab.



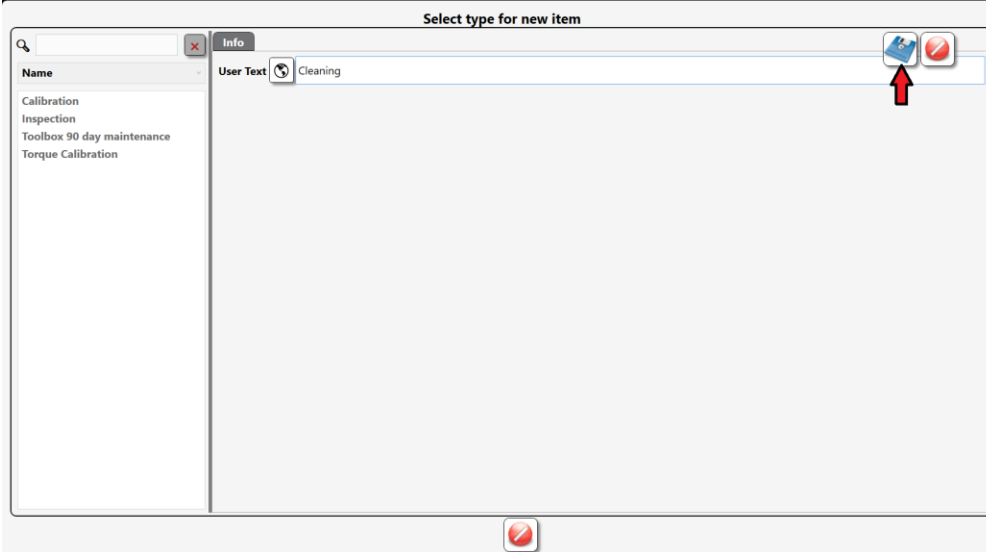
- If there are any maintenance types already assigned to this master tool they will appear here. To add a new maintenance type to this master tool, click the **New** button that looks like a green plus sign.



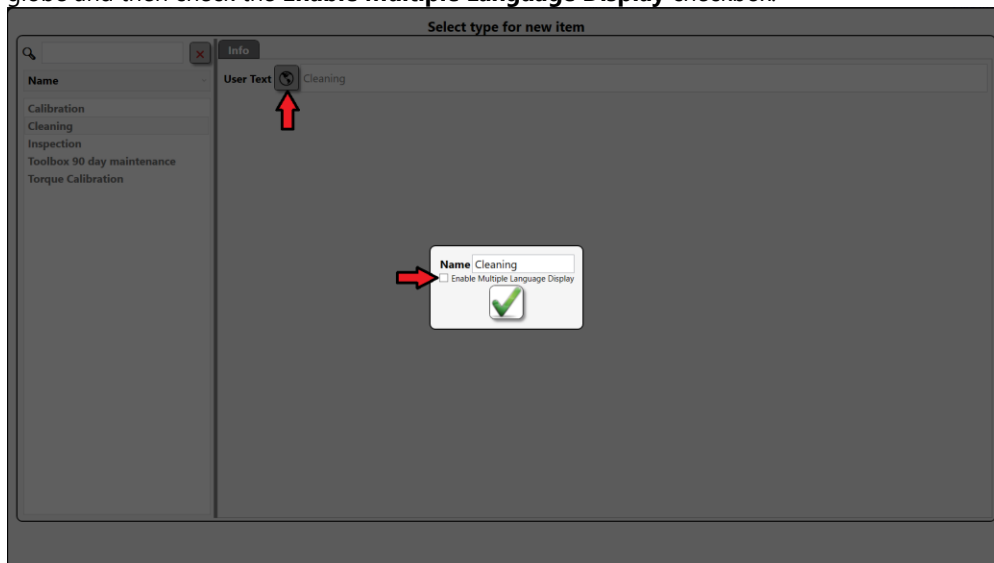
- This opens the **Maintenance Types** window. To add a new maintenance type, click the **New** button that looks like a green plus sign.



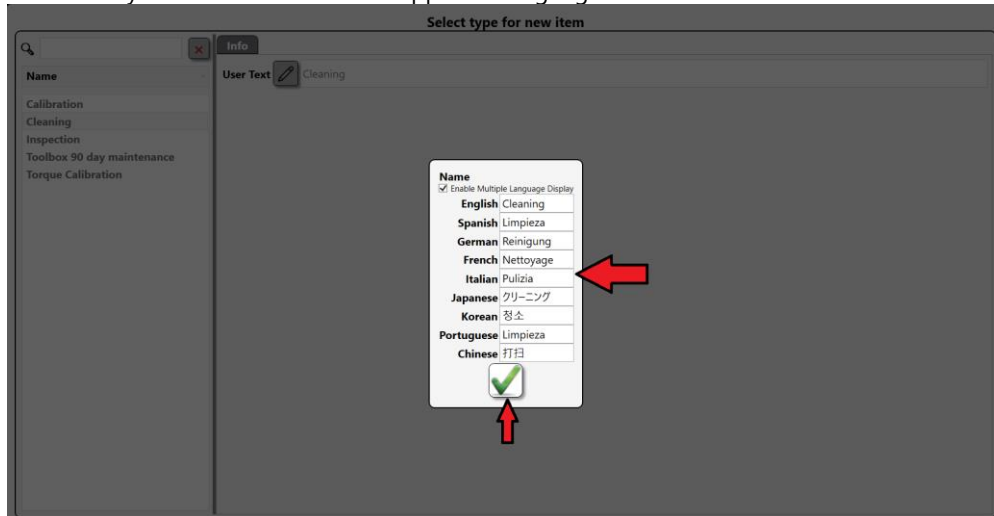
- Give the maintenance type a name and then click the **Save** button that looks like a blue disk.



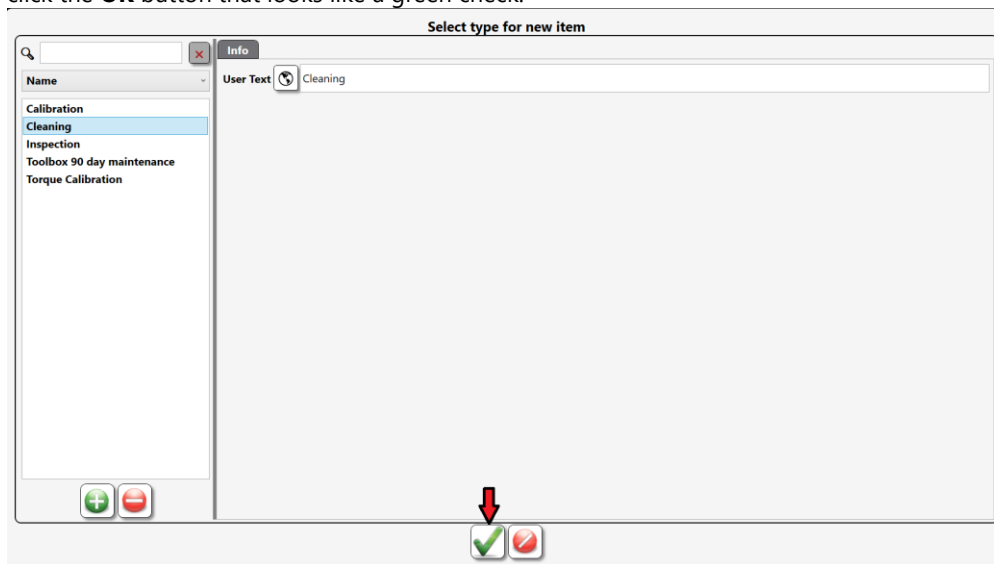
- If you need a multi-language display, you can click the **Edit Multiple Languages** button that looks like a globe and then check the **Enable Multiple Language Display** checkbox.



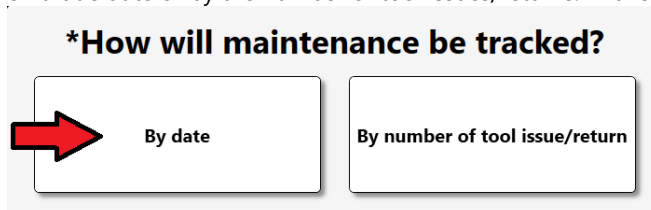
7. Then enter your translations for the supported languages and click the **OK** button.



8. The new maintenance type is now shown in the list of maintenance types. Make sure it is selected and then click the **OK** button that looks like a green check.



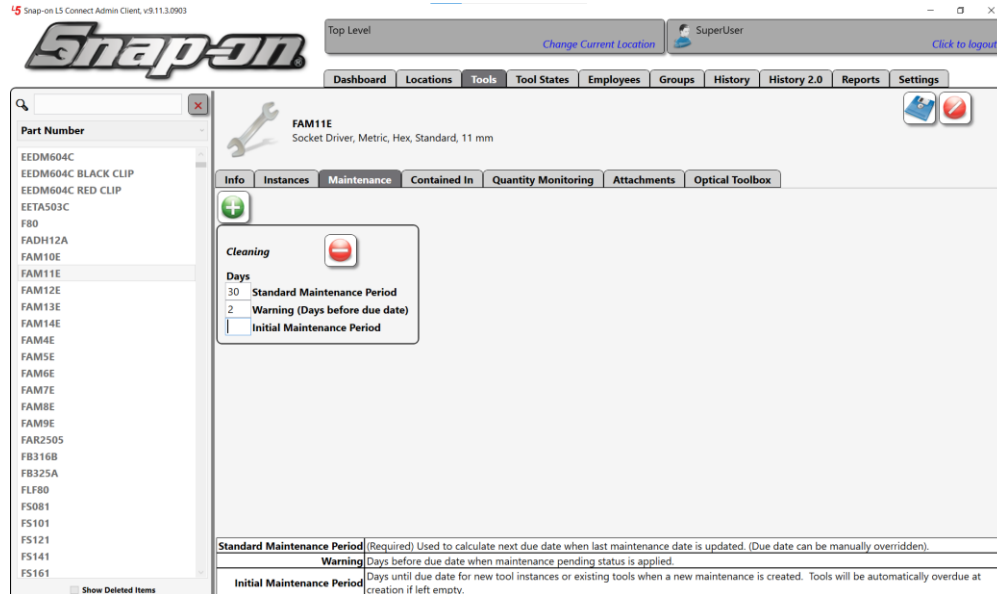
9. You will now be prompted to select how the maintenance will be tracked. Maintenance types can be based on a due date or by the number of tool issues/returns. In this case we will select the **By date** button.



10. You can see that the cleaning maintenance type has been created and is in the process of being assigned to the selected tool type but more information is still needed.
- **Standard Maintenance Period** - (Required) Used to calculate next due date when last maintenance date is updated
 - **Warning (Days before due date)** - Days before due date when **Maintenance Pending** status is applied to tool

- **Initial Maintenance Period** - Days until due date for new tool instances or existing tools when a new maintenance is created. Tools will be automatically overdue at creation if left empty.

Enter these fields and click the blue **Save** button.

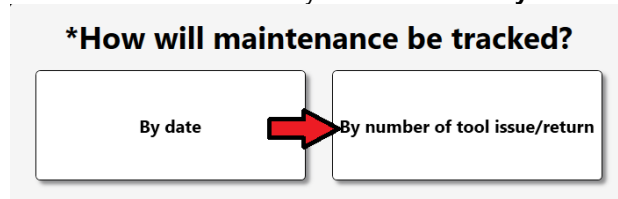


The screenshot shows the Snap-on L5 Connect Admin Client interface. The top navigation bar includes 'Top Level', 'Change Current Location', 'SuperUser', and 'Click to logout'. Below this is a menu bar with 'Dashboard', 'Locations', 'Tools', 'Tool States', 'Employees', 'Groups', 'History', 'History 2.0', 'Reports', and 'Settings'. The main content area displays the configuration for tool 'FAM11E' (Socket Driver, Metric, Hex, Standard, 11 mm). The 'Maintenance' tab is selected, showing a 'Cleaning' maintenance type. The 'Days' field is set to 30, with 'Standard Maintenance Period' selected. The 'Warning' field is set to 2, with 'Warning (Days before due date)' selected. The 'Initial Maintenance Period' field is empty. A table at the bottom explains the fields: 'Standard Maintenance Period' (Required) is used to calculate the next due date; 'Warning' is the number of days before the due date when the maintenance pending status is applied; and 'Initial Maintenance Period' is the number of days until the due date for new tool instances or existing tools when a new maintenance is created.

You have now created a new custom maintenance type and assigned it to a master tool type with maintenance period data specific to that master tool. Every instance of the master tool edited will now have a cleaning maintenance assigned to it.

Custom Tool Issued/Return Based Maintenance Types

- Follow the **Custom Date Based Maintenance Types** section up until you are prompted to choose how the maintenance will be tracked but instead of naming the maintenance **Cleaning** name it **Tool Issue Maintenance**. For this case you will select the **By number of tool issue/return** button.



The screenshot shows a dialog box titled '*How will maintenance be tracked?'. It contains two buttons: 'By date' and 'By number of tool issue/return'. A red arrow points from the 'By date' button to the 'By number of tool issue/return' button, indicating the selection.

- At this point the new maintenance has been created and is in the process of being assigned to the master tool but the data for maintenance still needs to be filled in.
 - Overdue Issues** - (required) The number of times the tool can be issued before it is overdue for maintenance
 - Warning Issues Before Overdue** - The number of tool issues left before a warning will be status will be set alerting that the tool is almost due for maintenance



L5 Connect User Manual

Enter these fields and click the blue **Save** button.

5 Snap-on L5 Connect Admin Client, v9.15.8.0924

Snap-on Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations **Tools** Tool States Employees Groups History Reports Settings

Part Number

- F80
- FADH12A
- FADH8A
- FAM10E
- FAM11E
- FAM12E
- FAM13E
- FAM14E
- FAM4E
- FAM5E
- FAM6E
- FAM7E
- FAM8E
- FAM9E
- FAR250S
- FB316B
- FB325A
- FB-335
- FLF80
- FRHM10
- FRHM11
- FRHM12
- FRHM13
- FRHM14
- FRHM15

FAM12E
Socket Driver, Metric, Hex, Standard, 12 mm

Info Instances **Maintenance** Contained In Quantity Monitoring Attachments Certifications Optical Toolbox

Tool Issue Maintenance

20 Overdue Issues
3 Warning Issues Before Overdue

Standard Maintenance Period	(Required) Used to calculate next due date when last maintenance date is updated. (Due date can be manually overridden).
Warning	Days before due date when maintenance pending status is applied.
Initial Maintenance Period	Days until due date for new tool instances or existing tools when a new maintenance is created. Tools will be automatically overdue at creation if left empty.
Overdue Issues	Tool is out of maintenance after being issued and returned a given number of times. Counter is incremented at tool return.
Warning Issues Before Overdue	Number of issue/return cycles prior to being overdue when a maintenance pending status is applied.

Show Deleted Items

You have now created a new custom tool issued based maintenance type and assigned it to tool instances of the associated master tool.




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Tool Maintenance Statuses

The system automatically sets and clears the **Maintenance Overdue** status based on the maintenance due date of each individual tool with that maintenance type. It will also apply a **Maintenance Pending** status as a warning that a tool is almost due for maintenance based on the **Warning** value configured in the maintenance type. This **Maintenance Pending** status will be automatically cleared when the tool becomes overdue or has the maintenance date updated.

Because the **Initial Maintenance Period** was left blank in the example above, each instance will now have a **Maintenance Overdue** status assigned to it. A switch to the **Instances** sub-tab will show that.


5 Snap-on L5 Connect Admin Client, v9.11.3.0903



Top Level [Change Current Location](#) SuperUser [Click to logout](#)

DashboardLocationsToolsTool StatesEmployeesGroupsHistoryHistory 2.0ReportsSettings

Part Number
EEDM604C
EEDM604C BLACK CLIP
EEDM604C RED CLIP
EETA503C
F80
FADH12A
FAM10E
FAM11E
FAM12E
FAM13E
FAM14E
FAM4E
FAM5E
FAM6E
FAM7E
FAM8E
FAM9E
FAR250S
FB316B
FB325A
FLF80
FS081
FS101
FS121

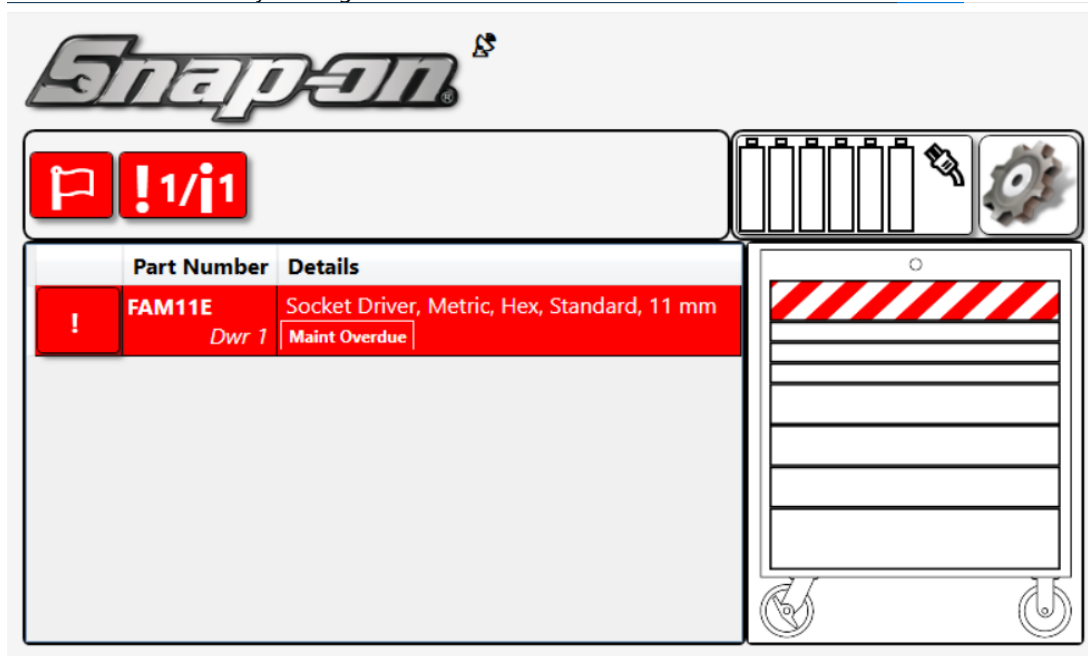
FAM11E
Socket Driver, Metric, Hex, Standard, 11 mm

InfoInstancesMaintenanceContained InQuantity MonitoringAttachmentsOptical Toolbox

☐ Show Deleted Items

Home Location	Additional Info	User Label 2	Serial Number	Customer ID	Qty	Issued	Work Location	Kit
Tool Crib East					1			
Z91B/001					1			

This is also confirmed by looking at the device as well.



The system does not know when these tools were last cleaned and can't calculate the next maintenance date. It sets the status so that this information can be provided now that required maintenance has been defined for these tools. If the user had made sure all instances of this tool type had been freshly cleaned, they could have set the **Initial Maintenance Period** to 30 days, and they would not have a status assigned to them.

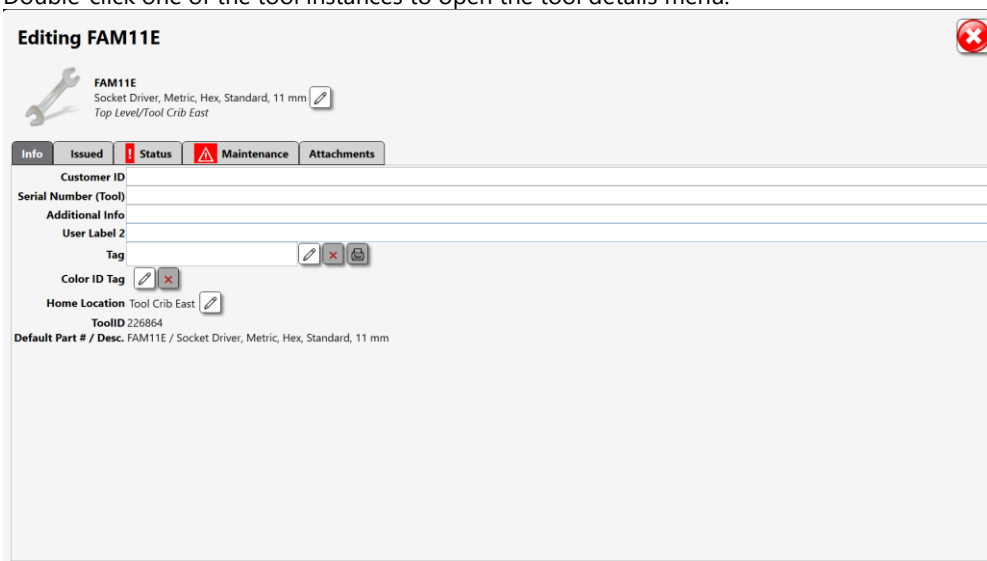
Follow the Updating Tool Instance Maintenance Information process for each instance of the tool type to finish setting up this maintenance type. Clearly, if you have a lot of this tool type you might want to consider providing the **Initial Maintenance Period** value when assigning the maintenance type to the master tool based on the situation.

Updating Tool Instance Maintenance Information

The Tool Instance Maintenance Information can be edited from either the user interface of the tool's home device or the Administration Client. **NOTE: We will show an example of updating a date-based maintenance on the Admin application and a number of tools issued maintenance on a device. However, each type of maintenance could be updated in either place.**

Updating Tool Instance Maintenance Information with the Admin Client

1. Double-click one of the tool instances to open the tool details menu.



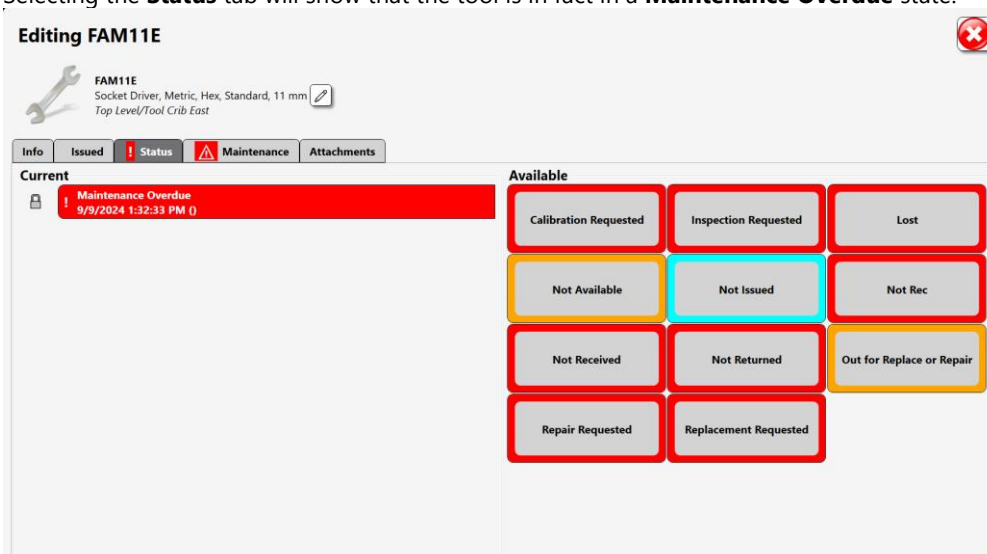
Editing FAM11E

FAM11E
Socket Driver, Metric, Hex, Standard, 11 mm
Top Level/Tool Crib East

Info Issued **Status** Maintenance Attachments

Customer ID
Serial Number (Tool)
Additional Info
User Label 2
Tag
Color ID Tag
Home Location Tool Crib East
ToolID 226864
Default Part # / Desc. FAM11E / Socket Driver, Metric, Hex, Standard, 11 mm

2. Selecting the **Status** tab will show that the tool is in fact in a **Maintenance Overdue** state.



Editing FAM11E

FAM11E
Socket Driver, Metric, Hex, Standard, 11 mm
Top Level/Tool Crib East

Info Issued **Status** Maintenance Attachments

Current
Maintenance Overdue
9/9/2024 1:32:33 PM ()

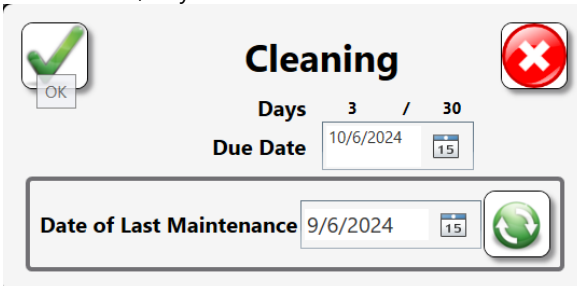
Available

Calibration Requested	Inspection Requested	Lost
Not Available	Not Issued	Not Rec
Not Received	Not Returned	Out for Replace or Repair
Repair Requested	Replacement Requested	

- Now switch to the **Maintenance** tab. You can see that the system doesn't know when the due date should be. To set the date, double-click the **Cleaning** maintenance.

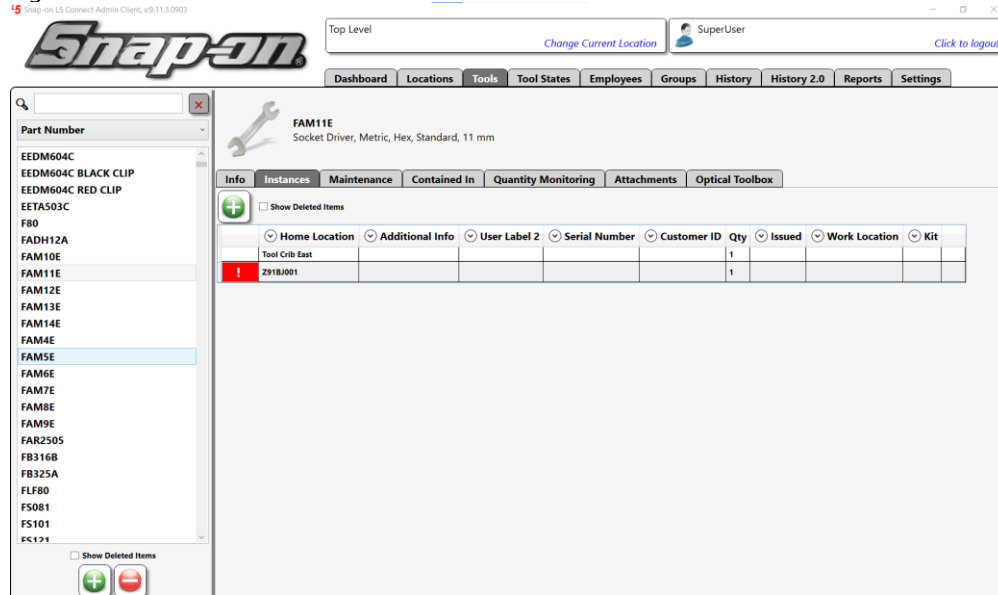


- You need to set the date of the last maintenance, and the system will take it from there. You can do this one by clicking the green **Update Maintenance** button to set the date of last maintenance to today. Alternatively, you can click the **Date Picker** button, which looks like a calendar and select the date of last maintenance, or you can click the date box and enter it manually.



- Once the date of last maintenance has been set you can see that the **Due Date** has been calculated based on the information you provided for the **Cleaning** maintenance type. Now click the **OK** button that looks like

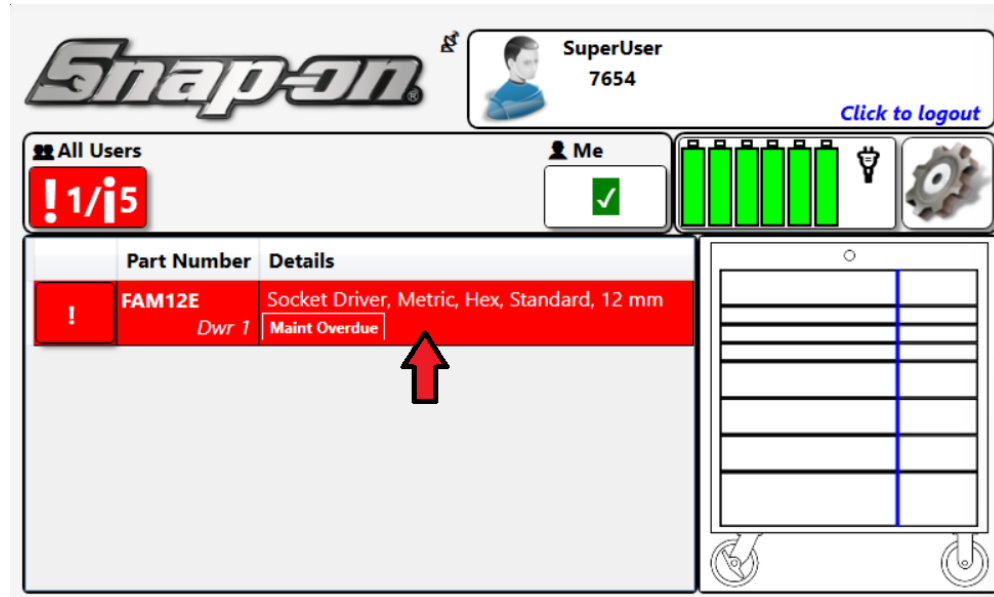
a green checkmark and then the blue **Save** button.



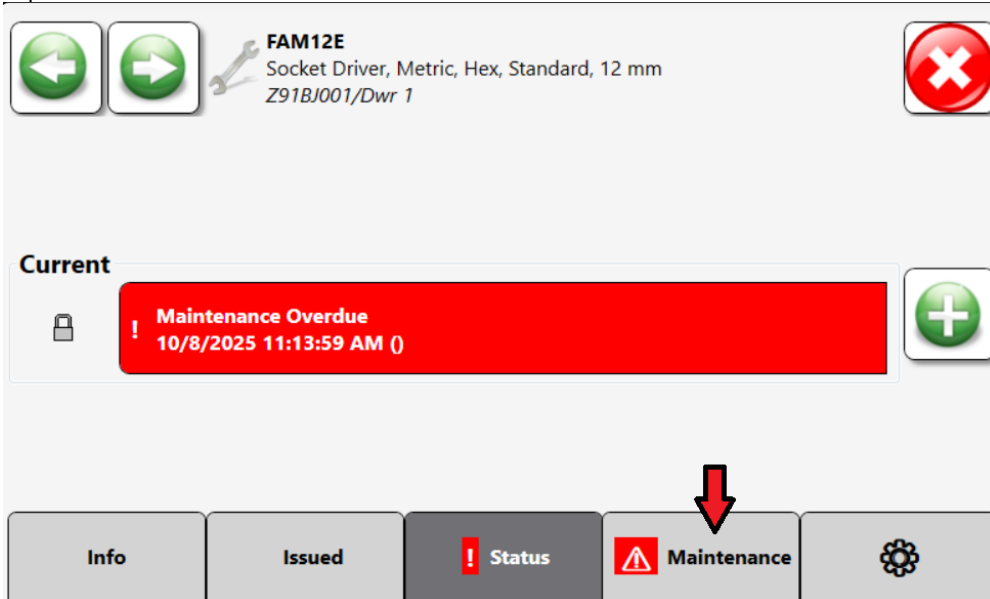
6. The first instance of this tool type no longer has the **Maintenance Overdue** status now. You will need to repeat this for each instance of the tool type to finish setting up this maintenance type.

Updating Tool Instance Maintenance Information with a Device

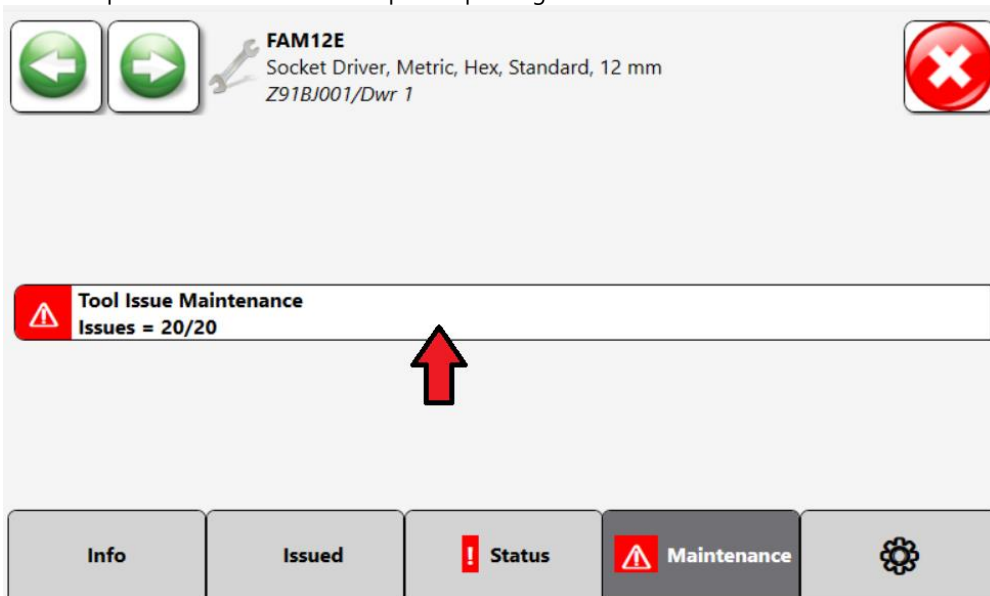
1. Log into the device with a tool instance requiring maintenance information updating. Then double tap the tool with the maintenance overdue status.



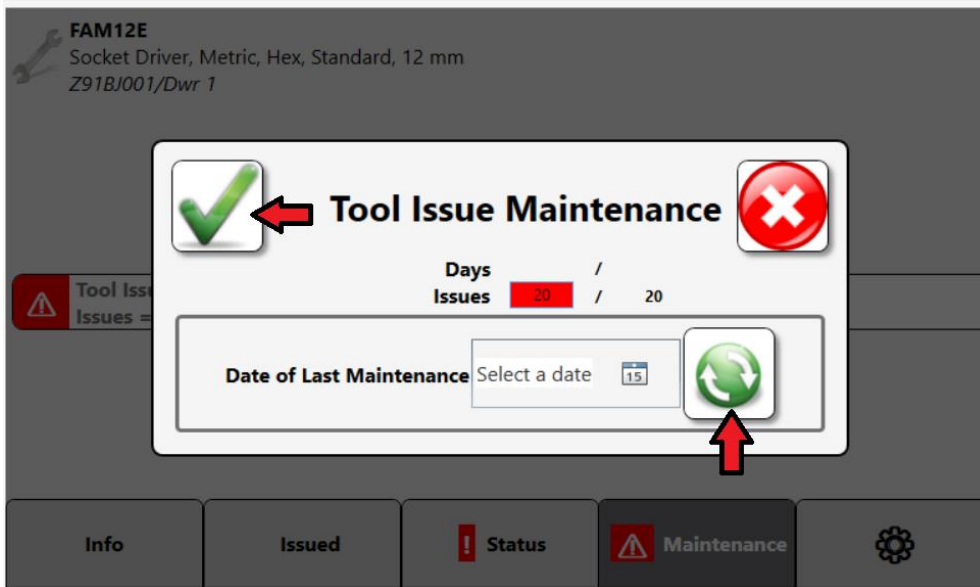
2. Tap the **Maintenance** button.



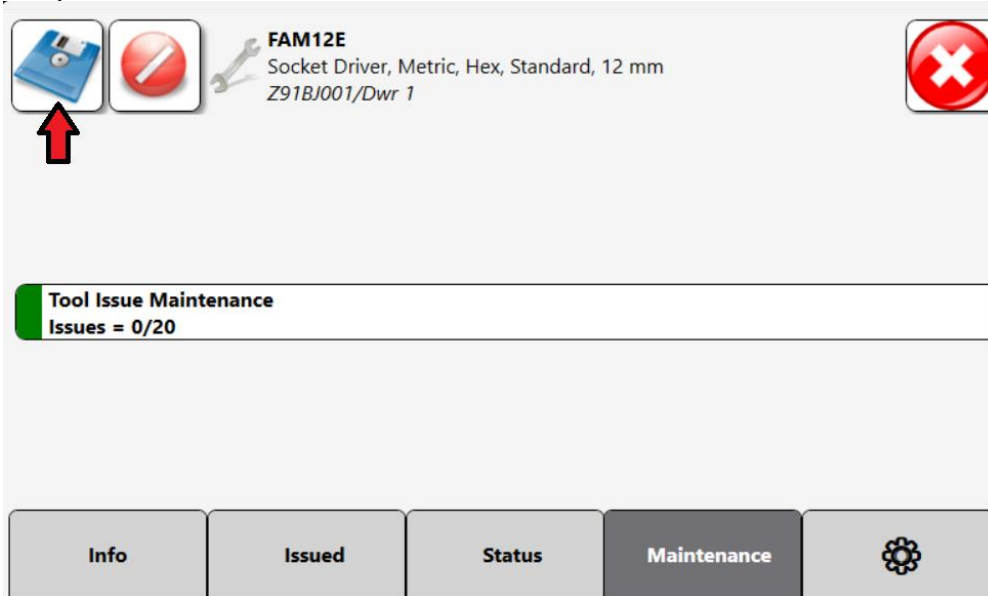
3. Double tap the maintenance that requires updating.



4. Tap the **Update Maintenance** button. Then tap the **OK** button.



5. Finally, click the **Save** button that looks like a blue disk.





L5 Connect User Manual

Importing Tool Maintenances

In some cases, it might be useful to be able to import maintenance information for tools. One example would be if you are moving tools with previous maintenance information into an L5 Connect tool crib and you don't want to manually input that maintenance data for each of those tool instances. Another possibility is if you sent a group of tools off to have maintenance performed and you don't want to have to update the maintenance data for each tool individually.

Importer Assumptions

The L5 connect system now supports importing maintenance type information for tools. This import feature assumes that the tools already exist in the system, and they have already been setup with a maintenance type.

NOTE: The maintenance importer will import any maintenance type, but it only supports importing one maintenance type at a time. If you have multiple maintenance types, you must import their data separately.

Import File

Your input file for the importer will need to be an Excel spreadsheet. It must have the **Tool ID** as a column to map the data to a specific tool instance in the system. Additionally, you must have at least one of the **Last Maintenance** or **Due Date** fields with calibration data to be updated. If you don't already have a source for your spreadsheet, you can easily create one by running a **Maintenance** report. If you need a customer-based reference for the tools such as the **Customer ID** field, you can add that to the report as well. For more information on how to run reports see the L5 Connect Reports document. Here is an example of a maintenance which has been exported into an Excel spreadsheet and had the **Last Maintenance** and **Due Date** fields updated in preparation for importing.

Maintenance							
Filtered By: Location = Top Level, Maintenance Type = Calibration, Due Date End Date = 6/28/2025							
Run Time: 5/29/2025 2:29 PM : Central Standard Time							
Requested By: SuperUser							
Storage Location Name	Part Number	Description	Tool Customer ID	Tool ID	Maintenance Type	Last Maintenance	Due Date
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive	148750	100004	Calibration	5/28/2025 0:00	5/29/2026 0:00
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive	457223	102917	Calibration	5/28/2025 0:00	5/29/2026 0:00
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive	934211	102960	Calibration	5/28/2025 0:00	5/29/2026 0:00
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive	134829	102972	Calibration	5/28/2025 0:00	5/29/2026 0:00
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive	742314	103069	Calibration	5/28/2025 0:00	5/29/2026 0:00
Z918I001	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8")	213648	225427	Calibration	5/28/2025 0:00	5/29/2026 0:00
Z918I001	OEX208	Wrench, Combination, Standard Length, 5/8", 12-Point	146378	225223	Calibration	5/28/2025 0:00	5/29/2026 0:00



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Running the Importer

To import your file, you will need to start the Admin application and go to the **Settings** tab.

The screenshot displays the Snap-on L5 Connect Admin Client interface. The top navigation bar includes tabs for Dashboard, Locations, Tools, Tool States, Employees, Groups, History, Reports, and Settings. The Settings tab is selected, and the 'Alerts' sub-tab is active. The interface is divided into several sections:

- System Status:** A summary of system metrics including Devices Online (0), Devices Offline (12), Tools Issued (18), Users with Tools Issued (5), Devices with Tools Issued (3), Tools Issued with Alerts (0), Managed Tools Out (0), and Tools Managed (1640).
- Device Status:** A table showing the status of various devices, including Name, Alerts, Issued, Issued Users, and Mngd Out.
- Work Location Status:** A table showing the status of various work locations, including Name, Alerts, Issued, Issued Users, and Mngd Out.
- Top Employees with Issued Tools:** A list of employees with their issued tool counts.
- Top Work Locations with Issued Tools:** A list of work locations with their issued tool counts.
- Top Devices with Issued Tools:** A list of devices with their issued tool counts.
- Inventory with Serial Number:** A table listing inventory items with their serial numbers and descriptions.

Select the **System Configuration** list item on the lefthand side. Then click the **Maintenance Types** button.

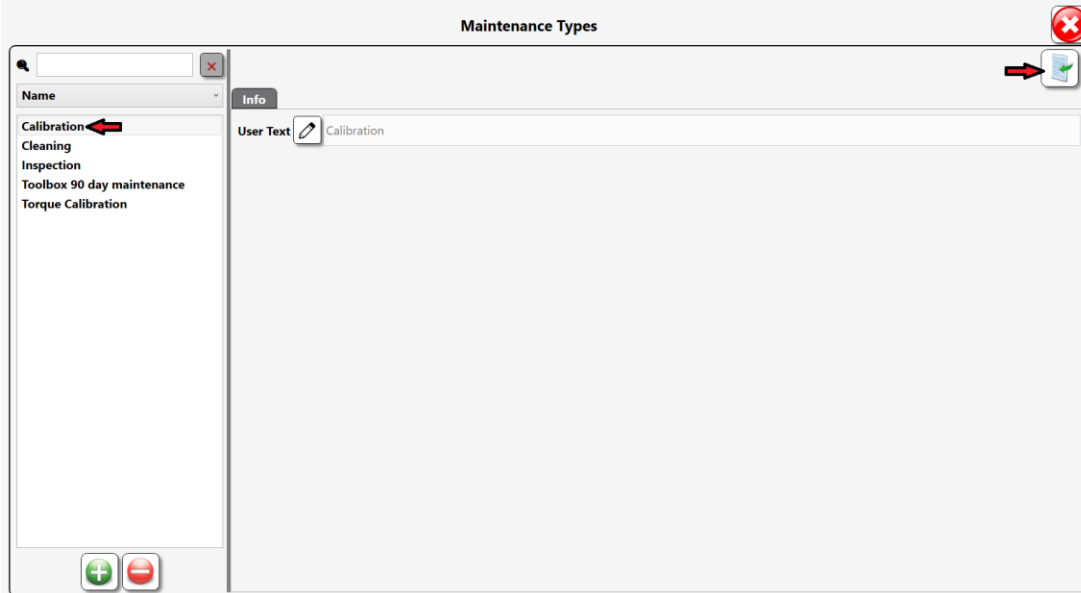
The screenshot displays the Snap-on L5 Connect Admin Client interface with the Settings tab selected. The left-hand navigation pane shows the following items:

- About
- Network Setup
- System Configuration (highlighted with a red arrow)
- Diagnostics
- Local Settings

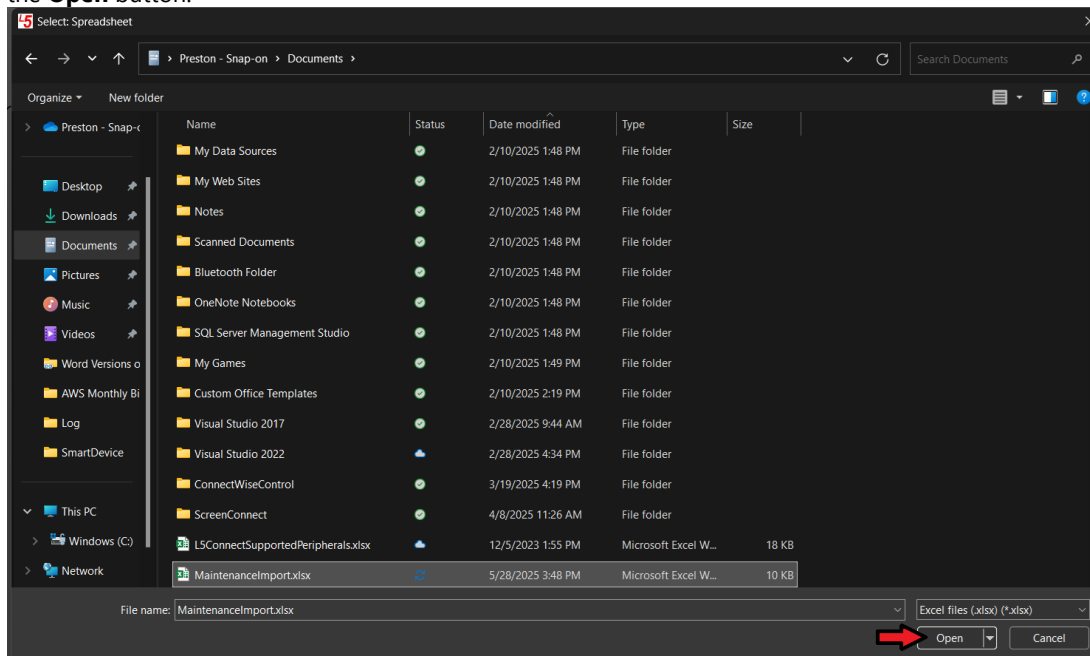
The main content area shows a list of configuration options:

- Status Types
- Work Location Templates
- Verifications
- Maintenance Types (highlighted with a red arrow)
- Units
- Audit Types
- Work Order White List
- Certifications

Select the **Calibration** maintenance type from the list of maintenance types on the left. Then click the **Import** button.



In the file dialog window, navigate to the directory where your spreadsheet is located and select your file. Then click the **Open** button.





Now you need to map the columns of the spreadsheet that the importer cares about. **Tool ID** should be mapped to **ToolID** in the pulldown menu. Then map **Last Maintenance** to **Date of Last Maintenance** and map **Due Date** to **Due Date**. Once everything is mapped, click the **OK** button to import the data.


NOTE: The devices containing the tools need to be online. Otherwise, the system will import what it can and give you a list of the ones that were offline.






L5 Connect User Manual



Select Header Row (Double-Click)
Identify Column (Drop-Down Menu)



Storage Location Name	Part Number	Description	Tool Customer ID	Tool ID	Maintenance Type	Last Maintenance	Due Date
				ToolID		Date of Last Maintenance	Due Date
Maintenance							
Filtered By: Location = Top Level, Maintenance Type = Calibration							
Run Time: 5/29/2025 2:29 PM : Central Standard Time							
Requested By: SuperUser							
Storage Location Name	Part Number	Description	Tool Customer ID	Tool ID	Maintenance Type	Last Maintenance	Due Date
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratch	148750	100004	Calibration	5/28/2025 12:00:00 AM	5/29/2026 12:00:00
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratch	457223	102917	Calibration	5/28/2025 12:00:00 AM	5/29/2026 12:00:00
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratch	934211	102960	Calibration	5/28/2025 12:00:00 AM	5/29/2026 12:00:00
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratch	194829	102972	Calibration	5/28/2025 12:00:00 AM	5/29/2026 12:00:00
Tool Crib East	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratch	142314	103069	Calibration	5/28/2025 12:00:00 AM	5/29/2026 12:00:00
291B/001	AW1015CHK	Set, Wrench, L-Shape, Hex (15 pcs. In BH415 Me	213948	225427	Calibration	5/28/2025 12:00:00 AM	5/29/2026 12:00:00
291B/001	OEC20B	Wrench, Combination, Standard Length, 5/8", 12	146378	225223	Calibration	5/28/2025 12:00:00 AM	5/29/2026 12:00:00

You will then be prompted to confirm that you want to import the listed number of tools. Click the **Confirm** button to continue.

Update Maintenance: 7 Tools Contained In 2 Devices?




Confirm

Cancel

Then click the **OK** button to complete the process.

Complete: Success



OK



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Assigned Tools

The L5 Connect system allows you to assign a specific tool instance to a specific employee so that other employees cannot issue that tool. For example, if you had a number of personal laptops stored in your FlexHub, you could assign those laptops to the specific employees who should be allowed to issue them. The only exceptions to this constraint are that employees who have the tool courier permission will be able to access these tools for administrative purposes such as when a tool becomes broken and needs to be replaced. For more information about setting up permissions see Profiles and Permissions.

Supported Devices

Here is a list of the L5 Connect devices that currently support assigned tools.

- FlexHub

Admin Configuration

Start the Admin application and select the **Locations** tab. Then select the FlexHub device for which you would like to assign tools to employees. Then select the **Inventory** sub-tab to show the tools in the device.

Snap-on L5 Connect Admin Client, v3.16.1.1110

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard **Locations** Tools Tool States Employees Groups History Reports Settings

Z97BB001
Locker Hub

Info Profiles (Employee) Profiles (Group) Options **Inventory** Status Subscriptions Audit Types Quantity Monitoring Attachments Favorites

Custom Reports ☐ Show Deleted Items

Drawer	Part Number	Description	Tool ID
1	WIND100	Shop Fan	229279
2	WIND100	Shop Fan	229280
3	WIND100	Shop Fan	229281
4	WIND100	Shop Fan	229282
5	WIND100	Shop Fan	229283
6	PT1800AL	1" Heavy Duty Impact Wrench	229284
7	PT1800AL	1" Heavy Duty Impact Wrench	229285
8	PT1800AL	1" Heavy Duty Impact Wrench	229286
9	CTECH4R500A	600 Ft. lb. torque wrench	229287
10	CTECH4R500A	600 Ft. lb. torque wrench	229288
11	CTECH4R500A	600 Ft. lb. torque wrench	229289
12	434HDC	1/2" DR SET w/CASE & FOAM	229242
12	L122	3/4DR 16IN LCK BTN EXT	229255
12	L32	3/4DR 3IN LCK BTN EXT	229256
12	L52B	T-BAR HEAD	229257
12	L62	3/4DR 8IN LCK BTN EXT	229258
12	L672B	3/4DR 44T RAT ADAPTOR	229259
12	L8112A	3/4DR 15/16IN ID BRK BAR HEAD	229260
12	L82A	3/4DR UNIVERSAL JOINT 3-7/BIN	229261
12	L872	3/4DR 32T RAT HEAD	229262
12	L872H	3/4DR 19 3/16IN DR LCK HANDLE	229263
12	LDH242	3/4DR 12PT 3/4" SHL SKT	229264
12	LDH262	3/4DR 12PT 13/16" SHL SKT	229265
12	LDH282	3/4DR 12PT 7/8" SHL SKT	229266
12	LDH302	3/4DR 12PT 15/16" SHL SKT	229267
12	LDH312	3/4DR 12PT 31/32" SHL SKT	229268
12	LDH322	3/4DR 12PT 1" SHL SKT	229269
12	LDH342	3/4DR 12PT 1 1/16" SHL SKT	229270



L5 Connect User Manual

Double-click on the tool which you would like to assign to an employee. Then click the **Change** button next to the **Assigned Employee** field, that looks like a pencil.

Editing WIND100

WIND100
Shop Fan
Top Level/Z9788001/Door 1

Info | **Issued** | **Status** | **Attachments**

Customer ID

Serial Number (Tool)

Additional Info

User Label 2

Tag

Color ID Tag

Home Location Z9788001/Door 1

Assigned Employee

ToolID 22479

Default Part # / Desc. WIND100 / Shop Fan

Select the employee to whom you would like to assign the tool and then click the **OK** button.

Select new value: Assigned Employee

Assembly Area A Line 0, Anne

Plane Maintenance Hangar, Harry

Plane Maintenance Hangar, Preston

Smith, John J.

SuperUser

SuperViewer



L5 Connect User Manual

You can now see that the tool has been changed to be assigned to the selected employee. Click the **Save** button that looks like a blue disk to save this change.

Editing WIND100

WIND100
Shop Fan
Top Level/Z9788001/Door 1

Info | Issued | Status | Attachments

Customer ID

Serial Number (Tool)

Additional Info

User Label 2

Tag

Color ID Tag

Home Location Z9788001/Door 1

Assigned Employee Plane Maintenance Hangar, Harry

ToolID 229279

Default Part # / Desc. WIND100 / Shop Fan

















L5 Connect User Manual




Device Behavior

Normal Issue



When a user logs into the device and tries to issue a tool, any instances of that tool type that are assigned to other employees will not even appear as options for issue in the normal tool issue screen. For instance, here is the inventory of a sample FlexHub showing the shop fans stored in the device. Notice that the tools currently assigned to an employee have a small person icon on them.

Inventory		
Part Number	Details	
 PT1800AL Door 6	1" Heavy Duty Impact Wrench	
 PT1800AL Door 7	1" Heavy Duty Impact Wrench	⚙
 PT1800AL Door 8	1" Heavy Duty Impact Wrench	
 TTL-300-DTGK Door 21	Guage - Aircraft Tire, Digital	
 WIND100 Door 3	Shop Fan	👤
 WIND100 Door 1	Shop Fan	👤 ▲
 WIND100 Door 4	Shop Fan	
 WIND100 Door 5	Shop Fan	
 WIND100 Door 2	Shop Fan	👤 ▼
 WMH140170 Door 14	Pallet Jacks - 20x36	
 WMH140170 Door 13	Pallet Jacks - 20x36	
 WMH140172 Door 15	Pallet Jacks - 20x48	
 WMH140172 Door 16	Pallet Jacks - 20x48	
 WMH140174 Door 17	Pallet Jacks - 27x42	⚙



You can see that there are five shop fans in the device. However, three of them are currently assigned to employees in the system. The fan in door 1 is assigned to Harry.



WIND100
Shop Fan
Z97BB001/Door 1

Customer ID
Serial Number
Additional Info
User Label 2
Tag
Color ID Tag  

Home Location Z97BB001/Door 1

Assigned Employee Plane Maintenance Hangar, Harry  

ToolID 229279
Default Part # / Desc. WIND100 / Shop Fan




L5 Connect User Manual

The fan in door 2 is assigned to Alice.

←

→



WIND100
Shop Fan
Z97BB001/Door 2



Customer ID

Serial Number



Additional Info

User Label 2

Tag

Color ID Tag  

Home Location Z97BB001/Door 2

Assigned Employee Plane Maintenance Hangar, Alice  


ToolID 229280

Default Part # / Desc. WIND100 / Shop Fan

The fan in door 3 is assigned to Gerald.

←

→



WIND100
Shop Fan
Z97BB001/Door 3



Customer ID

Serial Number



Additional Info

User Label 2

Tag

Color ID Tag  

Home Location Z97BB001/Door 3

Assigned Employee Plane Maintenance Hangar, Gerald  


ToolID 229281

Default Part # / Desc. WIND100 / Shop Fan




L5 Connect User Manual

So when Gina logs into the device and tries to issue a tool she will only see the two unassigned fans in door 4 and 5.


**Select Work Flow**

Plane Maintenance Hangar, Gina


 [Click to logout](#)


Employee

Return














 **Issue**

Audit

 **Scan tag/code to auto-launch workflow**

Select tools for issue.

Available

Part Number	Details	
 WIND100 Door 4	Shop Fan	
 WIND100 Door 5	Shop Fan	
PT1800AL Door 6	1" Heavy Duty Impact Wrench	
PT1800AL Door 7	1" Heavy Duty Impact Wrench	
PT1800AL Door 8	1" Heavy Duty Impact Wrench	
CTECH4R600A Door 9	600 ft. lb. torque wrench	
CTECH4R600A Door 10	600 ft. lb. torque wrench	
CTECH4R600A Door 11	600 ft. lb. torque wrench	
434HDC Door 12	1/4" DR SET w/CASE & FOAM	
WMH140170 Door 13	Pallet Jacks - 20x36	
WMH140170 Door 14	Pallet Jacks - 20x36	

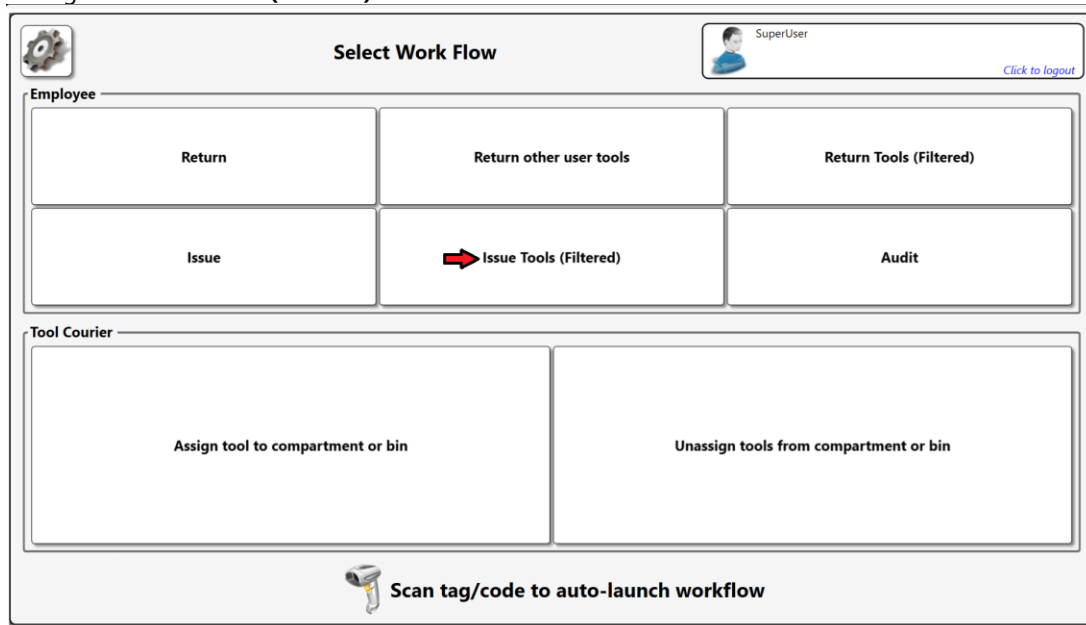
Issuing

Part Number	Details
-------------	---------

Issue


Administrative Issue

If a user with the tool courier permission in their profile logs into the system, they will have the ability to issue tools through the **Issue Tools (Filtered)** screen.



Select Work Flow

Employee

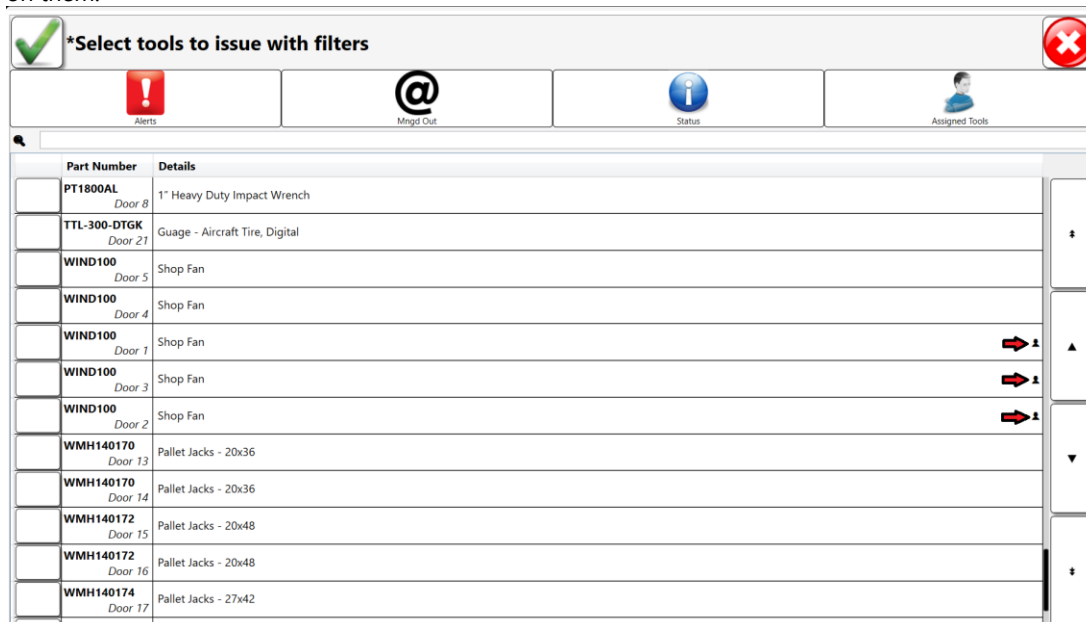
Return	Return other user tools	Return Tools (Filtered)
Issue	 Issue Tools (Filtered)	Audit

Tool Courier




Assign tool to compartment or bin	Unassign tools from compartment or bin
-----------------------------------	--

Scan tag/code to auto-launch workflow



Now they can see all the shop fans. Notice that the tools currently assigned to an employee have a small person icon on them.





***Select tools to issue with filters**


Part Number	Details
PT1800AL Door 8	1" Heavy Duty Impact Wrench
TTL-300-DTGG Door 21	Guage - Aircraft Tire, Digital
WIND100 Door 5	Shop Fan
WIND100 Door 4	Shop Fan
WIND100 Door 1	Shop Fan 
WIND100 Door 3	Shop Fan 
WIND100 Door 2	Shop Fan 
WMH140170 Door 13	Pallet Jacks - 20x36
WMH140170 Door 14	Pallet Jacks - 20x36
WMH140172 Door 15	Pallet Jacks - 20x48
WMH140172 Door 16	Pallet Jacks - 20x48
WMH140174 Door 17	Pallet Jacks - 27x42


To issue one of these shop fans the user can click the **Assigned Tools** filter button.


***Select tools to issue with filters**


 Alerts

 Mygd Out

 Status

 Assigned Tools

Part Number	Details
PT1800AL Door 8	1" Heavy Duty Impact Wrench
TTL-300-DTGK Door 21	Guage - Aircraft Tire, Digital
WIND100 Door 5	Shop Fan
WIND100 Door 4	Shop Fan
WIND100 Door 1	Shop Fan
WIND100 Door 3	Shop Fan
WIND100 Door 2	Shop Fan
WMH140170 Door 13	Pallet Jacks - 20x36
WMH140170 Door 14	Pallet Jacks - 20x36
WMH140172 Door 15	Pallet Jacks - 20x48
WMH140172 Door 16	Pallet Jacks - 20x48
WMH140174 Door 17	Pallet Jacks - 27x42

Then click the **Select: Employee** button to get a list of the employees who have tools assigned to them.

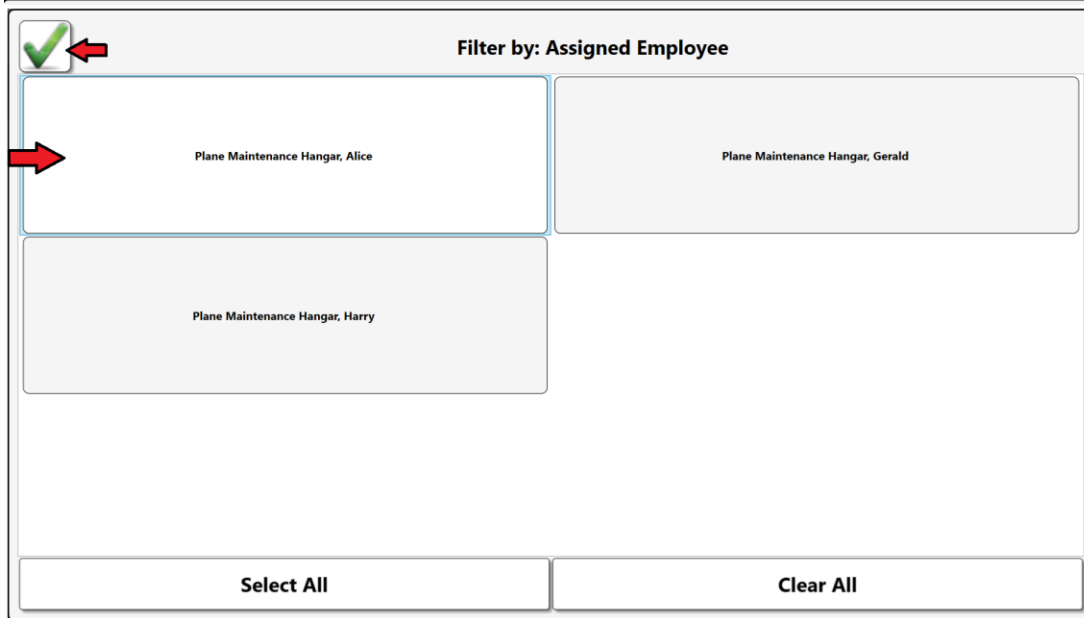
Please select an option.

Assigned Tools

Unassigned Tools

Select: Employee

Then select the employee or employees whose assigned tools you would like to issue to yourself. Then click the **OK** button, which looks like a green checkmark.



Filter by: Assigned Employee

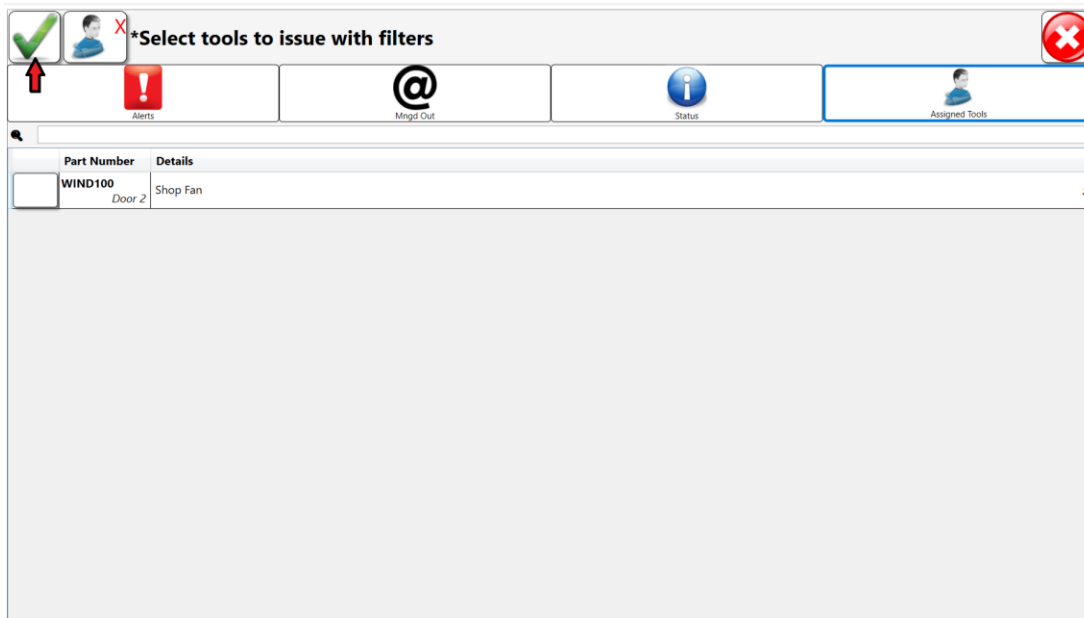
Plane Maintenance Hangar, Alice

Plane Maintenance Hangar, Gerald

Plane Maintenance Hangar, Harry

Select All Clear All

Then click the **OK** button to issue the tool.



Select tools to issue with filters

Alerts Myd Out Status Assigned Tools

Part Number	Details
WIND100 Door 2	Shop Fan

You will then be warned that the tool is assigned to a different user. You can then either remove that tool and continue, cancel, or click the **Issue** button to continue the issue of the tool to yourself.

***1 selected tools are assigned to a different user:
WIND100, Shop Fan)**

Issue

*Remove 1 assigned tools and continue

Cancel

You may then be required to select a work location to be used for the tool issue.

Plane Maintenance Hangar

Select Work Location

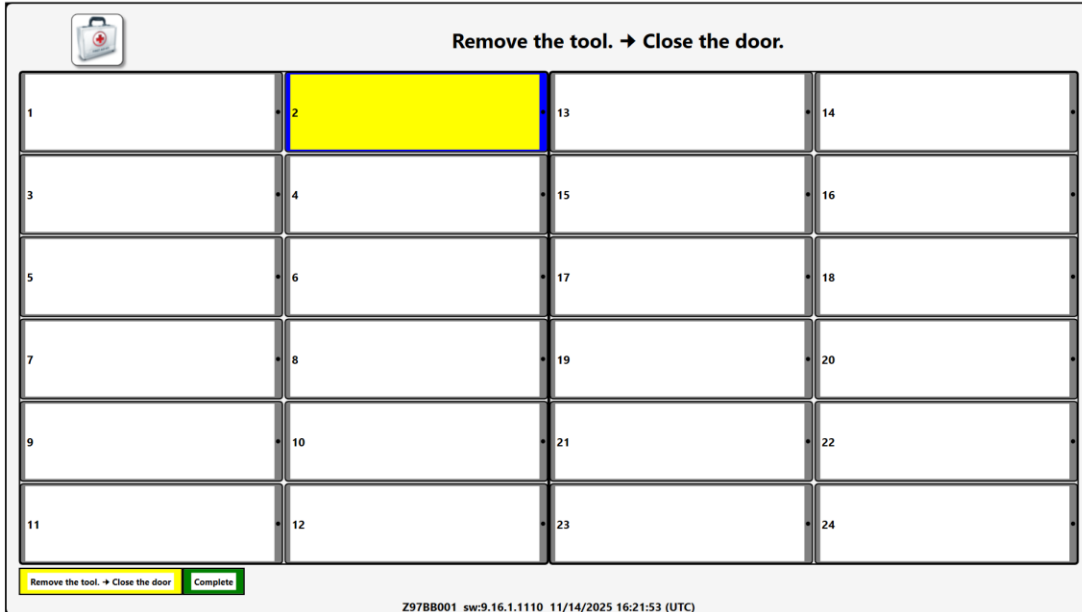
Plane Maintenance Hangar Bay 0 (1)	Plane Maintenance Hangar Bay 1 (0)	Plane Maintenance Hangar Bay 2 (0)	Plane Maintenance Hangar Bay 3 (0)
--	--	--	--

Plane Maintenance Hangar Bay 0

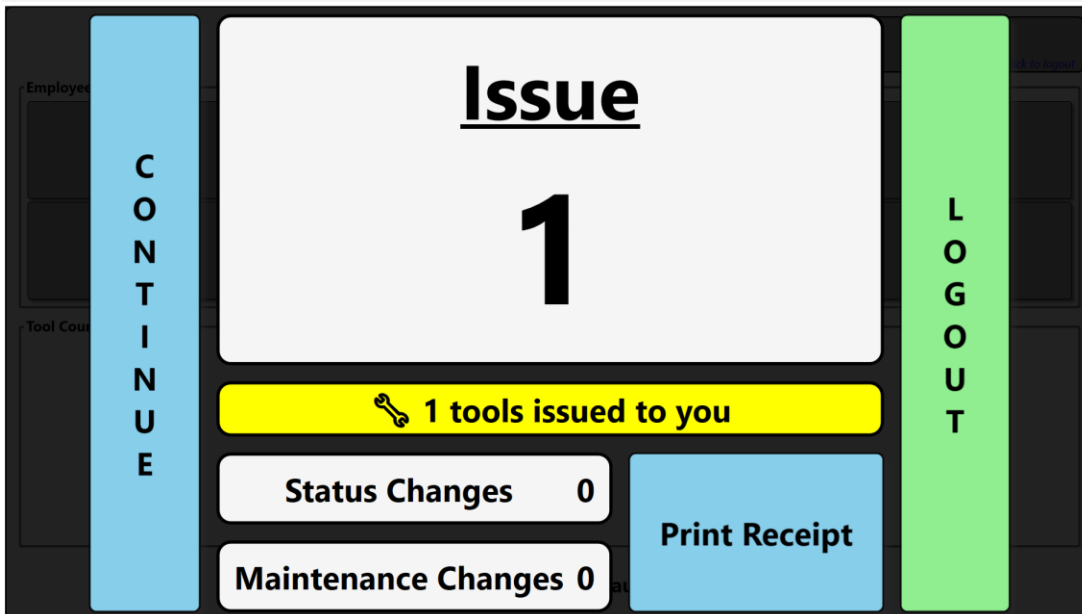
Select Work Location

Work Location 2
✓

Now you will be prompted to remove the tool from the compartment and close the drawer to complete the issue of the tool.



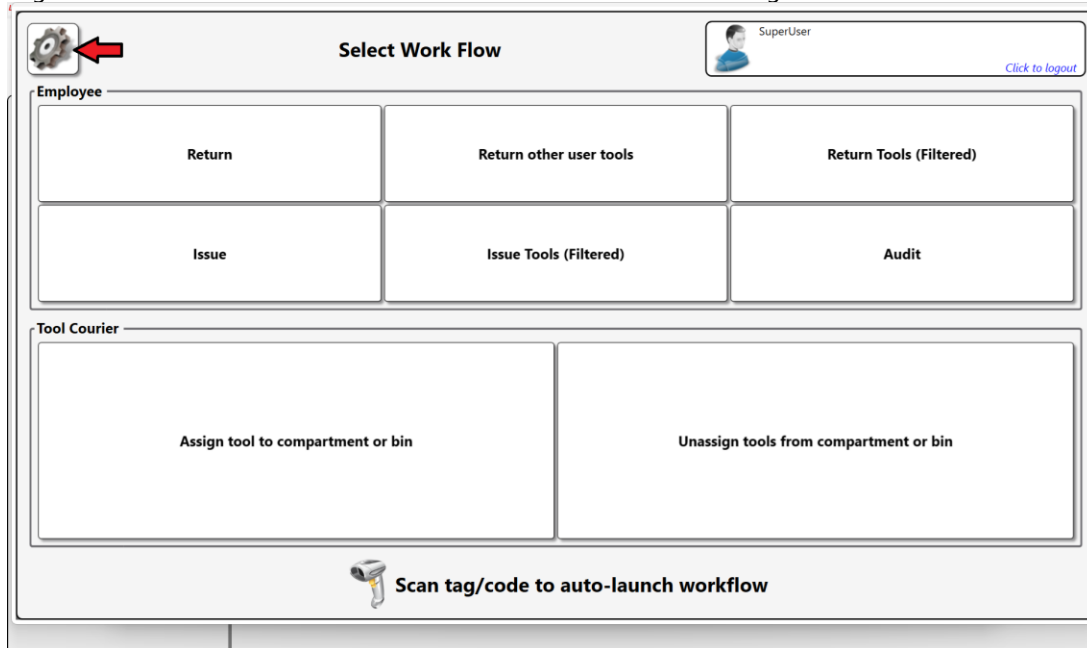
After closing the door, the tool issue will be completed and you will see the summary screen.



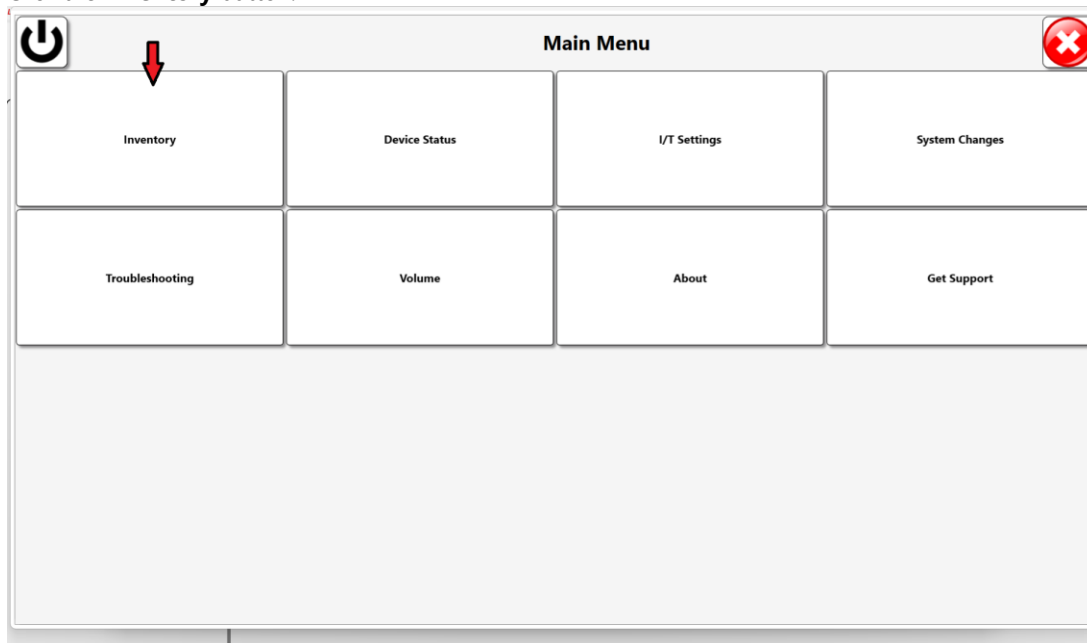
Updating Assigned Employee at the Device

You can also modify assigned employee from the device with the tool info edit permission.

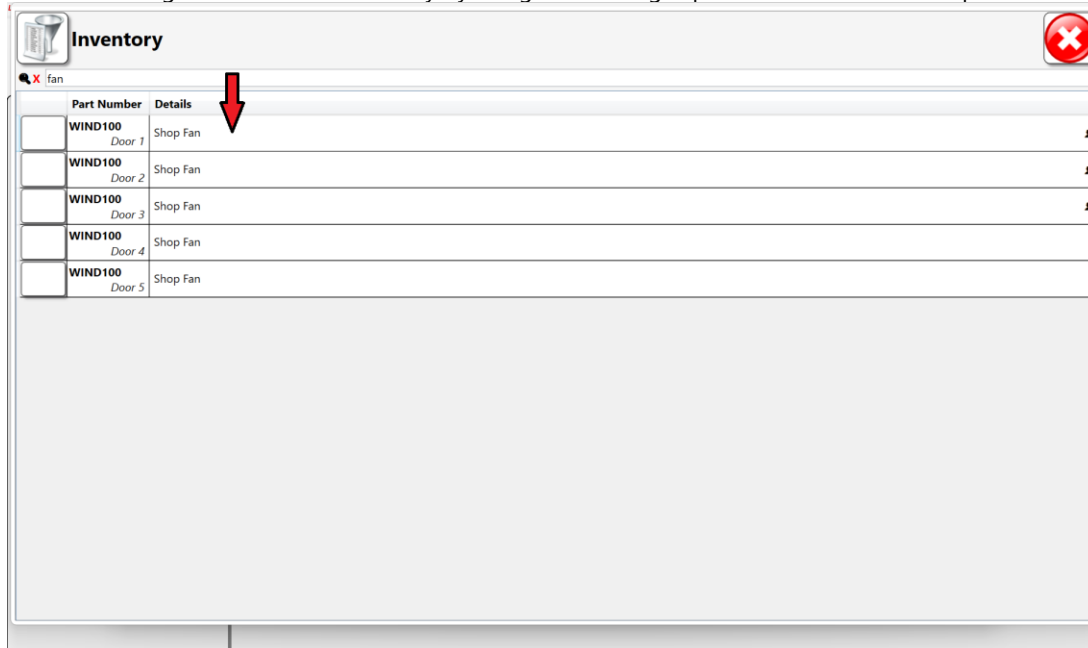
Log into the device and click the **Main Menu** button, which looks like a gear.



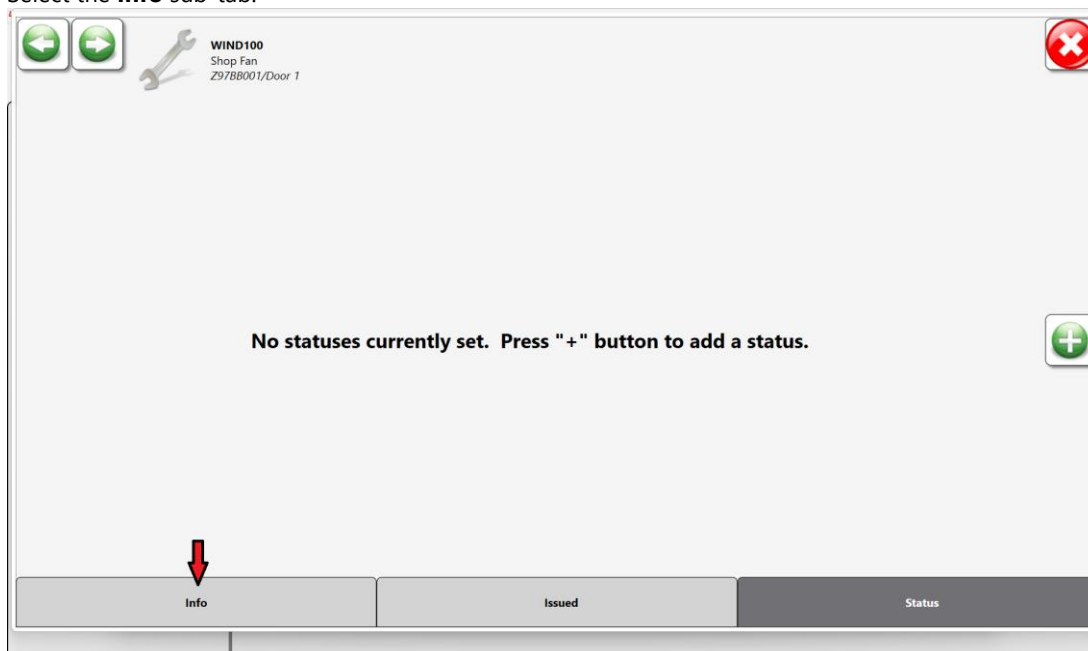
Click the **Inventory** button.



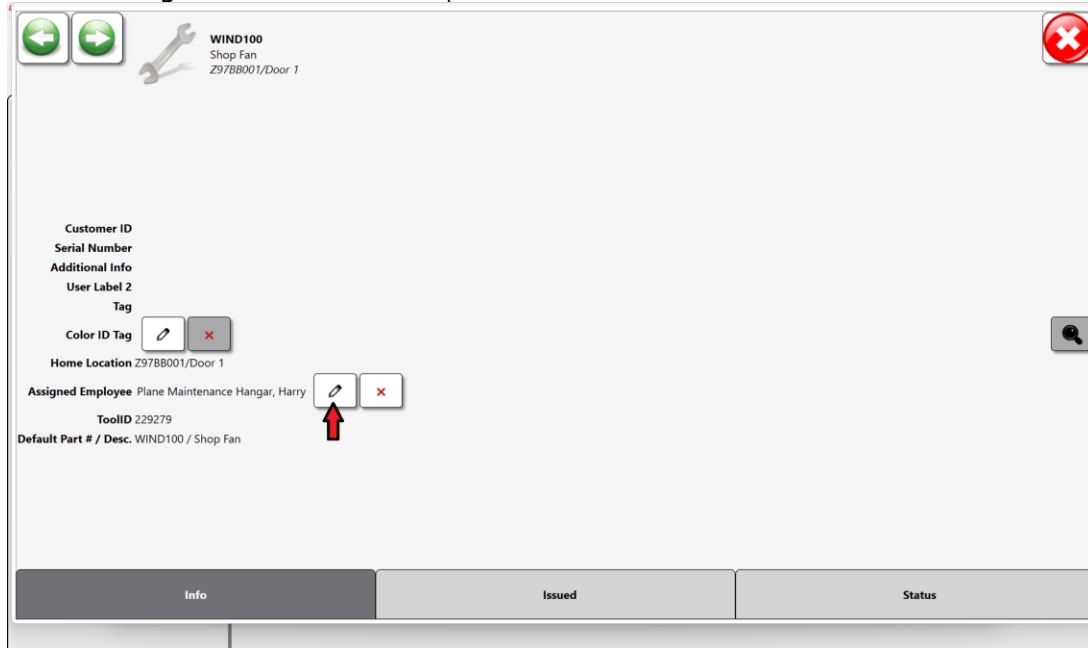
Locate the assigned tool in the inventory by using the filtering capabilities. Then double-tap the desired tool.



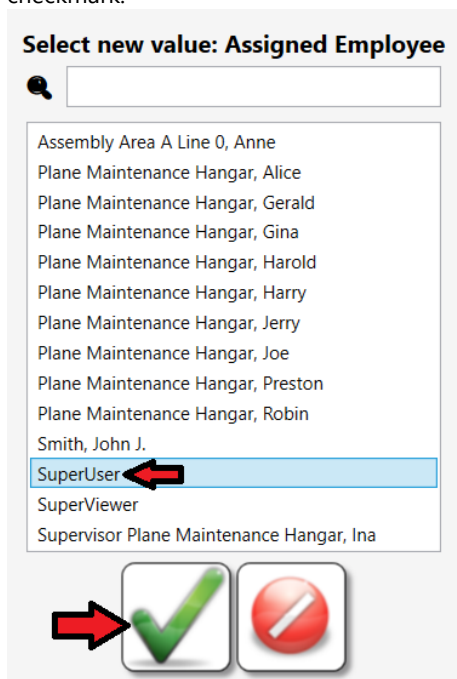
Select the **Info** sub-tab.



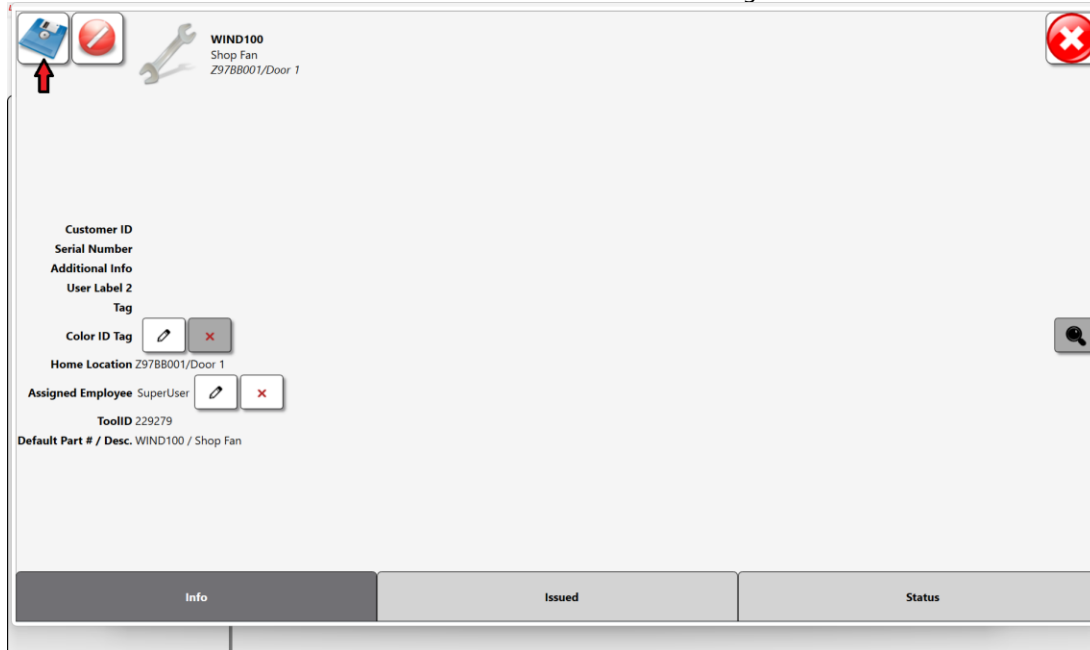
Click the **Change** button that looks like a pencil.



Select the employee to whom you wish the tool to be assigned and then click the **OK** button that looks like a green checkmark.



Then click the **Save** button that looks like a blue disk to save the change.

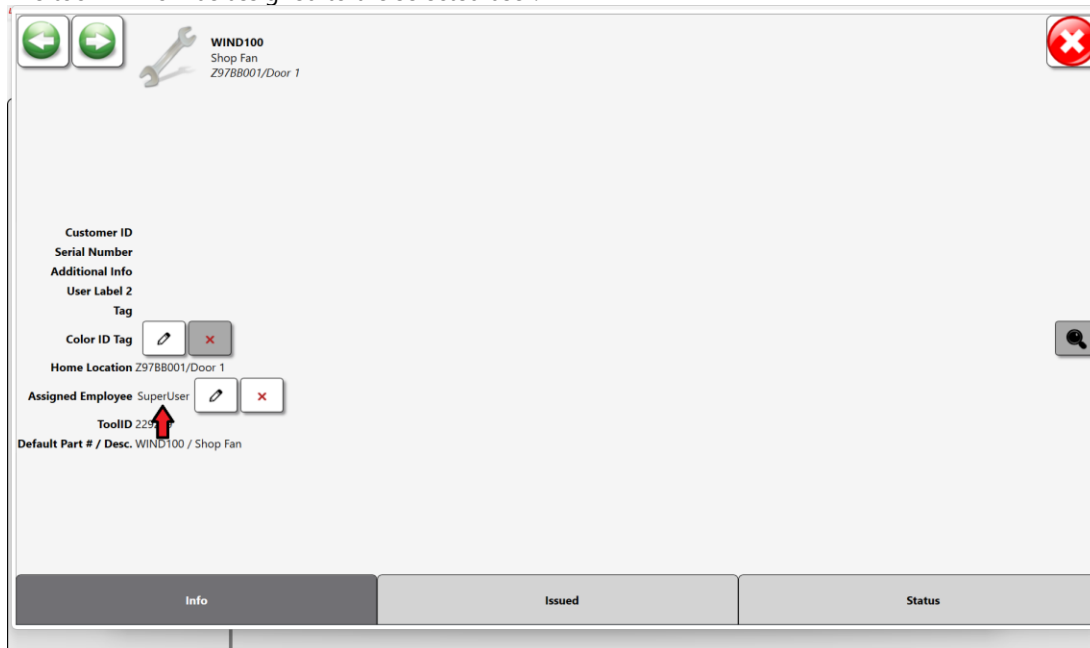


WIND100
Shop Fan
Z978B001/Door 1

Customer ID
Serial Number
Additional Info
User Label 2
Tag
Color ID Tag
Home Location Z978B001/Door 1
Assigned Employee SuperUser
ToolID 229279
Default Part # / Desc. WIND100 / Shop Fan

Info Issued Status

The tool will now be assigned to the selected user.



WIND100
Shop Fan
Z978B001/Door 1

Customer ID
Serial Number
Additional Info
User Label 2
Tag
Color ID Tag
Home Location Z978B001/Door 1
Assigned Employee SuperUser
ToolID 229279
Default Part # / Desc. WIND100 / Shop Fan

Info Issued Status



L5 Connect User Manual

Kit Inspection Process

This document will explain the process of how kit inspections work. In the L5 Connect system, whenever a kit is returned to a device, the user is prompted to inspect the kit to ensure that all the tools are present and in good condition.

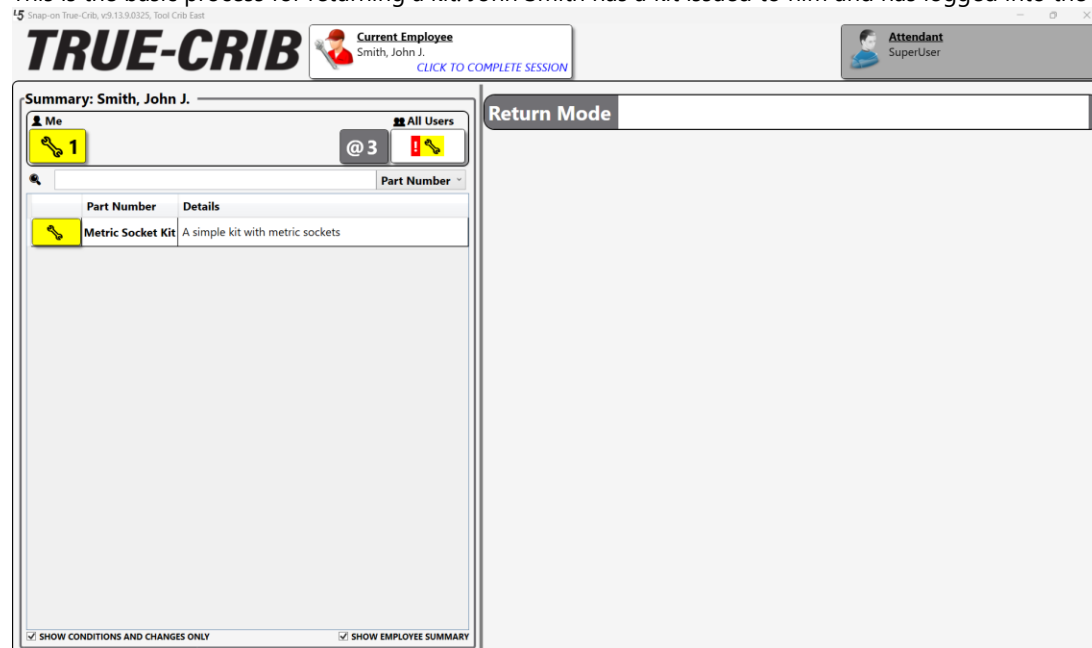
Devices That Support Kit Inspection

Not all devices in the L5 Connect system support kit inspection. Here is a list of the devices that currently do support kit inspection.

- True-Crib
- ATC FlexHub
- ATC Portal

Basic Kit Inspection

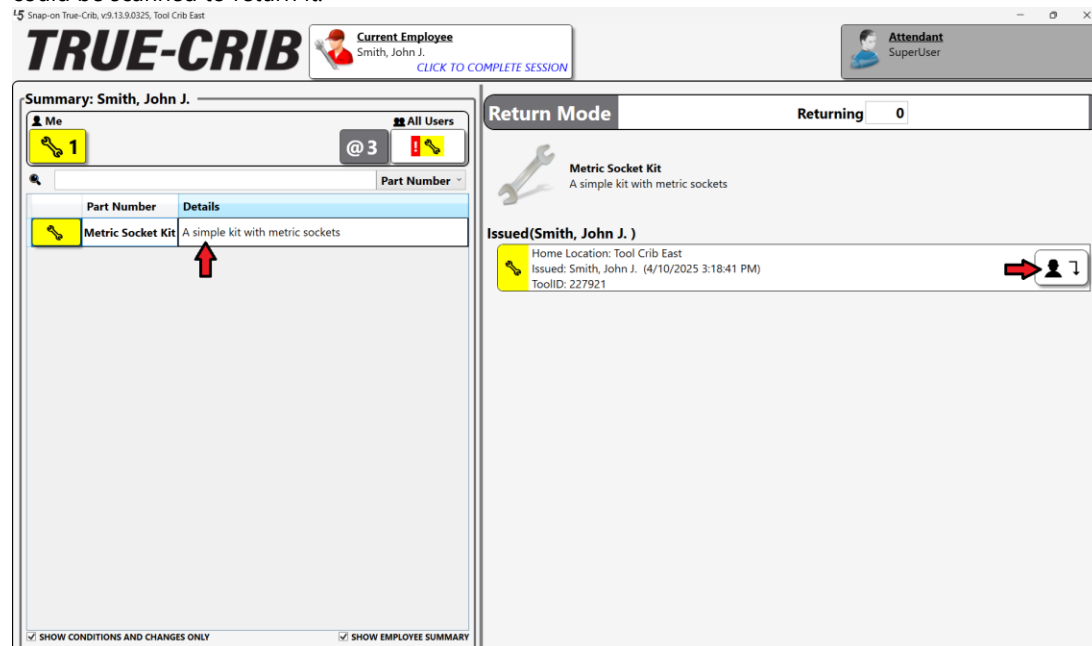
This is the basic process for returning a kit. John Smith has a kit issued to him and has logged into the crib to return it.



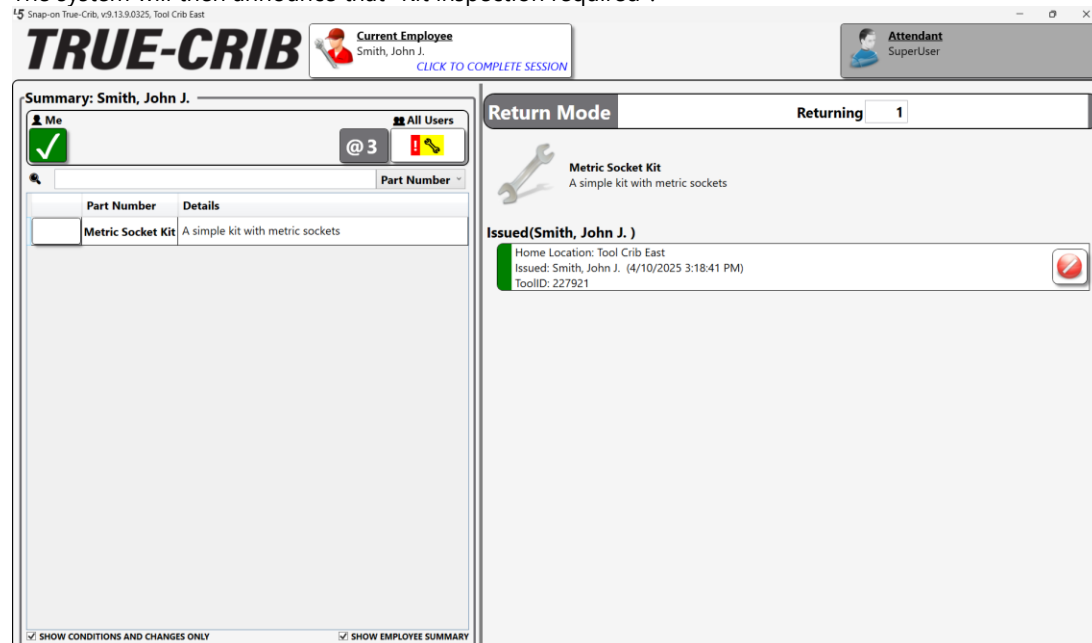


L5 Connect User Manual

The kit is selected, and the attendant clicks the **Return** button to return the kit. Alternatively, the bar code of the kit could be scanned to return it.




The system will then announce that "Kit inspection required".






L5 Connect User Manual








When John Smith initiates an end to his employee session, the attendant is prompted to inspect the kit.





Please inspect the contents of the kit:




Part Number: Metric Socket Kit, Description: A simple kit with metric sockets, ToolID: 227921

Part Number/Description: FSM101/Socket, Metric, Shallow, 10 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227922	
Part Number/Description: FSM111/Socket, Metric, Shallow, 11 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227923	
Part Number/Description: FSM121/Socket, Metric, Shallow, 12 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227924	
Part Number/Description: FSM131/Socket, Metric, Shallow, 13 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227925	
Part Number/Description: FSM141/Socket, Metric, Shallow, 14 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227928	
Part Number/Description: FSM151/Socket, Metric, Shallow, 15 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227927	
Part Number/Description: FSM161/Socket, Metric, Shallow, 16 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1	








At this point, the attendant would then inspect the kit to ensure all the tools were present. Then he would click the green checkmark button to complete the inspection.



Please inspect the contents of the kit:



Part Number: Metric Socket Kit, Description: A simple kit with metric sockets, ToolID: 227921


Part Number/Description: FSM101/Socket, Metric, Shallow, 10 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227922	
Part Number/Description: FSM111/Socket, Metric, Shallow, 11 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227923	
Part Number/Description: FSM121/Socket, Metric, Shallow, 12 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227924	
Part Number/Description: FSM131/Socket, Metric, Shallow, 13 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227925	
Part Number/Description: FSM141/Socket, Metric, Shallow, 14 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227928	
Part Number/Description: FSM151/Socket, Metric, Shallow, 15 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1 ToolID: 227927	
Part Number/Description: FSM161/Socket, Metric, Shallow, 16 mm, 6-Point Home Location: Tool Crib East Quantity Available: 1	




L5 Connect User Manual








When a Tool is Missing (Kit Incomplete)

What happens when you are inspecting the kit, and a tool is missing? For instance, suppose the first tool in drawer 1 of this kit is not there. The person inspecting the kit would click the **Issue** button for that tool. This will issue that tool to the employee who is checking in the kit. **NOTE: If the person returning the kit is not the person to whom the kit was issued, he will still be issued the missing tool.**




Please inspect the contents of the kit: Drawer 1
Part Number: Kit Master3, Description: Screwdriver kit, ToolID: 102844











<div>Part Number/Description: SHD10/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227914</div>	 
<div>Part Number/Description: SHD20/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227905</div>	
<div>Part Number/Description: SHD40/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227906</div>	
<div>Part Number/Description: SHD60/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .050"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227907</div>	
<div>Part Number/Description: SHD80/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .055"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227908</div>	
<div>Part Number/Description: SHDP22IRO/Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227909</div>	

Since they have not returned this tool with the kit, it will now be issued to them even though the rest of the kit will be returned.



Please inspect the contents of the kit: Drawer 1
Part Number: Kit Master3, Description: Screwdriver kit, ToolID: 102844

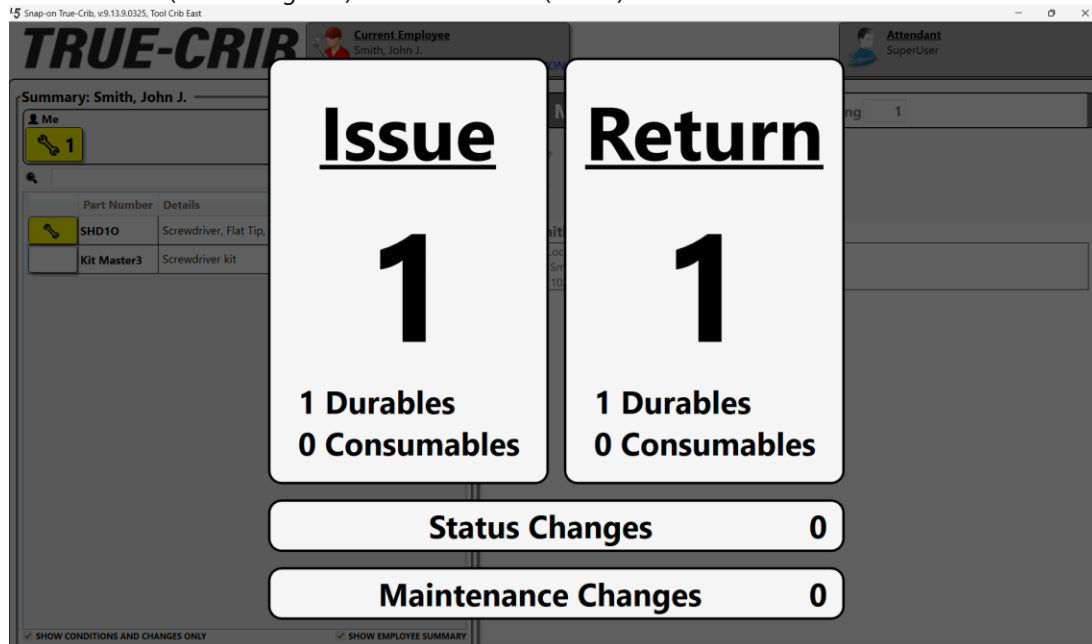


<div>Part Number/Description: SHD10/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 0</div> <div>Issued: Smith, John J. (4/10/2025 1:39:47 PM)</div> <div>ToolID: 227914</div>	
<div>Part Number/Description: SHD20/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227905</div>	
<div>Part Number/Description: SHD40/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227906</div>	
<div>Part Number/Description: SHD60/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .050"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227907</div>	
<div>Part Number/Description: SHD80/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .055"</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227908</div>	
<div>Part Number/Description: SHDP22IRO/Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227916</div>	
<div>Part Number/Description: SHDP31IRO/Screwdriver, Phillips ACR, Instinct™ Hard Handle, #1, Orange</div> <div>Home Location: Tool Crib East</div> <div>Quantity Available: 1</div> <div>ToolID: 227917</div>	

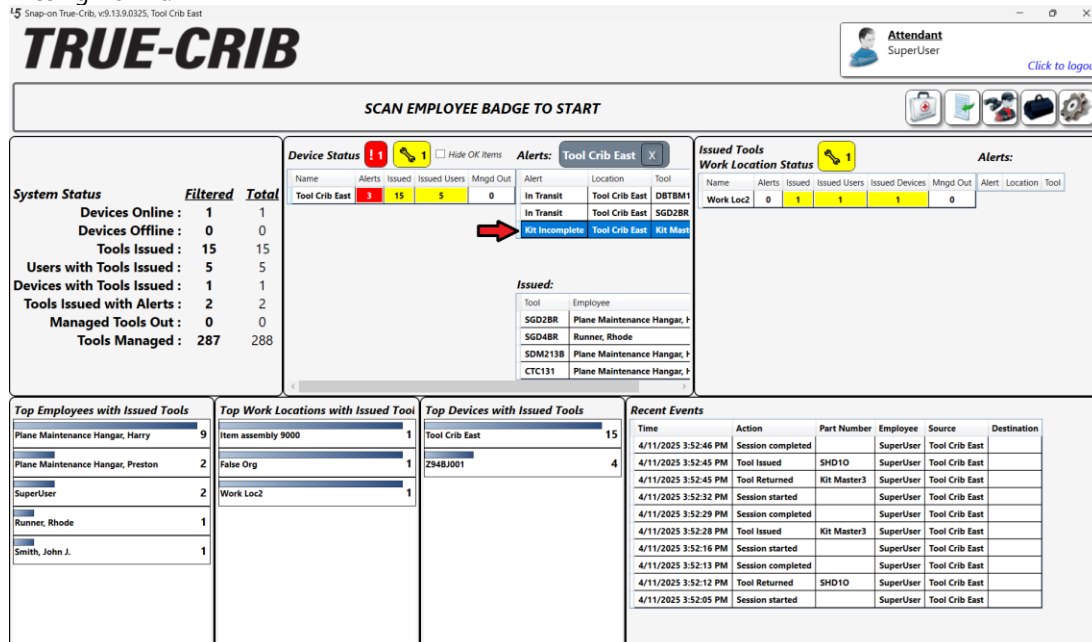


L5 Connect User Manual

As the inspection is completed, the employee session will end. As you can see from the session summary screen, there was one issued(the missing tool) and one returned(the kit).



Also, the dashboard of the crib now shows an alert status on the kit tool of **Kit Incomplete** because it has a tool missing from it.



Kit statuses will only be set if the kit has been configured to enable them. For more information on how to do this, see the Kit Tools section of the Adding Tools document.

It should also be noted that if during the inspection you notice a tool has some problem such as being broken, you can double click that tool to go to the tool details and set a status on the tool to show that it needs attention.

Editing SHD10



SHD10
Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"
Tool Crib East

Info Issued Status Attachments

Current

Available



Calibration Requested	Inspection Requested	Lost
Not Available	Not Issued	Not Rec
Not Received	Not Returned	Out for Replace or Repair
Repair Requested	Replacement Requested	



L5 Connect User Manual

Consumables and Returnable Consumables



Kits with consumables and returnable consumables behave a bit differently than other kits. When a kit with consumables is returned, the system will give a voice prompt just as before that kit inspection is required. As the inspection screen is displayed, however, there are some notable differences between the consumable and returnable consumable tools.

**Please inspect the contents of the kit:**

Part Number: ConsumableKit, Description: Kit with consumables and returnable consumables, ToolID: 227932

Part Number/Description: GA225/Face Shield Home Location: Tool Crib East Quantity Available: 10 ToolID: 227933	Prev Qty 10	Curr Qty 10	▼ ▲	Issued 0	Returned 0	▼ ▲
Part Number/Description: GLOVE7LB/LRG HD LATX TECH GLVS Home Location: Tool Crib East Quantity Available: 100 ToolID: 227934	Prev Qty 100 1 Pair	Curr Qty 100 1 Pair	▼ ▲			

First let's look at the consumable tool, the gloves. When the kit was issued there were 100 pairs available. Now that the kit is being returned, the inspector needs to decrement the number of pairs of gloves that are still in the kit. In this case, let's say it was 2 pairs of consumable gloves used while the kit was issued.

**Please inspect the contents of the kit:**

Part Number: ConsumableKit, Description: Kit with consumables and returnable consumables, ToolID: 227932



Part Number/Description: GA225/Face Shield Home Location: Tool Crib East Quantity Available: 10 ToolID: 227933	Prev Qty 10	Curr Qty 10	▼ ▲	Issued 0	Returned 0	▼ ▲
Part Number/Description: GLOVE7LB/LRG HD LATX TECH GLVS Home Location: Tool Crib East Quantity Available: 98 Issued: Smith, John J. (4/14/2025 3:03:54 PM) ToolID: 227934	Prev Qty 100 1 Pair	Curr Qty 98 1 Pair	▼ ▲			





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NOTE: If the number of pairs of gloves used was large enough, the system would set a Quantity Low status to alert users that the kit needed to be replenished.

Now let's look at the returnable consumable tools. These tools are considered consumable but must be returned before being disposed of. In this case, there are two sets of counters. The first set shows the original quantity, and the quantity left unused when the kit is returned. We will assume 1 was used and decrement that counter by 1. The second set of counters shows the quantity that was used and the quantity that is being returned.

**Please inspect the contents of the kit:**

Part Number: ConsumableKit, Description: Kit with consumables and returnable consumables, ToolID: 227932

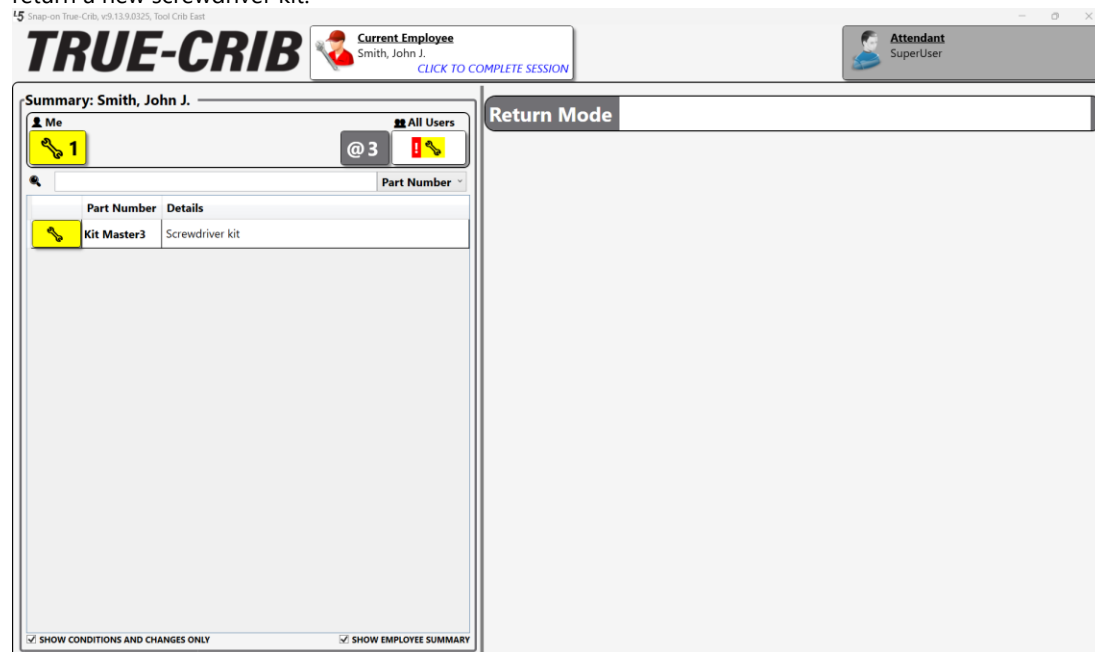
 Part Number/Description: GA225/Face Shield Home Location: Tool Crib East Quantity Available: 9 Issued: Smith, John J. (4/14/2025 3:06:36 PM) ToolID: 227933	Prev Qty	Curr Qty		Issued	Returned	
	10	9	▼▲	1	1	▼▲
 Part Number/Description: GLOVE7LB/LRG HD LATX TECH GLVS Home Location: Tool Crib East Quantity Available: 98 Issued: Smith, John J. (4/14/2025 3:03:54 PM) ToolID: 227934				Prev Qty	Curr Qty	
				100	98	▼▲
				1 Pair	1 Pair	

The session summary at the end of the inspection shows that two consumable tools were issued, the gloves and the face shield. It also shows that two tools were returned. These were the durable kit and the consumable face shield.

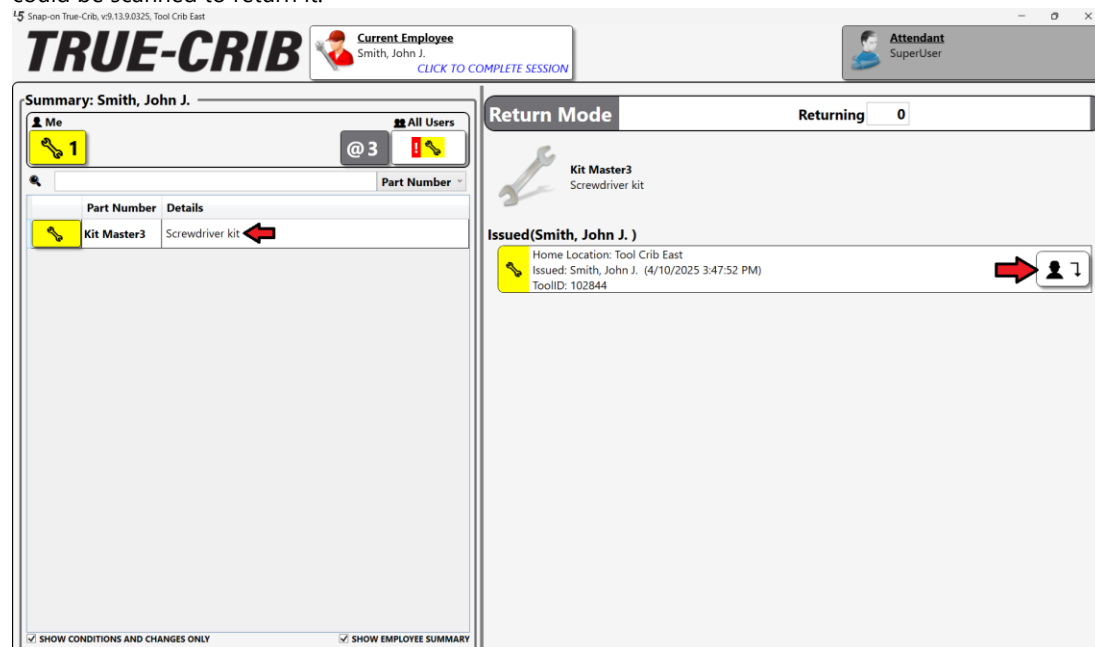
<u>Issue</u>	<u>Return</u>
2	2
0 Durables	1 Durables
2 Consumables	1 Consumables
Status Changes	0
Maintenance Changes	0

Sub-Locations

Some kits will have sub-locations in them such as drawers. These types of kits will have more options for kit inspection. This time we will look at an example of a kit with multiple sub-locations. John Smith starts a session to return a new screwdriver kit.



The kit is selected, and the attendant clicks the **Return** button to return the kit. Alternatively, the bar code of the kit could be scanned to return it.





L5 Connect User Manual

The system will then announce that "Kit inspection required".

5 Snap-on True-Crib, v9.13.9.0325, Tool Crib East

TRUE-CRIB

Current Employee
Smith, John J.
[CLICK TO COMPLETE SESSION](#)

Attendant
SuperUser

Summary: Smith, John J.

Me @ 3

Part Number Details

Part Number	Details
Kit Master3	Screwdriver kit

Return Mode Returning 1

Kit Master3
Screwdriver kit

Issued(Smith, John J.)

Home Location: Tool Crib East
Issued: Smith, John J. (4/10/2025 3:47:52 PM)
ToolID: 102844

☒ SHOW CONDITIONS AND CHANGES ONLY ☒ SHOW EMPLOYEE SUMMARY

When John Smith initiates an end to his employee session, the attendant is prompted to inspect the kit.

Please inspect the contents of the kit

Part Number: Kit Master3, Description: Screwdriver kit, ToolID: 102844

Inspect All Locations

Drawer 1	Inspect	Drawer 2	Inspect
----------	---------	----------	---------



Notice that there are multiple drawers in this kit. In the basic inspection mode, the attendant has several options on how he can verify the contents of the kit.




L5 Connect User Manual

Manual Inspection

The first option is manually inspecting everything and then just clicking the green checkmark to verify that the kit is complete.



Please inspect the contents of the kit


Part Number: Kit Master3, Description: Screwdriver kit, ToolID: 102844

Inspect All Locations

Drawer 1	Inspect	Drawer 2	Inspect
----------	---------	----------	---------


Manually Inspecting Each Location








The second option is to click the **Inspect** button on each of the locations to show him the expected contents of each location one at a time and verify each location in that way. Once he has verified all the listed tools are present, he would click the green checkmark button to verify that location.




Please inspect the contents of the kit: Drawer 1

Part Number: Kit Master3, Description: Screwdriver kit, ToolID: 102844




Part Number/Description: SHD10/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227914	
Part Number/Description: SHD20/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227905	
Part Number/Description: SHD40/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227906	
Part Number/Description: SHD60/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .050" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227907	
Part Number/Description: SHD80/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .055" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227908	
Part Number/Description: SHDP22IRO/Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange Home Location: Tool Crib East Quantity Available: 1 ToolID: 227916	
Part Number/Description: SHDP31IRO/Screwdriver, Phillips ACR, Instinct™ Hard Handle, #1, Orange Home Location: Tool Crib East Quantity Available: 1	

Once he has repeated this process for each of the locations in the kit, he would then click the green checkmark button on the main inspection screen to complete the verification of the kit.



Please inspect the contents of the kit

Part Number: Kit Master3, Description: Screwdriver kit, ToolID: 102844



Drawer 1

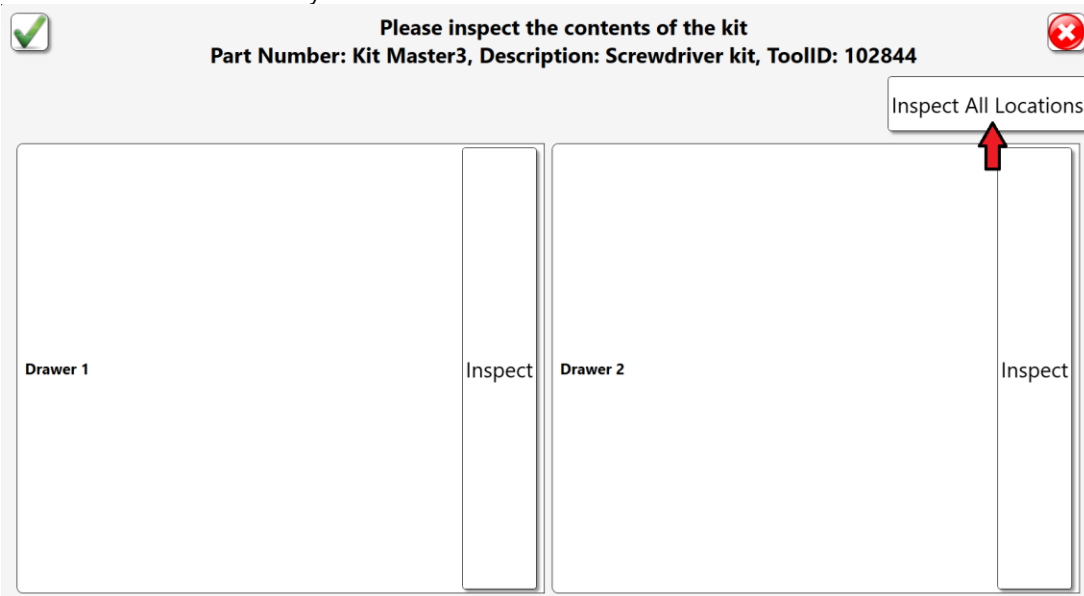
Inspect

Drawer 2

Inspect

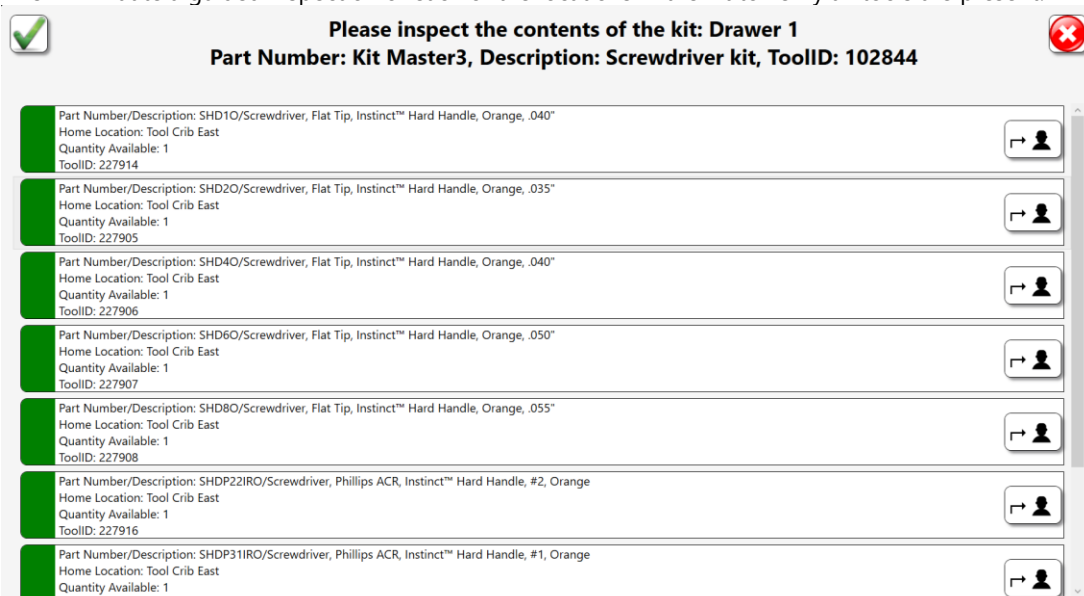
Guided Inspection

Finally, he could click the **Inspect All Locations** button, and the system would walk him through verifying each of the locations in the kit individually.



The screenshot shows a software window titled "Please inspect the contents of the kit" with a green checkmark icon on the left and a red X icon on the right. Below the title bar, it displays "Part Number: Kit Master3, Description: Screwdriver kit, ToolID: 102844". In the top right corner, there is a button labeled "Inspect All Locations" with a red arrow pointing to it. The main area of the window is divided into two large empty rectangular boxes, each labeled "Drawer 1" and "Drawer 2" respectively, with a vertical "Inspect" label positioned between them.

This will initiate a guided inspection of each of the locations in the kit to verify all tools are present.





The screenshot shows a software window titled "Please inspect the contents of the kit: Drawer 1" with a green checkmark icon on the left and a red X icon on the right. Below the title bar, it displays "Part Number: Kit Master3, Description: Screwdriver kit, ToolID: 102844". The main area contains a list of seven tool entries, each with a green checkmark icon on the left and a "Find" button (represented by a magnifying glass and a person icon) on the right. The tool details are as follows:


Part Number/Description: SHD10/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"	Home Location: Tool Crib East	Quantity Available: 1	ToolID: 227914
Part Number/Description: SHD20/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"	Home Location: Tool Crib East	Quantity Available: 1	ToolID: 227905
Part Number/Description: SHD40/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"	Home Location: Tool Crib East	Quantity Available: 1	ToolID: 227906
Part Number/Description: SHD60/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .050"	Home Location: Tool Crib East	Quantity Available: 1	ToolID: 227907
Part Number/Description: SHD80/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .055"	Home Location: Tool Crib East	Quantity Available: 1	ToolID: 227908
Part Number/Description: SHDP22IRO/Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange	Home Location: Tool Crib East	Quantity Available: 1	ToolID: 227916
Part Number/Description: SHDP31IRO/Screwdriver, Phillips ACR, Instinct™ Hard Handle, #1, Orange	Home Location: Tool Crib East	Quantity Available: 1	










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After verifying each tool listed in the current location, click the green checkmark button to verify that location's contents.



Please inspect the contents of the kit: Drawer 1

Part Number: Kit Master3, Description: Screwdriver kit, ToolID: 102844

Part Number/Description: SHD10/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227914	
Part Number/Description: SHD20/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227905	
Part Number/Description: SHD40/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227906	
Part Number/Description: SHD60/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .050" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227907	
Part Number/Description: SHD80/Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .055" Home Location: Tool Crib East Quantity Available: 1 ToolID: 227908	
Part Number/Description: SHDP22IRO/Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange Home Location: Tool Crib East Quantity Available: 1 ToolID: 227916	
Part Number/Description: SHDP31IRO/Screwdriver, Phillips ACR, Instinct™ Hard Handle, #1, Orange Home Location: Tool Crib East Quantity Available: 1	

Repeat this process as the system walks you through each of the locations and once you have completed the verification of all locations the kit inspection will complete automatically, and the employee session will end.

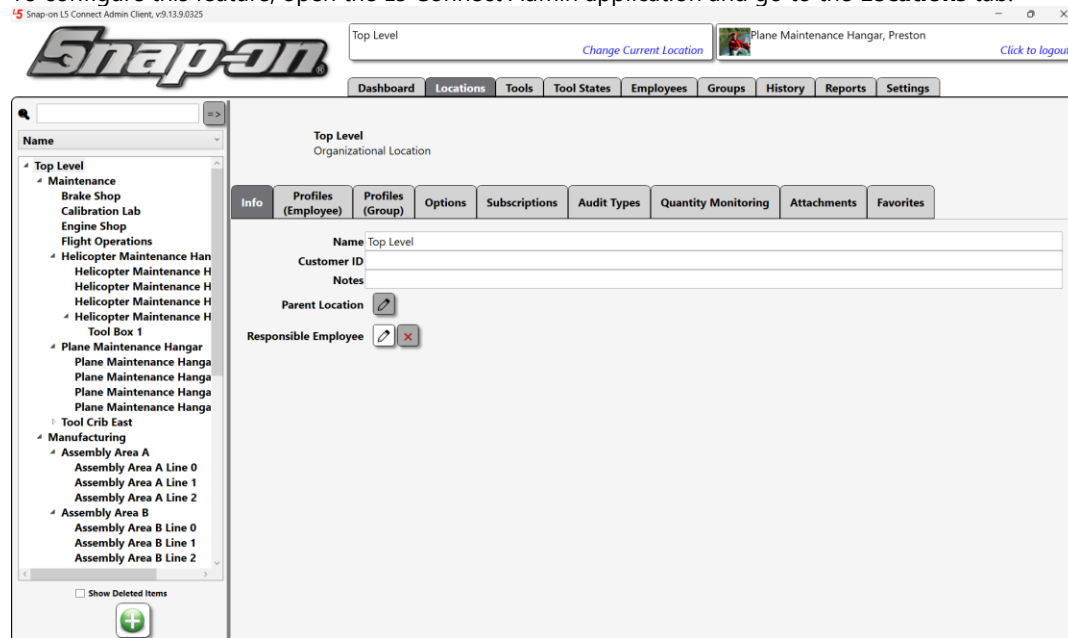


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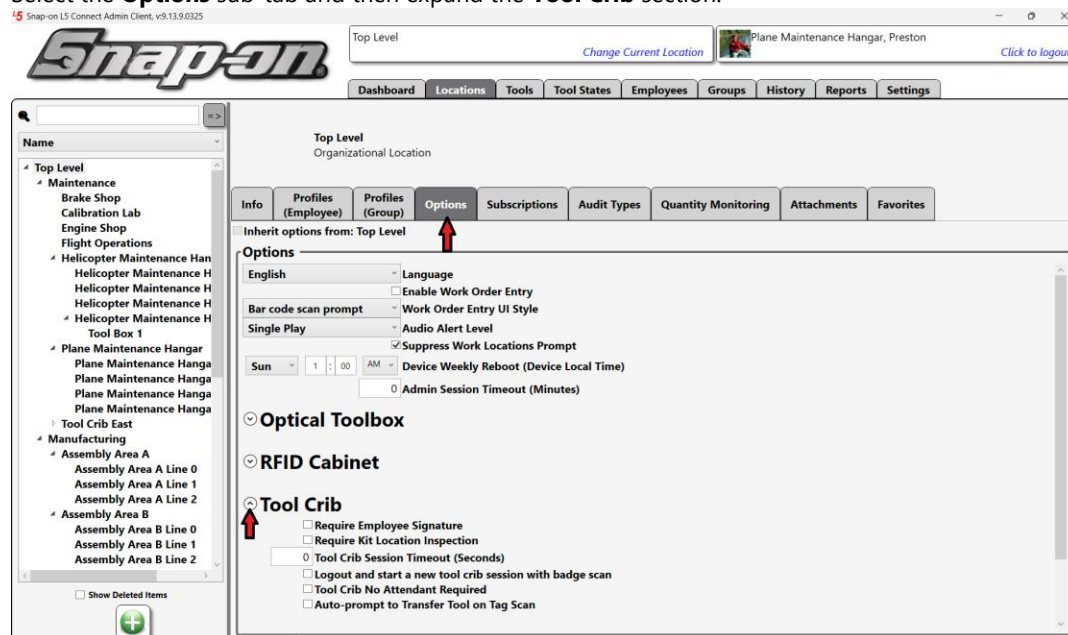
Require Kit Location Inspection Feature

The L5 Connect system has a **Require Kit Location Inspection** feature. Enabling this feature will force users returning a kit with multiple sub-locations to use the guided inspection procedure described in the Guided Inspection section.

To configure this feature, open the L5 Connect Admin application and go to the **Locations** tab.



Select the **Options** sub-tab and then expand the **Tool Crib** section.



Select the **Require Kit Location Inspection** checkbox to force users to go through the guided inspection process.



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Tool Custody Transfer

Sometimes a user who has tools issued to them may be at the end of their shift, but the job is not complete yet and the tools are still needed to complete the job. Rather than forcing the employee to return the tools so that the employee who will be taking over can then check them back out, the L5 Connect™ system allows the custody of these tools to be transferred from one employee to another. This custody transfer can be initiated from the tool or from the employee.

NOTE: Tool custody transfer requires the Info Edit permission in the Tools group of permissions.

Snap-on L5 Connect Admin Client, v9.12.1.1001

Top Level Change Current Location SuperUser

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

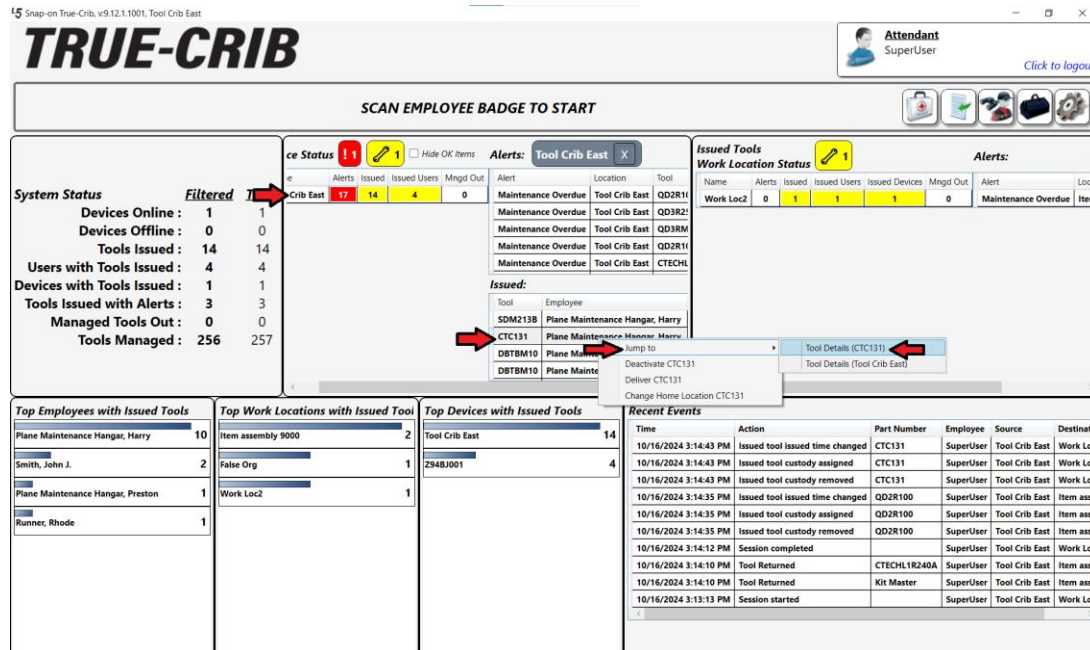
Profile Permissions Editor

Name	Custom	System User	No Audit	SuperUser -copy	SuperUserCheater	System User	Maintenance	Administrator	SuperViewer	SuperUser
Employees	(None)	(None)	(None)	(Custom)	Administrator	System User	Maintenance	Administrator	SuperViewer	SuperUser
Locations	System User	System User	Administrator	Administrator	System User	Maintenance	Administrator	SuperViewer	SuperUser	
Groups	System User	System User	Administrator	Administrator	System User	Maintenance	Administrator	SuperViewer	SuperUser	
Devices	(Custom)	(Custom)	(Custom)	(Custom)	System User	Maintenance	Administrator	SuperViewer	SuperUser	
Status	(Custom)	(Custom)	(Custom)	(Custom)	System User	Maintenance	Administrator	SuperViewer	SuperUser	
System Configuration	(None)	(None)	SuperUser	(Custom)	System User	Maintenance	Administrator	SuperViewer	SuperUser	
Tools	System User	System User	(Custom)	(Custom)	System User	Maintenance	Administrator	SuperViewer	SuperUser	
Bypass Tool Status Issued Lock Out										
Home Location Change										
Info Edit										
Info View										
Override Issued Tool State										
Tolerance Edit										
Reports	(None)	(None)	SuperUser	SuperUser	System User	Maintenance	Administrator	SuperViewer	SuperUser	

Tool Initiated Custody Transfer

Initiating custody transfer from the tool can happen from multiple places in the admin application. Basically, anywhere from which you can access the tool info will work.

For example, on the dashboard you could select the device from which the tool is issued in the **Device Status** widget. This will cause the list of tools issued from that device to be displayed. You could then double click the tool of interest or right click and select **Jump to** and then **Tool Details** to pull up the tool info for that tool.



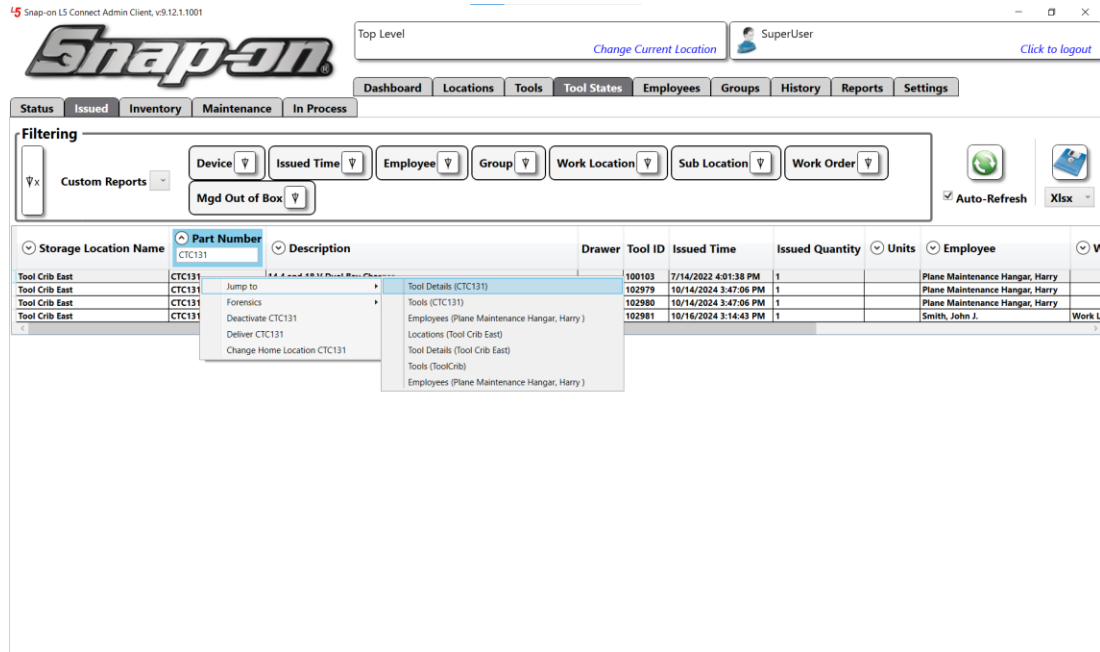
The screenshot shows the Snap-on TRUE-CRIB dashboard. The top navigation bar includes a 'SCAN EMPLOYEE BADGE TO START' button and a user profile for 'Attendant SuperUser'. The main dashboard is divided into several sections:

- System Status:** A summary of system health with filters. It shows 17 Alerts, 14 Issued tools, 4 Issued Users, and 0 Mngd Out. A red arrow points to the 'Filtered' button.
- Device Status:** A table showing the status of various devices. A red arrow points to the 'CTC131' device, which is highlighted in blue.
- Issued Tools:** A table showing tools issued from the selected device. A red arrow points to the 'CTC131' tool, which is highlighted in blue.
- Tool Details:** A pop-up window showing details for the selected tool. A red arrow points to the 'Jump to' button, which then points to the 'Tool Details (CTC131)' button.
- Recent Events:** A table showing the history of tool events. A red arrow points to the 'Jump to' button, which then points to the 'Tool Details (CTC131)' button.

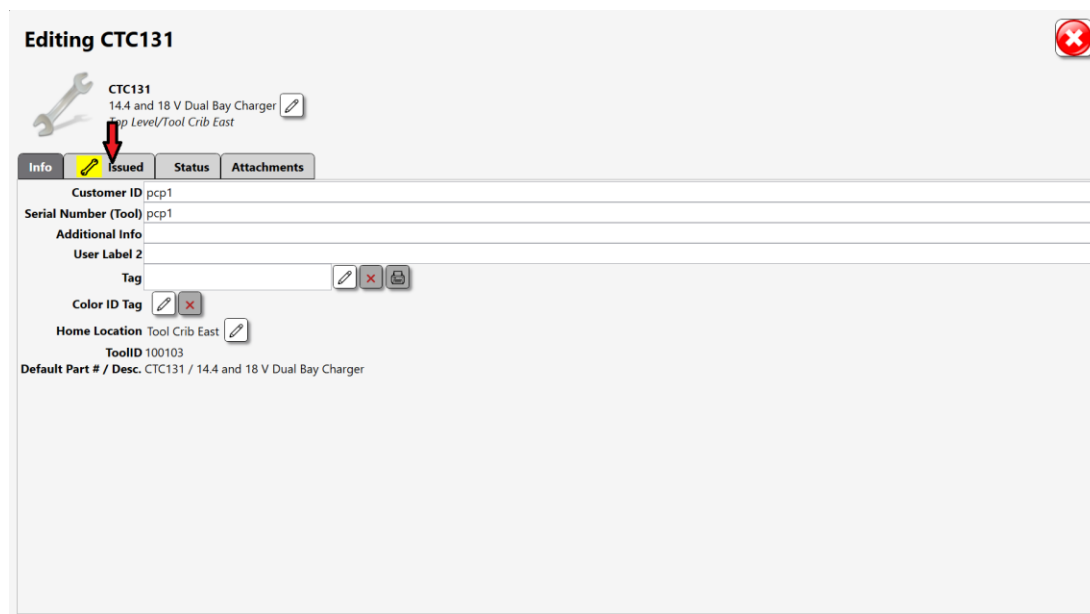
Alternatively, you could go to the **Tool States** tab and select the **Issued** sub-tab. You could filter the list of issued tools if needed, and then either double click the desired tool or right click and use the context menu to select **Jump to** and then **Tool Details** to pull up the tool info.



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Once you get to the tool info page select the **Issued** sub-tab.



Then click the **Change** button, that looks like a pencil, to edit the tool issued details.

Editing CTC131



CTC131

14.4 and 18 V Dual Bay Charger

Top Level/Tool Crib East

Info

Issued


Status

Attachments


Plane Maintenance Hangar, Preston

7/14/2022 4:01:38 PM (Qty:1)

Click the **Employee** pull-down and select the employee to whom you wish to transfer custody of the tool. **NOTE: The list of employees to which you can transfer custody is limited to those that have access to the tool's device.**



Issued



Employee

Plane Maintenance Hangar, Preston

Date

7/14/2022


Time

4 : 01 PM


(UTC-06:00) Central Time (US & Canada)

Work Location

Once you have the new employee selected, click the green **OK** button.



Issued



Employee

Plane Maintenance Hangar, Harry

Date

7/14/2022

Time

4 : 01 PM

(UTC-06:00) Central Time (US & Canada)

Work Location



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Finally, click the blue **Save** button to save the change and the tool will now be issued to the new employee.

Editing CTC131

CTC131
14.4 and 18 V Dual Bay Charger
Top Level/Tool Crib East

Info Issued Status Attachments

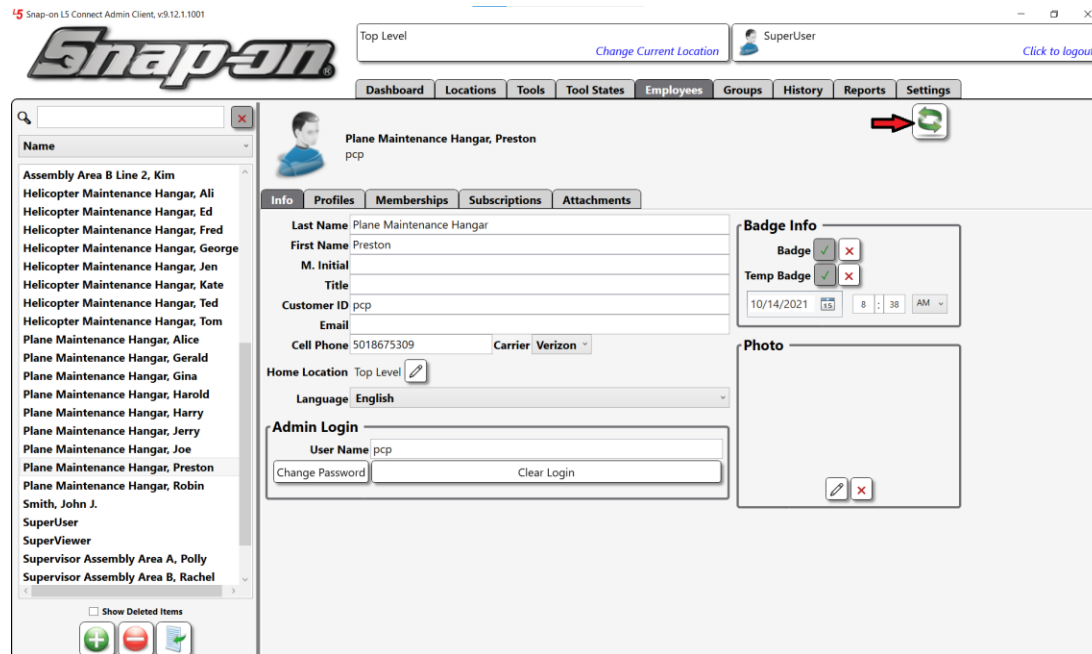
Plane Maintenance Hangar, Harry
7/14/2022 4:01:38 PM (Qty:1)



L5 Connect User Manual

Employee Initiated Custody Transfer

Suppose the employee has multiple tools issued and it would be inconvenient to find each tool individually and then transfer the custody. You can instead go to the **Employees** tab and find that employee. Then you click the **Custody Transfer: Issued Tools** button.



You will be taken to a **Confirm: Custody Transfer** screen and all the tools currently issued to the user will be pre-selected to be transferred to a soon to be selected new employee. If there are tools that you don't wish to transfer, you can move them back to the original employee by clicking the red arrow button next to those tools. Once you have the tools you wish to transfer selected, click the **OK** button that looks like a green checkmark.



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Confirm: Custody Transfer (Plane Maintenance Hangar, Preston ➔ Recipient @ Top Level)

From: Plane Maintenance Hangar, Preston ➔ ➔ To: Recipient

Part Number	Details
SGD2BR	Screwdriver, Flat, Instinct™ Soft Handle, Red, .035" Plane Maintenance Hangar, Preston 12/22/2021 9:38 AM
SDM213B	Bit, Flat Tip, .038" x .250" Plane Maintenance Hangar, Preston 1/12/2022 9:44 AM
DBTBM10	10 mm ThunderBit® Metric High Speed Steel 135° Split Point Drill Bit Plane Maintenance Hangar, Preston 10/20/2021 4:11 PM
DBTBM10	10 mm ThunderBit® Metric High Speed Steel 135° Split Point Drill Bit Plane Maintenance Hangar, Preston 12/7/2021 1:04 PM
CTC131	14.4 and 18 V Dual Bay Charger Plane Maintenance Hangar, Preston 7/14/2022 4:01 PM
CTC131	14.4 and 18 V Dual Bay Charger Plane Maintenance Hangar, Preston 7/14/2022 4:01 PM
DBTBM13	13 mm ThunderBit® Metric High Speed Steel 135° Split Point Drill Bit Plane Maintenance Hangar, Preston 7/14/2022 3:30 PM
DBTBM13	13 mm ThunderBit® Metric High Speed Steel 135° Split Point Drill Bit Plane Maintenance Hangar, Preston 7/18/2022 9:00 AM
Kit with drawers	kit with sub-locations for testing inspections Plane Maintenance Hangar, Preston 8/24/2022 10:08 AM
AT380	Impact Wrench, Air, Heavy Duty, 3/8" Drive (35-150 ft. lb.) Plane Maintenance Hangar, Preston 1/12/2024 1:59 PM

You will then be prompted to select the employee to whom the tools will be transferred. Select the employee to which you wish to transfer the tools. **NOTE: The list of employees to which you can transfer custody is limited to those that have access to ALL the devices for the selected list of tools.** You can use the search bar to find the desired employee when you have a lot of employees from which to choose.

Select: Recipient

Plane Maintenance Hangar, Harry

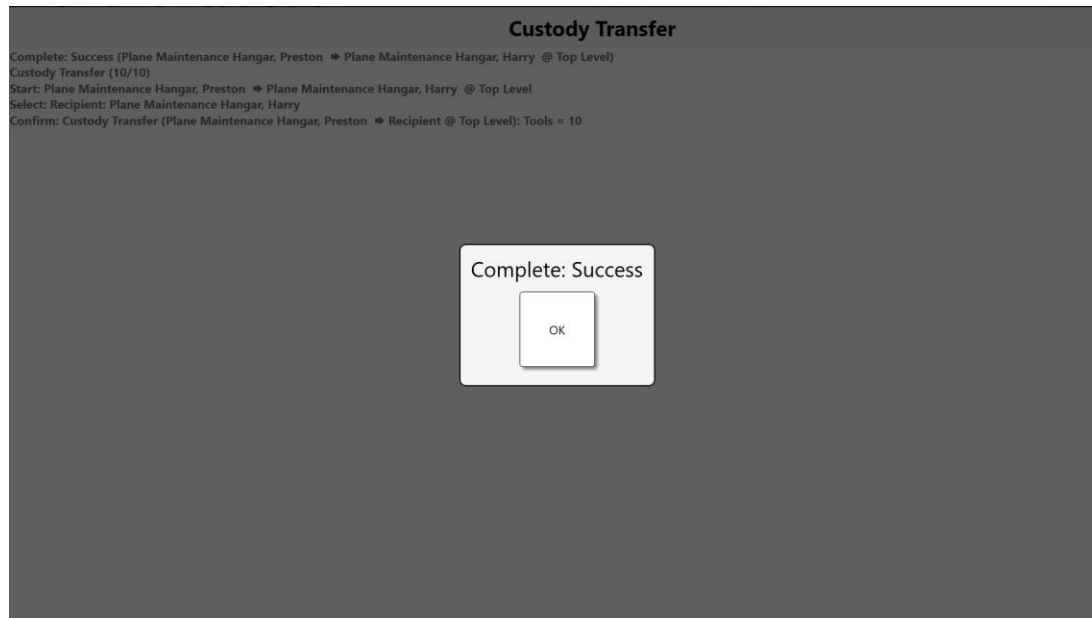
Smith, John J.

SuperUser

You should then see that you have successfully transferred custody of the tools to the new employee. Press the **OK** button.



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True-Crib Custody Transfer

Tool custody transfer can also be accomplished from a True-Crib device. Log into the crib as an attendant but without a session. On the **Device Status** widget of the dashboard, click the **Issued** number to display the issued tools.

15 Snap-on True-Crib, v9.12.1.1001, Tool Crib East

TRUE-CRIB

Attendant SuperUser [Click to logout](#)

SCAN EMPLOYEE BADGE TO START

System Status

	Filtered	Total
Devices Online :	1	1
Devices Offline :	0	0
Tools Issued :	14	14
Users with Tools Issued :	4	4
Devices with Tools Issued :	1	1
Tools Issued with Alerts :	3	3
Managed Tools Out :	0	0
Tools Managed :	256	257

Device Status 11 1 ☐ Hide OK Items
Crib East 17 14 4 0

Alerts: Tool Crib East X
Maintenance Overdue Tool Crib East QD2R1
Maintenance Overdue Tool Crib East QD3R2
Maintenance Overdue Tool Crib East QD3R3
Maintenance Overdue Tool Crib East QD2R1
Maintenance Overdue Tool Crib East CTECHL
Issued:

Tool	Employee
SOM2138	Plane Maintenance Hangar, Harry
CTC131	Plane Maintenance Hangar, Harry
DBTBM10	Plane Maintenance Hangar, Harry
DBTBM10	Plane Maintenance Hangar, Harry

Issued Tools 1
Work Location Status

Name	Alerts	Issued	Issued Users	Issued Devices	Mngd Out	Alert	Local
Work Loc2	0	1	1	1	0	Maintenance Overdue	Item

Top Employees with Issued Tools

Plane Maintenance Hangar, Harry	10
Smith, John J.	2
Plane Maintenance Hangar, Preston	1
Runner, Rhode	1

Top Work Locations with Issued Tools

Item assembly 9000	2
False Org	1
Work Loc2	1

Top Devices with Issued Tools

Tool Crib East	14
Z94B.001	4

Recent Events

Time	Action	Part Number	Employee	Source	Destination
10/16/2024 3:14:43 PM	Issued tool issued time changed	CTC131	SuperUser	Tool Crib East	Work Loc
10/16/2024 3:14:43 PM	Issued tool custody assigned	CTC131	SuperUser	Tool Crib East	Work Loc
10/16/2024 3:14:43 PM	Issued tool custody removed	CTC131	SuperUser	Tool Crib East	Work Loc
10/16/2024 3:14:35 PM	Issued tool issued time changed	QD2R100	SuperUser	Tool Crib East	Item asse
10/16/2024 3:14:35 PM	Issued tool custody assigned	QD2R100	SuperUser	Tool Crib East	Item asse
10/16/2024 3:14:35 PM	Issued tool custody removed	QD2R100	SuperUser	Tool Crib East	Item asse
10/16/2024 3:14:12 PM	Session completed		SuperUser	Tool Crib East	Work Loc
10/16/2024 3:14:10 PM	Tool Returned	CTECHL1R240A	SuperUser	Tool Crib East	Item asse
10/16/2024 3:14:10 PM	Tool Returned	Kit Master	SuperUser	Tool Crib East	Item asse
10/16/2024 3:13:13 PM	Session started		SuperUser	Tool Crib East	Work Loc

Right click the tool of interest from the list of issued tools. Then click the **Jump to** menu option and finally click the **Tool Details (Part Number)** menu option. Once you have reached the tool details screen the process is the same as the **Tool Initiated Custody Transfer** section of the document.



L5 Connect User Manual

Tool Swap Process

The goal of this article is to document the process of swapping tools in the L5 Connect system. An example of why you might want to do this would be if a tool in an ATC FlexHub has been set with a **Maintenance Overdue** status and the user would like to take a freshly calibrated tool of the same type from a True-Crib and swap it with the tool that needs calibration.

Configuration of L5 Connect system to Allow Tool Swap

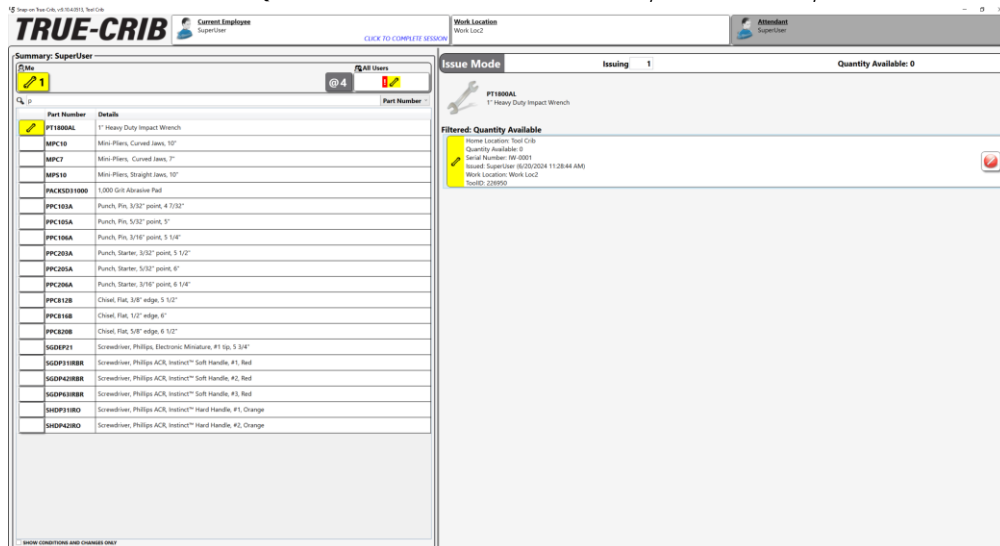
1. Using the admin client, login and navigate to the **Locations** Tab.
2. Select the device in which you wish to allow tool swap. Then click on **Options**. **NOTE: Not all devices support configuration of "Auto-Prompt to Transfer on Tag Scan". As of this document's writing, only tool cribs, and FlexHubs support Auto-Prompt tool swap. This doesn't mean that tools can't be transferred to other devices, however.**
3. Look to see if the Options for this device are inherited from another location. If the options are inherited, you will either need to go to that location to change the options or uncheck the checkbox to inherit options to set them for this location.
4. Check the **Auto-prompt to Transfer Tool on Tag Scan** checkbox.
5. Repeat this process for any other device types/instances you wish to allow to swap tools including any cribs from which you will be providing the replacement tools.

Tool Swap Process from TrueCrib to Device Types

This section will walk through the process of swapping a tool at each of the device types with a spare tool from the crib. The beginning where the spare tool is removed from the crib and taken to the device in need and the ending part where the tool removed from the device is returned to the crib would be the same for any of the devices. These parts will be described once and the middle portion of doing the swap on the device will be explained for each type of device.

Getting a Replacement Tool from the Crib

1. A supervisor checks the admin dashboard and sees that the QD2R100 torque wrench in one of the devices has a maintenance overdue status. The user goes to a tool crib and logs in as an attendant and then starts a session.
2. The user finds another QD2R100 wrench that is in calibration, issues the tool, and ends the session.



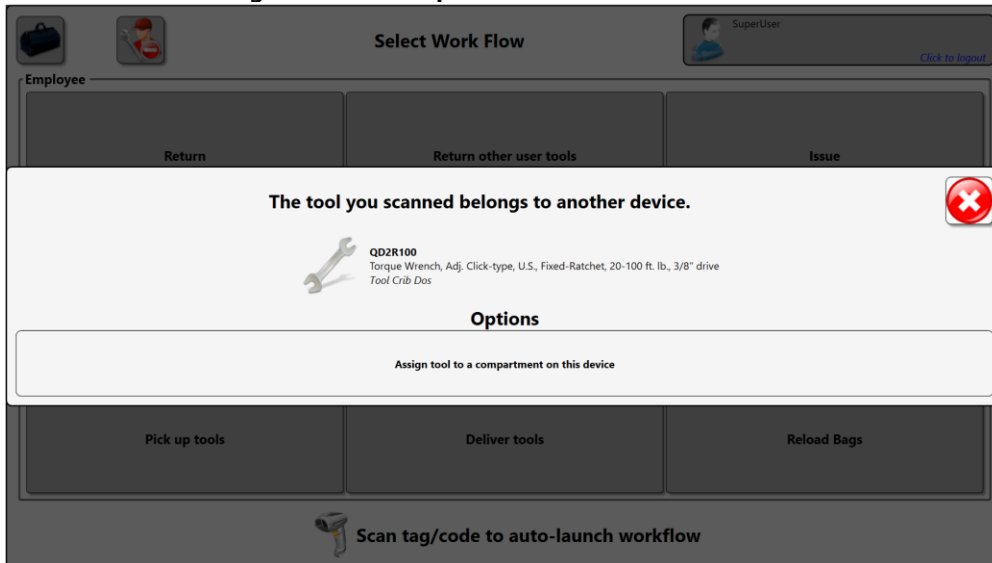
Swapping Replacement Tool with a Tool at the Device

There is a separate section on how to swap the tool on each device type.

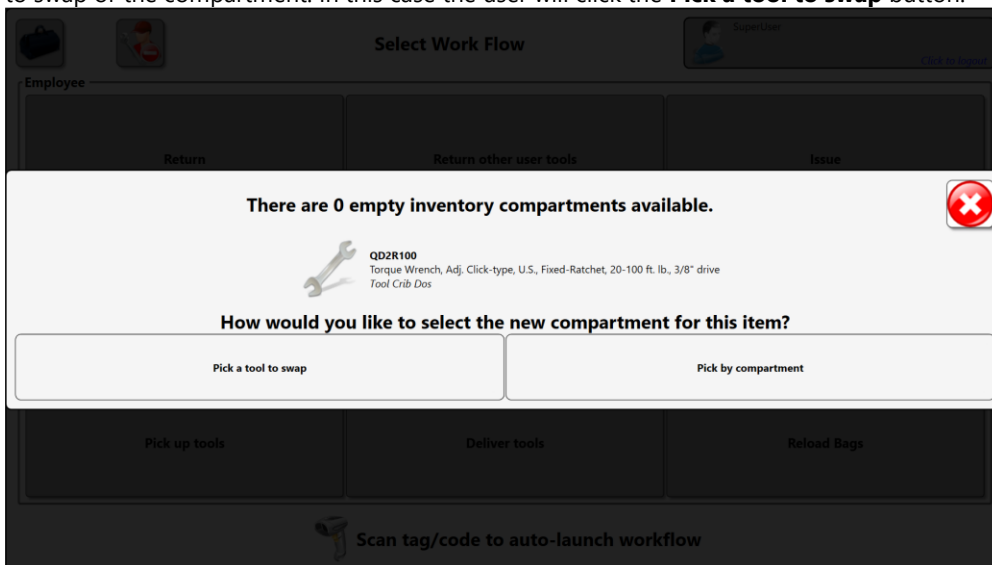
FlexHub Tool Swap

1. The user takes that tool to the device with tool that has the maintenance overdue status.
2. The user logs into the FlexHub and scans the tag on the replacement tool.

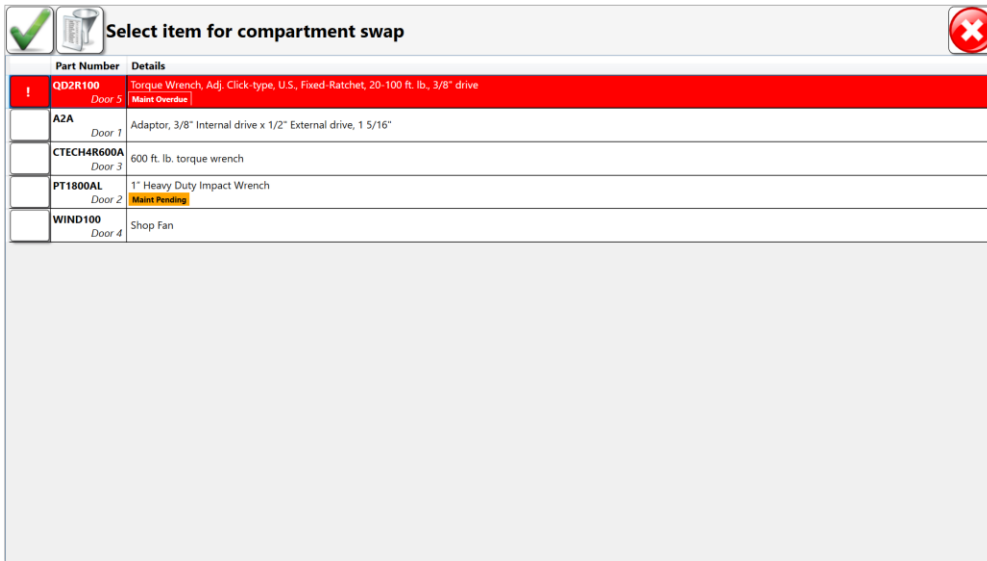
3. The user clicks the **Assign tool to a compartment on this device** button.



4. Next the user will be prompted to select whether to select the compartment by choosing the tool they want to swap or the compartment. In this case the user will click the **Pick a tool to swap** button.

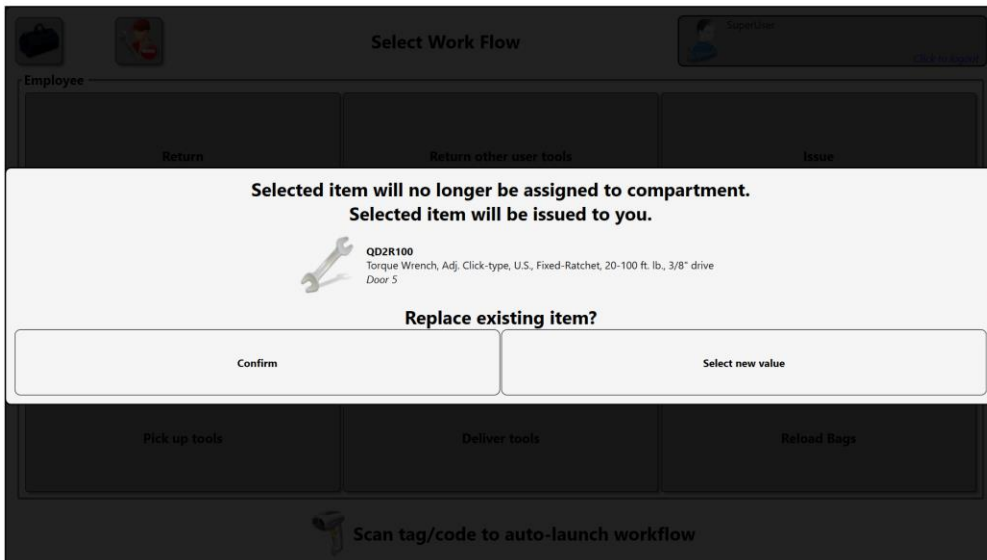


5. The user selects the wrench with the **maintenance overdue** status, then clicks the **Green Check** button.



Part Number	Details
QD2R100 Door 5	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive Maint Overdue
A2A Door 1	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"
CTECH4R600A Door 3	600 ft. lb. torque wrench
PT1800AL Door 2	1" Heavy Duty Impact Wrench Maint Pending
WIND100 Door 4	Shop Fan

6. A prompt is displayed to confirm that the selected item will no longer be assigned to the compartment and will be issued to the user. The user clicks the **Confirm** button.




Select Work Flow

Employee: [User Name]

Return Return other user tools Issue


**Selected item will no longer be assigned to compartment.
Selected item will be issued to you.**

 **QD2R100**
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive
Door 5

Replace existing item?

Confirm Select new value


Pick up tools Deliver tools Reload Bags

 Scan tag/code to auto-launch workflow




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7. The user is then prompted to remove the tool and close the door. The user takes the tool and closes the door.

 QD2R100 Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive Door 5		Remove the tool. Close the door	
1		2	
3		4	
5		6	
7		8	
9		10	
11		12	TAGS / BAGS

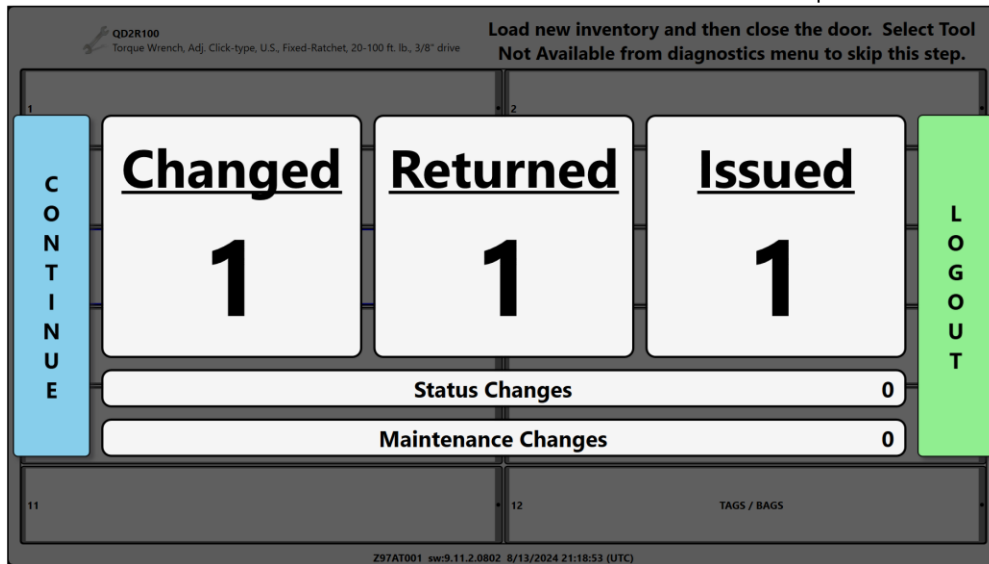
Z97AT001 sw:9.11.2.0802 8/13/2024 21:18:03 (UTC)

8. Now the user is prompted to load the new tool into the compartment and close the door. The user does so.

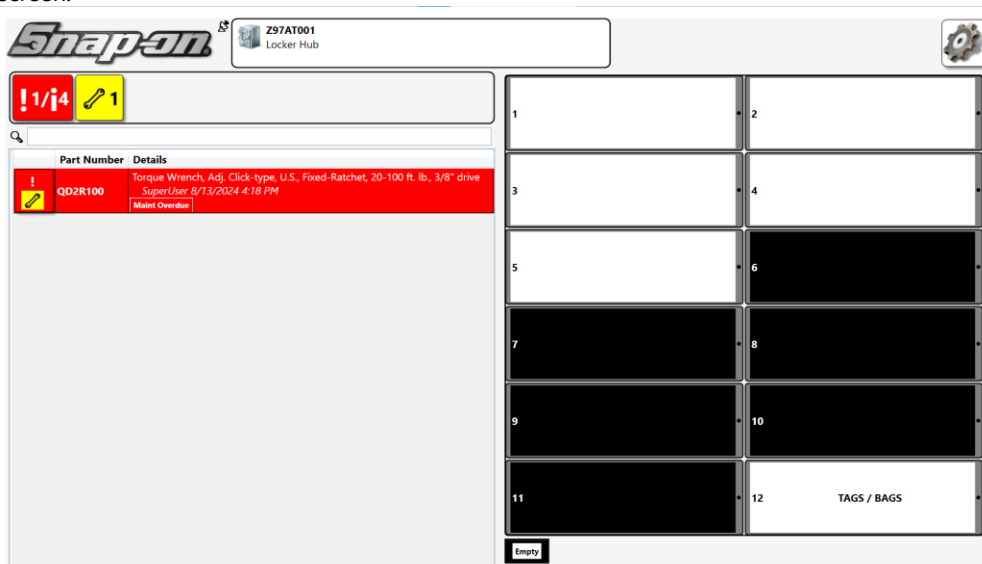
 QD2R100 Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive		Load new inventory and then close the door. Select Tool Not Available from diagnostics menu to skip this step.	
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3		4	
5		6	
7		8	
9		10	
11		12	TAGS / BAGS

Z97AT001 sw:9.11.2.0802 8/13/2024 21:18:53 (UTC)

9. The user is then presented with the summary screen that shows a change has been made to the inventory, the old tool has been issued, and the new tool has been returned to the compartment.



10. At this point, the tool the user had issued from the crib is now a part of the FlexHub inventory. It is assigned to the compartment that had been the home of the tool with the maintenance overdue status. Meanwhile the maintenance overdue tool is still part of the FlexHub inventory but does not have a compartment to which it is assigned as can be seen by the main screen of the FlexHub. Once the **Returning Out of Calibration Tool to Crib** part of the process occurs, it will automatically disappear from the FlexHub main screen.



Optical Toolbox Tool Swap

NOTE: for this device we are using a different model torque wrench due to the availability of in the toolbox inventory.



L5 Connect User Manual

1. First the user double clicks on the just issued tool using the dashboard of the crib as shown. Alternatively, the tool could be found in the inventory or by right clicking the tool issued event in the recent events and jump to the tool details.

TRUE-CRIB

Attendant SuperUser [Click to logout](#)

SCAN EMPLOYEE BADGE TO START

System Status

	Filtered	Total
Devices Online :	1	1
Devices Offline :	0	0
Tools Issued :	112	112
Users with Tools Issued :	2	2
Devices with Tools Issued :	1	1
Tools Issued with Alerts :	0	0
Managed Tools Out :	0	0
Tools Managed :	117	118

Device Status 1 1 ☐ Hide OK Items
Tool Crib Dos 1 112 2 0 Maintenance Overdue
Alerts: Tool Crib Dos
Issued:

Tool	Employee
TestTool9892	Phillips, Preston C.
TestTool9891	Phillips, Preston C.
TestTool9890	Phillips, Preston C.
QD3R250	SuperUser

Issued Tools Work Location Status ✓
Alerts:

Top Employees with Issued Tools

Phillips, Preston C.	111
SuperUser	1

Top Work Locations with Issued Tools

Top Devices with Issued Tools

Tool Crib Dos	112

Recent Events

Time	Action	Part Number	Employee
8/14/2024 2:28:20 PM	Session completed		SuperUser
8/14/2024 2:28:17 PM	Tool issued	QD3R250	SuperUser
8/14/2024 2:27:20 PM	Session started		SuperUser
8/14/2024 2:19:01 PM	Status Cleared	QD3R250	
8/14/2024 2:19:01 PM	Tool maintenance date last maintenance changed	QD3R250	Phillips, Preston C.
8/14/2024 2:19:01 PM	Tool maintenance date due changed	QD3R250	Phillips, Preston C.
8/14/2024 2:17:56 PM	Status Set	QD3R250	
8/14/2024 2:17:55 PM	Tool home location changed	QD3R250	Phillips, Preston C.
8/14/2024 2:17:55 PM	Tool master tool changed	QD3R250	Phillips, Preston C.
8/14/2024 2:17:55 PM	Tool quantity changed	QD3R250	Phillips, Preston C.
8/14/2024 2:17:55 PM	Tool Added	QD3R250	Phillips, Preston C.
8/14/2024 10:43:59 AM	Tool Returned	QD2R100	SuperUser

2. Next the user clicks on the **Pencil** button to edit the home location of the tool.

Editing QD3R250

QD3R250
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 50-250 ft. lb., 1/2" drive
Tool Crib Dos

Info **Issued** **Status** **Maintenance** **Attachments**

Customer ID: _____

Serial Number (Tool): _____

Additional Info: _____

User Label 2: _____

Tag ☐ ☐ ☐

Color ID Tag ☐ ☐ ☐

Home Location Tool Crib Dos ☐

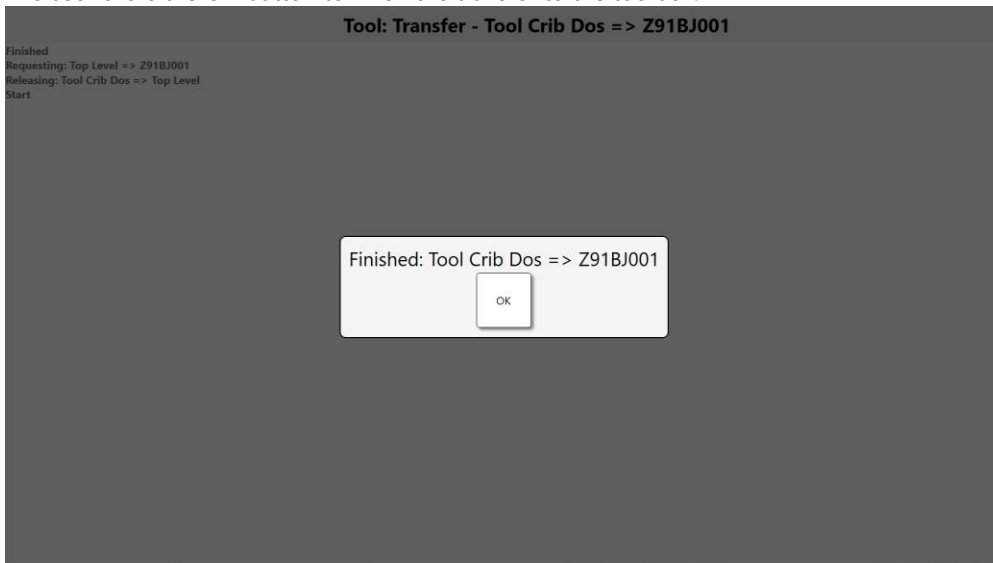
ToolID 227956

Default Part # / Desc. QD3R250 / Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 50-250 ft. lb., 1/2" drive

- The user selects the location of the device to which the tool will be transferred and clicks the **Green Checkmark** button.

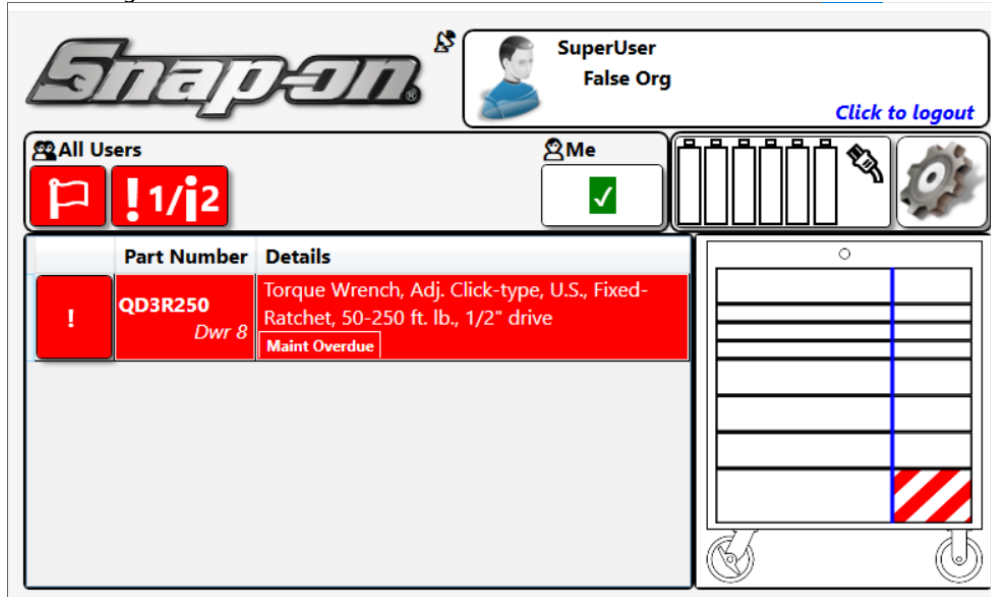


- The user clicks the **OK** button to finish the transfer to the toolbox.

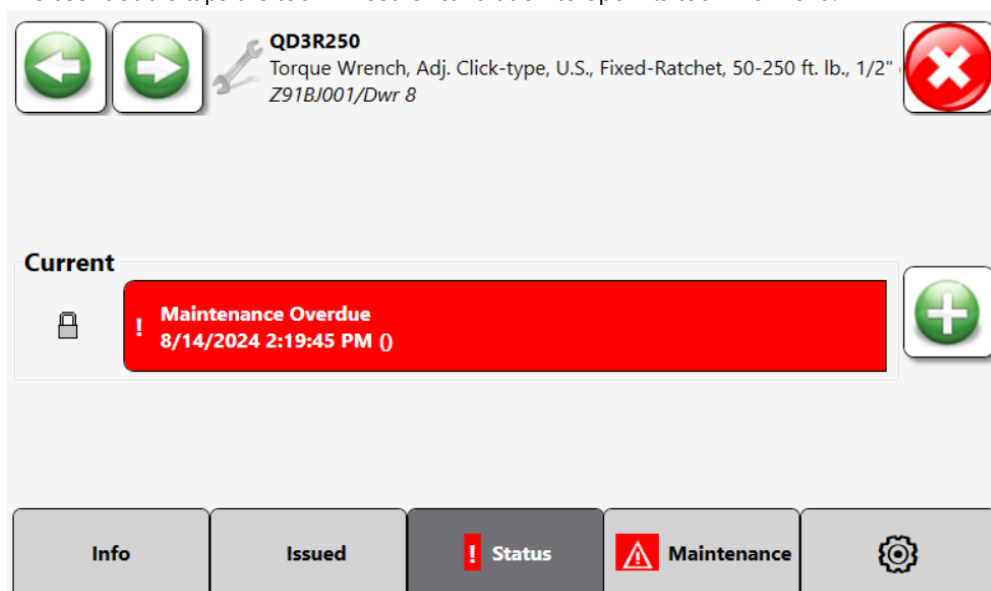


- The user logs out of the crib and takes the replacement tool to the toolbox.

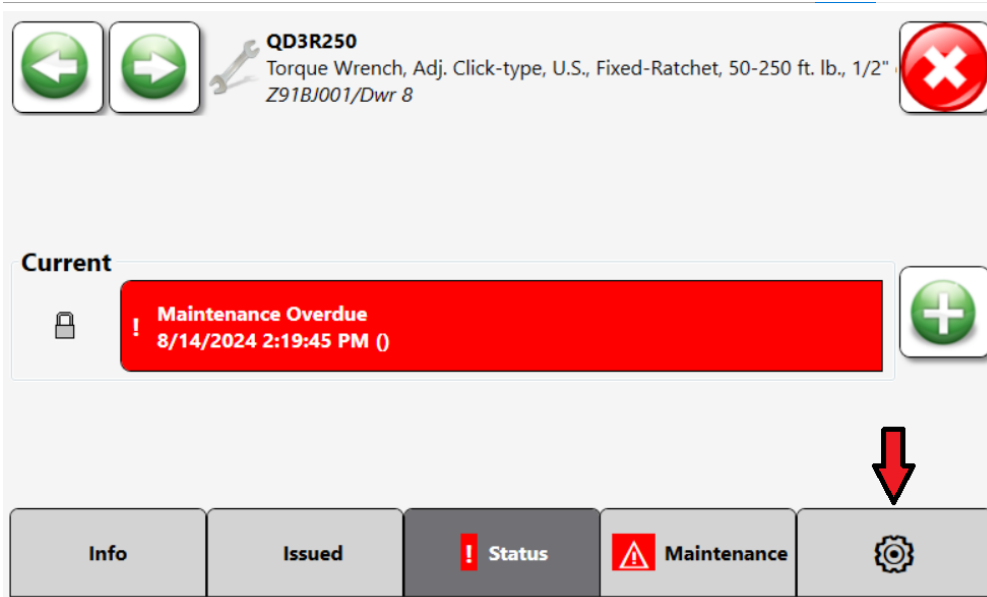
6. The user logs into the toolbox.



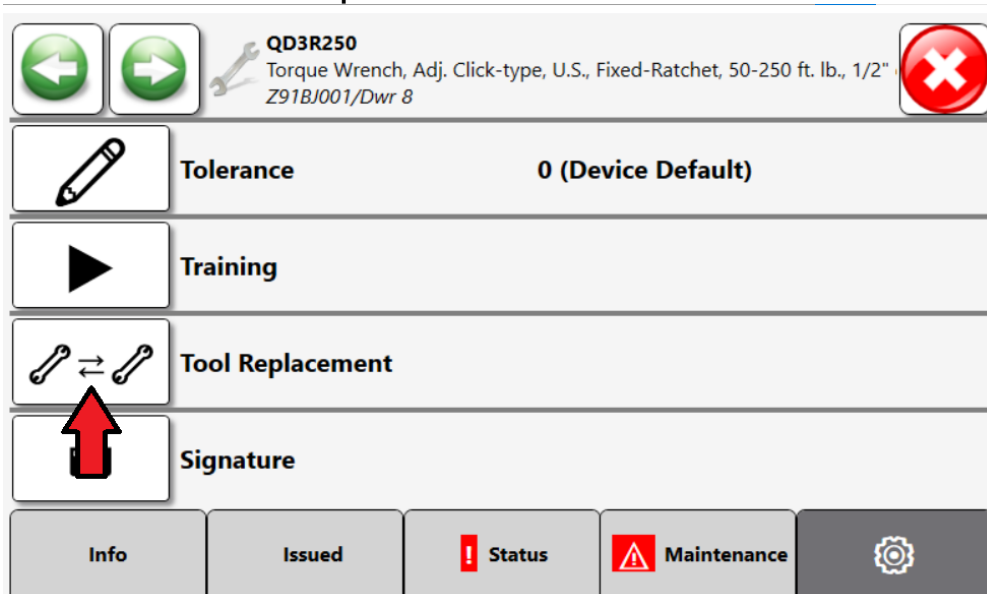
7. The user opens the drawer and removes the tool in need of calibration from its pocket and then closes the drawer, issuing it to himself.
8. The user double taps the tool in need of calibration to open its tool info menu.



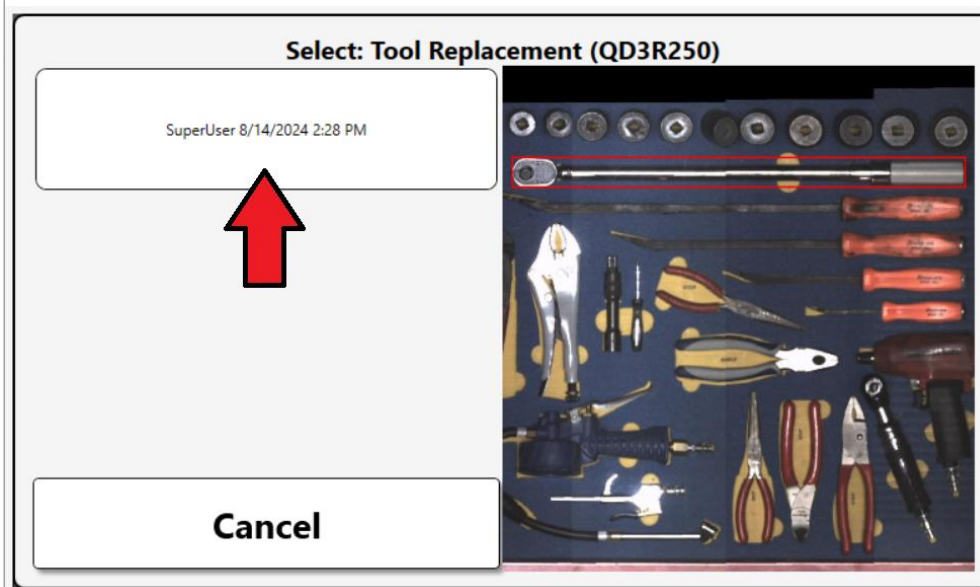
9. The user then clicks the **Gear** button.



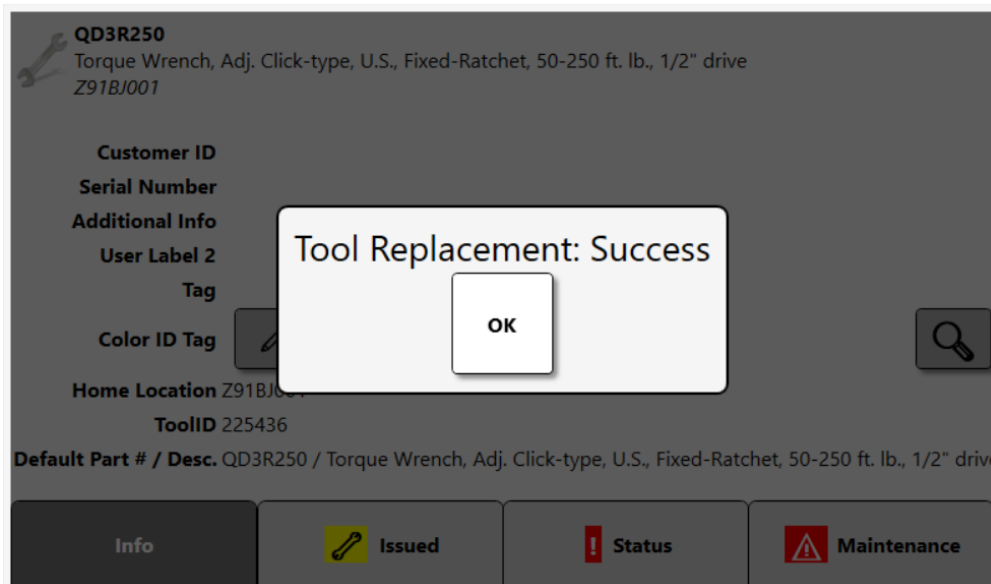
10. The user then clicks the **Tool Replacement** button.



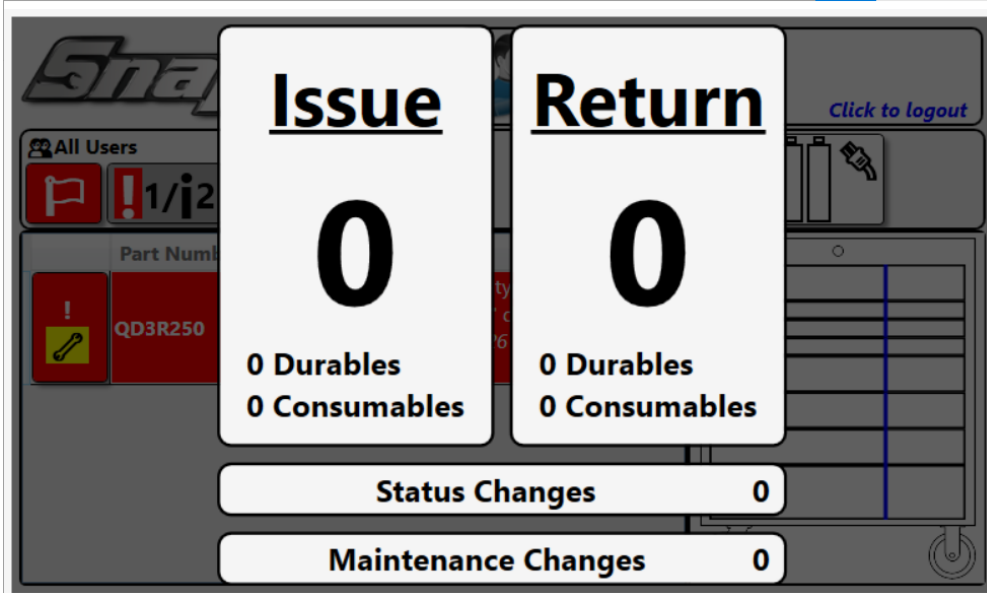
11. The user selects the instance of the issued replacement tool.



12. The user clicks the **OK** button.



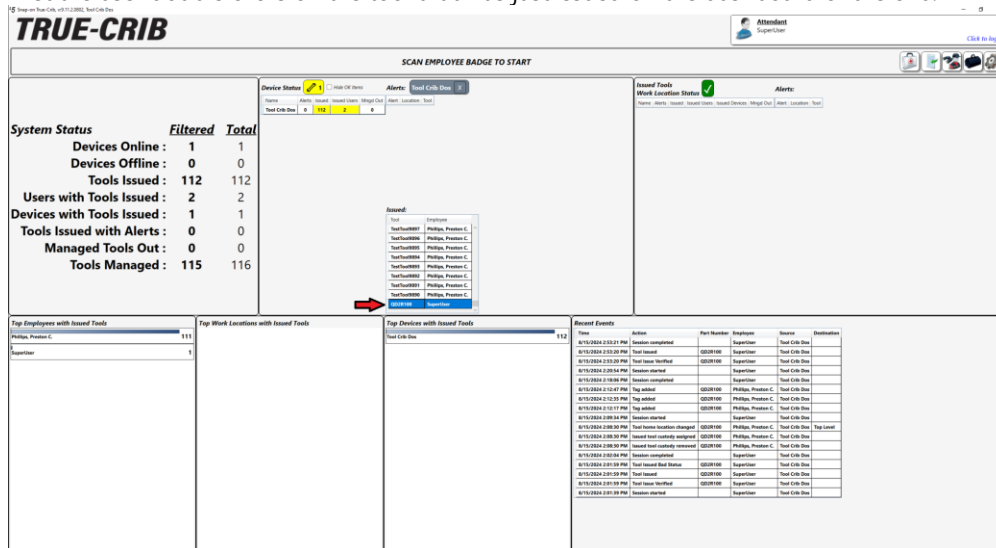
13. The user then opens the drawer where the tool is located and places the new replacement tool into the pocket vacated by the tool requiring maintenance.



- Now the user takes the tool needing maintenance to the crib and completes the **Returning Out of Calibration Tool to Crib** part of the process.


RFID Locker Tool Swap

1. First the user double clicks on the tool that was just issued on the dashboard of the crib.



- Next the user clicks on the **Pencil** button to edit the home location of the tool.

Editing QD2R100



QD2R100
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive
Tool Crib Dos

Info
Issued
Status
Maintenance
Attachments

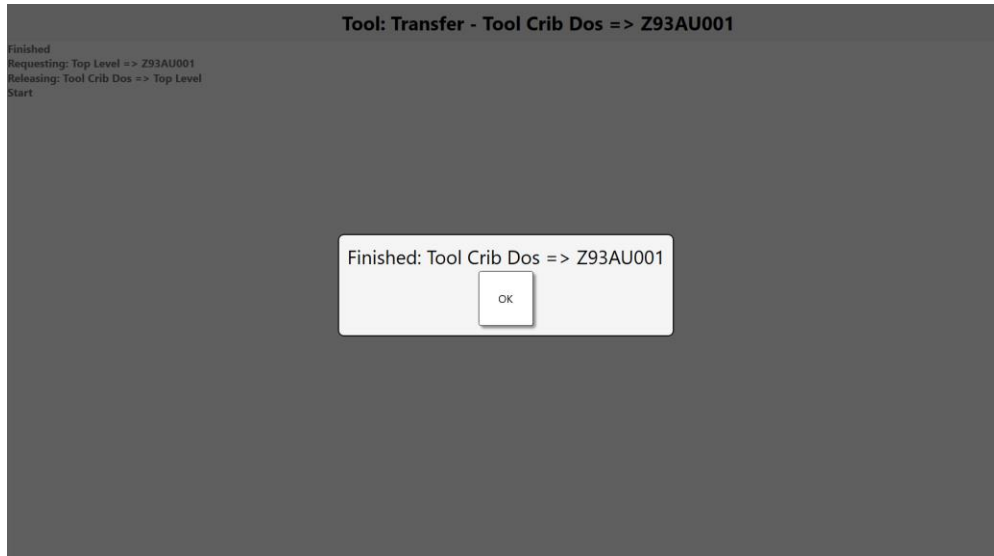
Customer ID
Serial Number (Tool)
Additional Info
User Label 2
Tag 80
Color ID Tag
Home Location Tool Crib Dos
ToolID 227952
Default Part # / Desc. QD2R100 / Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive

- The user selects the location of the locker to which the tool will be transferred and clicks the **Green Checkmark** button.

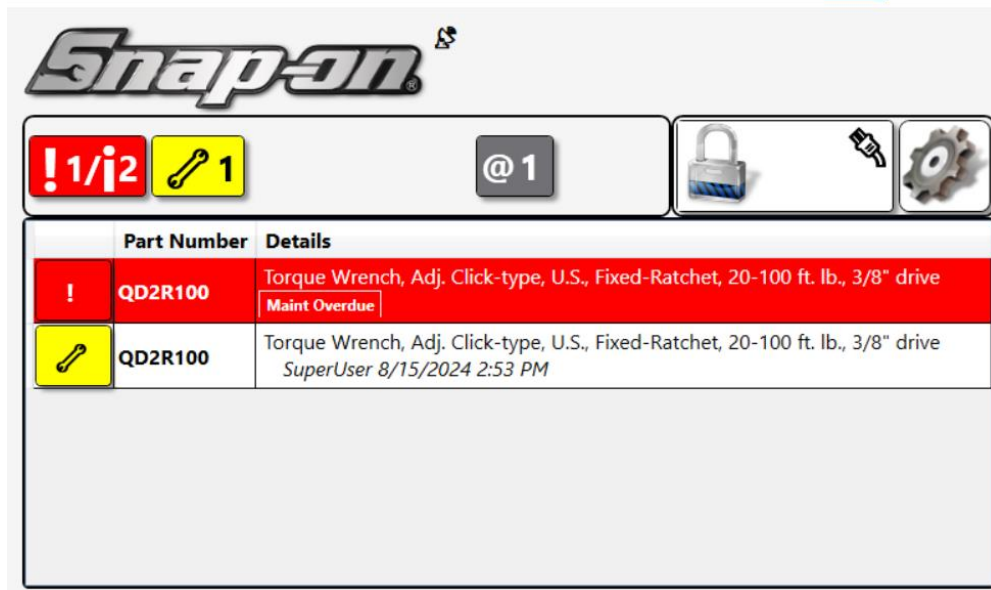
Select home location

- Top Level
- Maintenance
 - State Shop
 - Calibration Lab
 - Engine Shop
 - Flight Operations
- Helicopter Maintenance Hangar
 - Helicopter Maintenance Hangar Bay 0
 - Helicopter Maintenance Hangar Bay 1
 - Helicopter Maintenance Hangar Bay 2
 - Helicopter Maintenance Hangar Bay 3
- Plane Maintenance Hangar
 - Plane Maintenance Hangar Bay 0
 - Plane Maintenance Hangar Bay 1
 - Plane Maintenance Hangar Bay 2
 - Plane Maintenance Hangar Bay 3
- Manufacturing
 - Assembly Area A
 - Assembly Area A Line 0
 - Assembly Area A Line 1
 - Assembly Area A Line 2
 - Assembly Area B
 - Assembly Area B Line 0
 - Assembly Area B Line 1
 - Assembly Area B Line 2
 - Final Assembly Area
- Tool Crib
 - Tool Crib Dos
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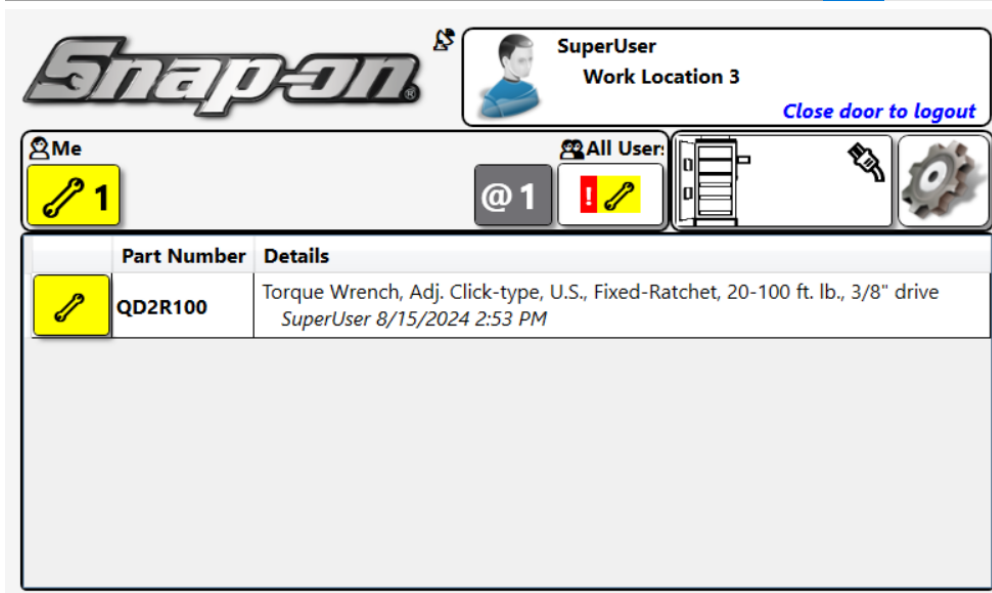
- The user clicks the **OK** button to finish the transfer to the locker.



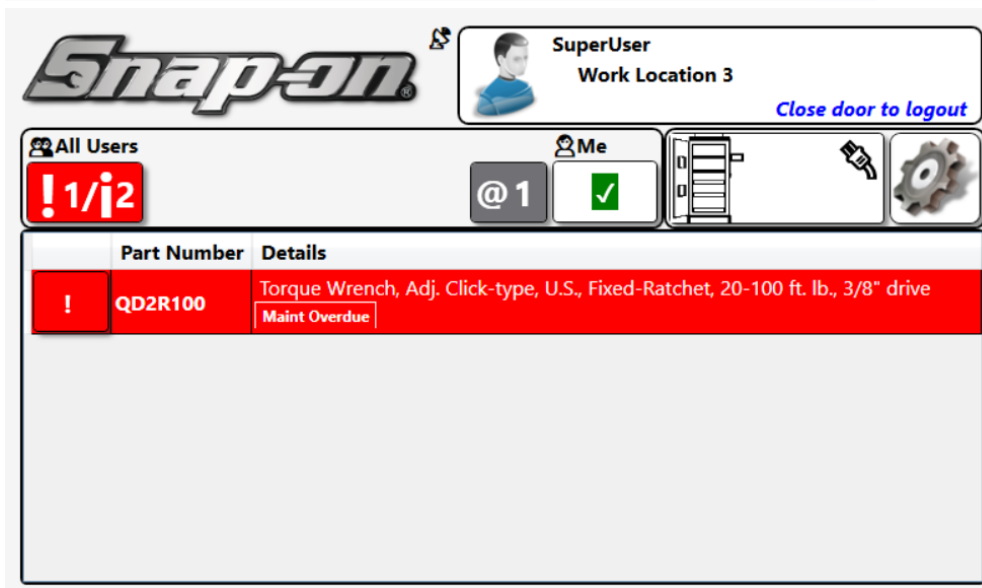
- The user logs out of the crib and takes the replacement tool to the locker. The locker shows both the tool that needs maintenance and the issued tool whose home location was just changed to the locker.



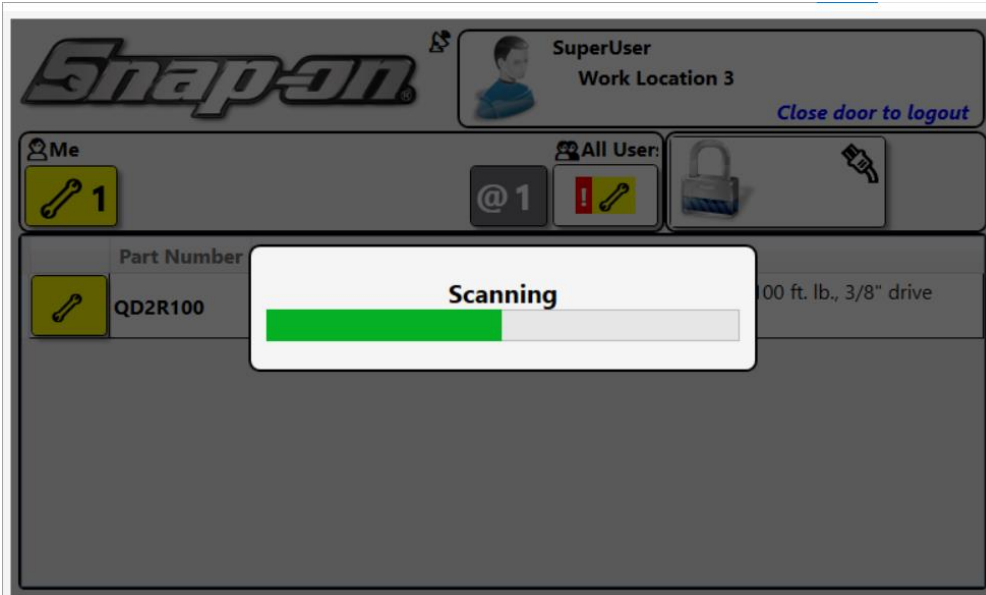
6. The user logs into the locker and opens the door.



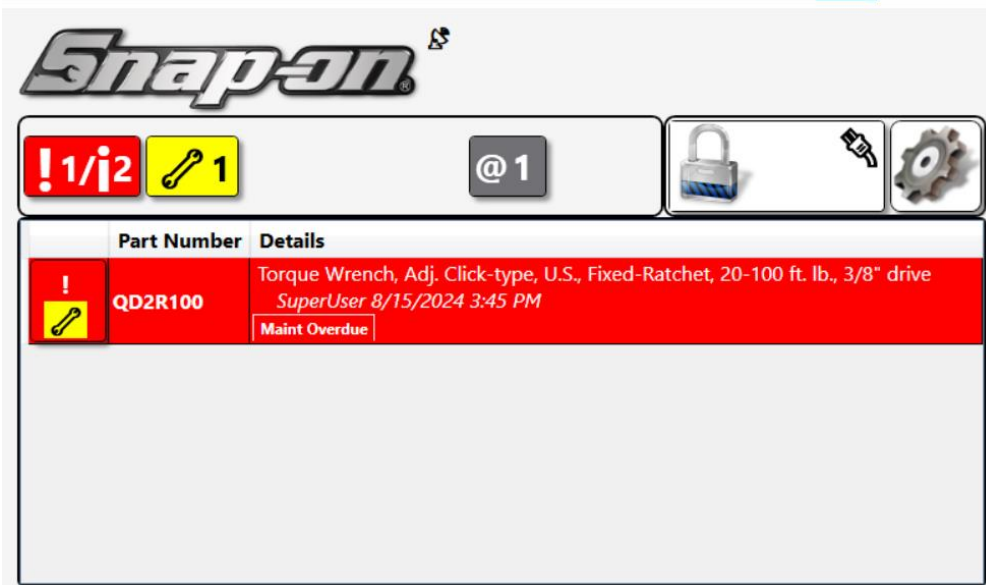
7. The user removes the tool that required maintenance and replaces it with the replacement tool.



8. Then the user closes the door.



9. Notice that the tool requiring maintenance is now issued to the user but still a part of the locker.



Tool Crib Tool Swap

1. The user takes the replacement tool to the crib with the tool needing maintenance and scans the tool.
2. The user clicks the **Transfer tool to this device** button.
3. The user clicks the **Return tools to crib** button and returns the tool to the crib.
4. The user then issues the tool needing calibration.



L5 Connect User Manual

Portal Tool Swap

1. First the user double clicks on the tool that was just issued on the dashboard of the crib.

TRUE-CRIB

SCAN EMPLOYEE BADGE TO START

System Status

Filtered	Total
Devices Online : 1	1
Devices Offline : 0	0
Tools Issued : 112	112
Users with Tools Issued : 2	2
Devices with Tools Issued : 1	1
Tools Issued with Alerts : 0	0
Managed Tools Out : 0	0
Tools Managed : 115	116

Alerts: Tool Crib Dos

Issued Tools: Work Location Status

Recent Events

Time	Action	Part Number	Employee	Device	Location
8/15/2024 2:03:21 PM	System completed		SuperUser	Tool Crib Dos	
8/15/2024 2:03:20 PM	Tool Issued	QD2R100	SuperUser	Tool Crib Dos	
8/15/2024 2:03:19 PM	Tool Issue Verified	QD2R100	SuperUser	Tool Crib Dos	
8/15/2024 2:03:14 PM	System started		SuperUser	Tool Crib Dos	
8/15/2024 2:03:04 PM	System completed		SuperUser	Tool Crib Dos	
8/15/2024 2:02:47 PM	Tag added	QD2R100	Philips, Preston C.	Tool Crib Dos	
8/15/2024 2:02:35 PM	Tag added	QD2R100	Philips, Preston C.	Tool Crib Dos	
8/15/2024 2:02:31 PM	Tag added	QD2R100	Philips, Preston C.	Tool Crib Dos	
8/15/2024 2:02:30 PM	System started		SuperUser	Tool Crib Dos	
8/15/2024 2:02:30 PM	Tool Issue Location changed	QD2R100	Philips, Preston C.	Tool Crib Dos	Tag Crib
8/15/2024 2:02:30 PM	Issued tool currently assigned	QD2R100	Philips, Preston C.	Tool Crib Dos	
8/15/2024 2:02:30 PM	Issued tool currently assigned	QD2R100	Philips, Preston C.	Tool Crib Dos	
8/15/2024 2:02:30 PM	System completed		SuperUser	Tool Crib Dos	
8/15/2024 2:01:59 PM	Tool Issue Bad Status	QD2R100	SuperUser	Tool Crib Dos	
8/15/2024 2:01:59 PM	Tool Issue	QD2R100	SuperUser	Tool Crib Dos	
8/15/2024 2:01:59 PM	Tool Issue Verified	QD2R100	SuperUser	Tool Crib Dos	
8/15/2024 2:01:59 PM	System started		SuperUser	Tool Crib Dos	

2. Next the user clicks on the **Pencil** button to edit the home location of the tool.

Editing QD2R100

QD2R100
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive
Tool Crib Dos

Info **Issued** Status Maintenance Attachments

Customer ID

Serial Number (Tool)

Additional Info

User Label 2

Tag 80

Color ID Tag

Home Location Tool Crib Dos

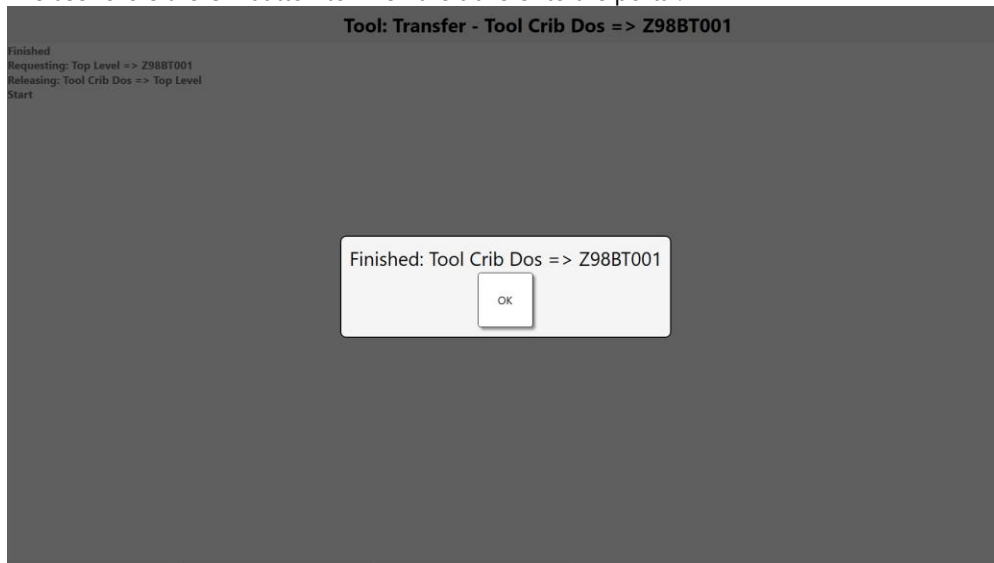
ToolID 227952

Default Part # / Desc. QD2R100 / Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive

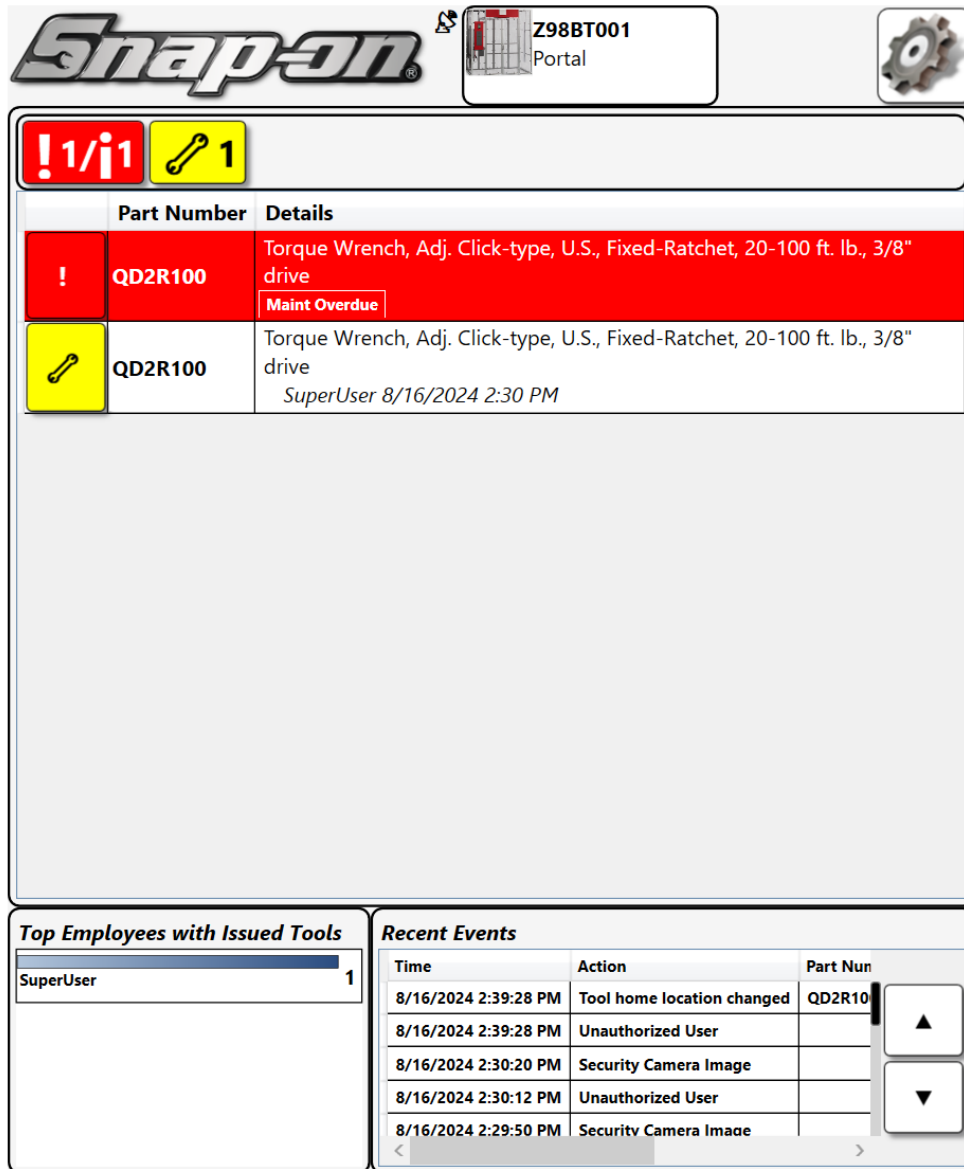
- The user selects the location of the portal to which the tool will be transferred and clicks the **Green Checkmark** button.



- The user clicks the **OK** button to finish the transfer to the portal.



- The user logs out of the crib and takes the replacement tool to the portal. The portal shows both the tool that needs maintenance and the issued tool whose home location was just changed to the portal.



The screenshot displays the Snap-on L5 Connect Portal interface. At the top, the Snap-on logo is on the left, and a user profile box shows 'Z98BT001 Portal' with a gear icon for settings. Below the header, a status bar indicates '1/i1' (information) and '1' (tool). The main content area features a table with tool details:

	Part Number	Details
!	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive Maint Overdue
🔑	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive SuperUser 8/16/2024 2:30 PM

Below the table, there are two sections: 'Top Employees with Issued Tools' and 'Recent Events'.


Top Employees with Issued Tools

Employee	Count
SuperUser	1


Recent Events


Time	Action	Part Num
8/16/2024 2:39:28 PM	Tool home location changed	QD2R100
8/16/2024 2:39:28 PM	Unauthorized User	
8/16/2024 2:30:20 PM	Security Camera Image	
8/16/2024 2:30:12 PM	Unauthorized User	
8/16/2024 2:29:50 PM	Security Camera Image	


- The user enters the portal with the replacement tool and logs in. The portal will scan for tools and detect the replacement tool.



SuperUser


Work Location
 Work Loc2








Me


All Users






Tools leaving with me




Part Number	Details
*No Items	


Tools returning to stock



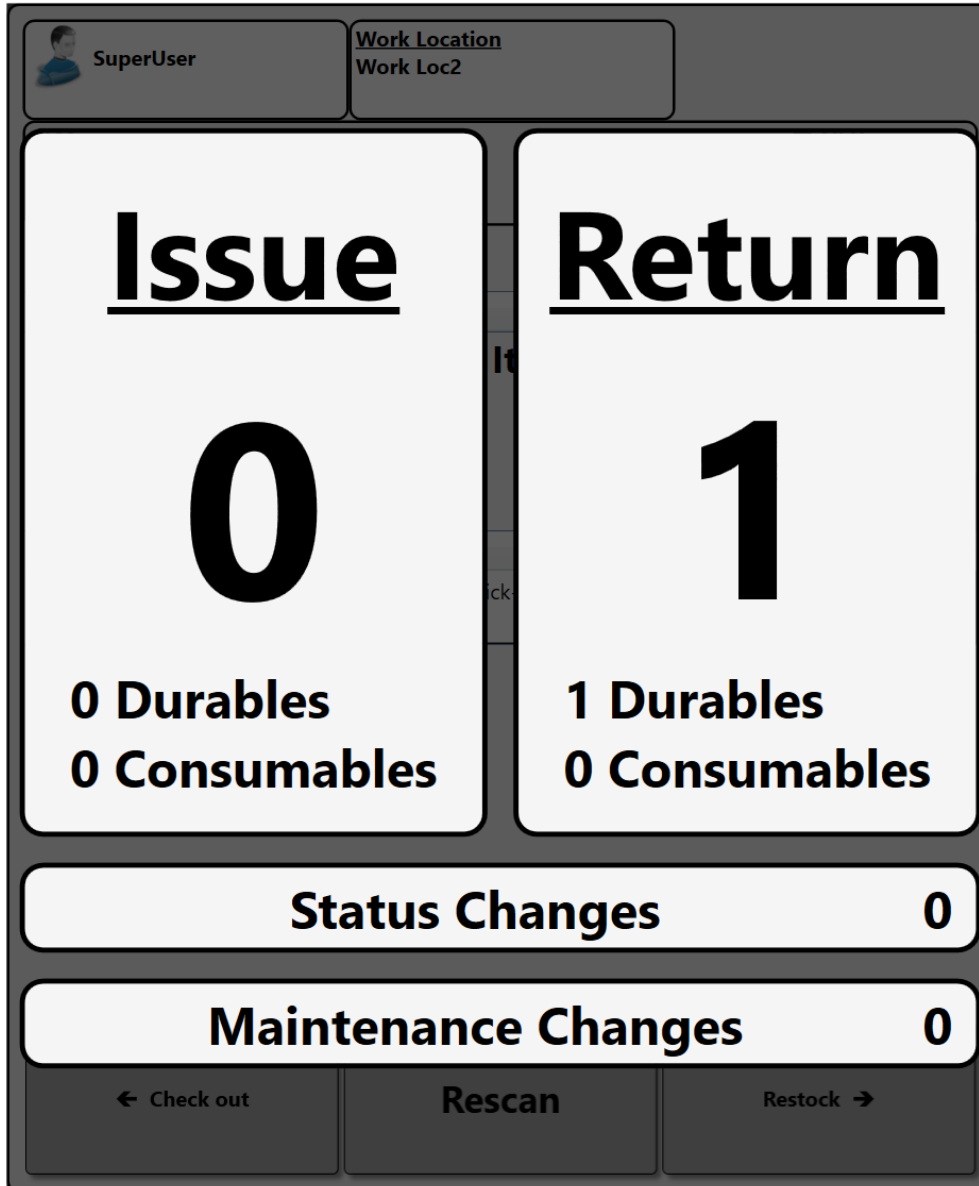
Part Number	Details
QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive


 Check out

Rescan

Restock 

7. The user clicks the **Restock** button, ends the session, and puts the replacement tool in the portal tool storage area.

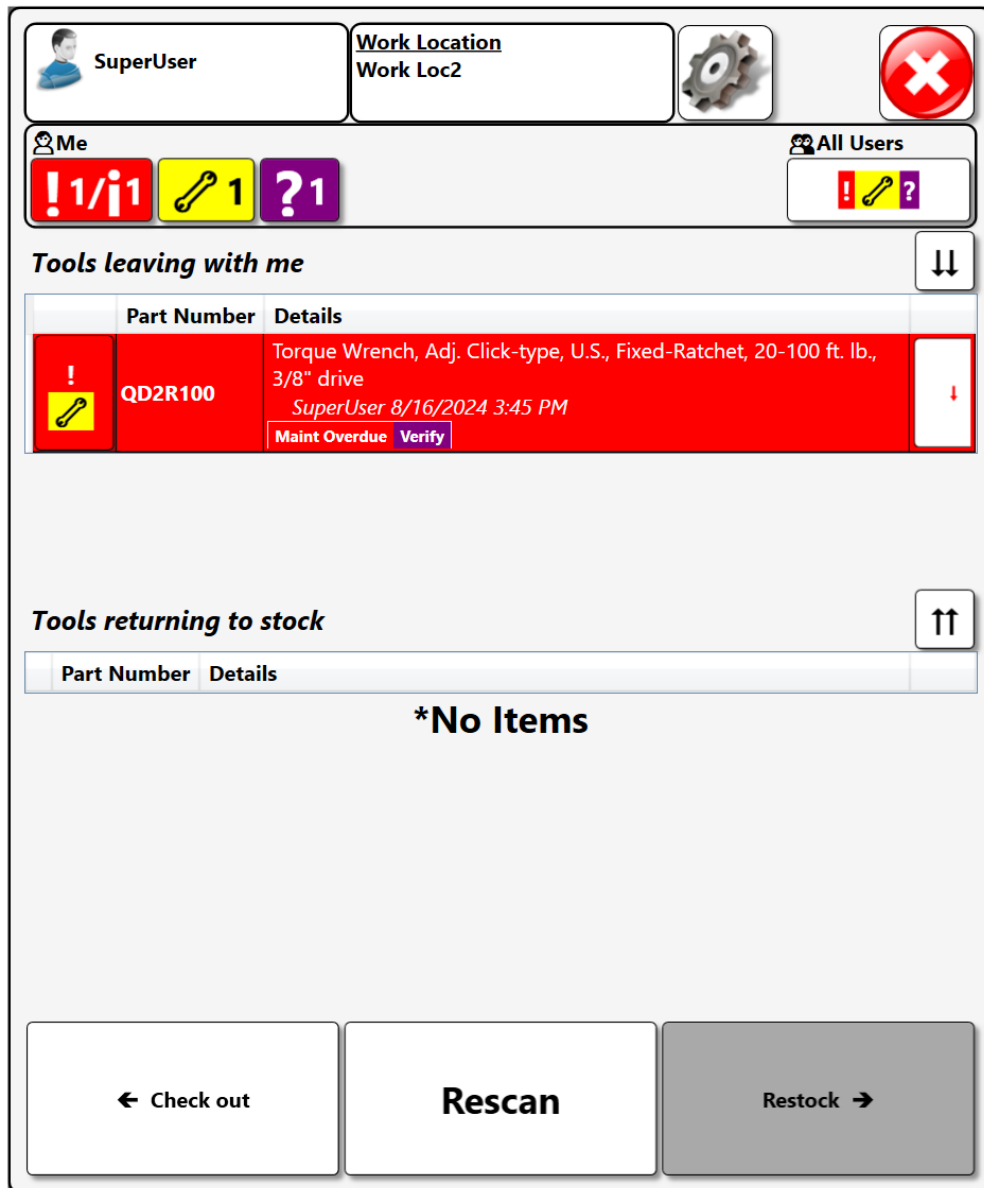


The screenshot displays the L5 Connect user interface. At the top left, a user profile for 'SuperUser' is shown. To the right, the 'Work Location' is set to 'Work Loc2'. The main area is divided into two large panels: 'Issue' on the left and 'Return' on the right. The 'Issue' panel shows a count of '0' and lists '0 Durables' and '0 Consumables'. The 'Return' panel shows a count of '1' and lists '1 Durables' and '0 Consumables'. Below these panels, there are two summary rows: 'Status Changes' with a count of '0' and 'Maintenance Changes' with a count of '0'. At the bottom, there are three buttons: '← Check out', 'Rescan', and 'Restock →'.

Category	Count
Issue	0
Return	1
Status Changes	0
Maintenance Changes	0

8. The user then retrieves the tool requiring maintenance, returns to the portal, and starts a new session which initiates a scan.

- Once the tool is shown in the **Tools leaving with me** window, the user clicks the **Check out** button and leaves the portal with the tool requiring maintenance.



Part Number	Details
QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive SuperUser 8/16/2024 3:45 PM Maint Overdue Verify

Tools returning to stock

Part Number	Details
*No Items	

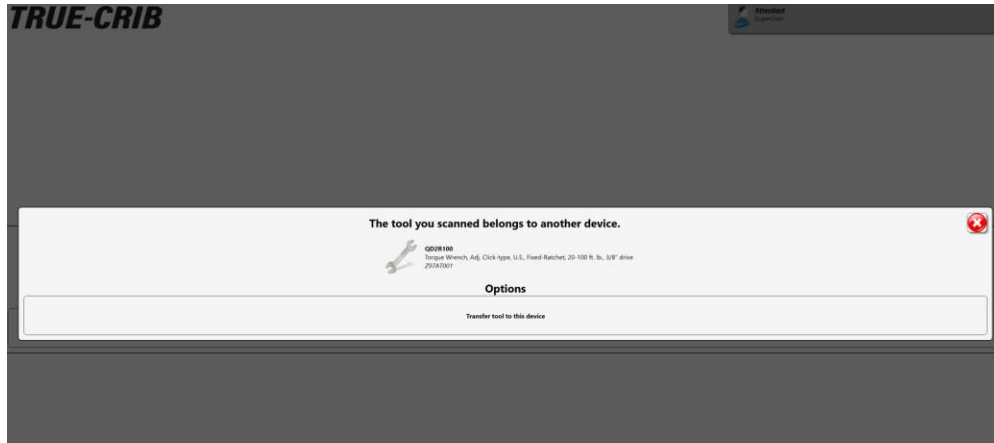
← Check out Rescan Restock →

- Notice that the tool requiring maintenance is now issued to the user but still a part of the portal inventory.

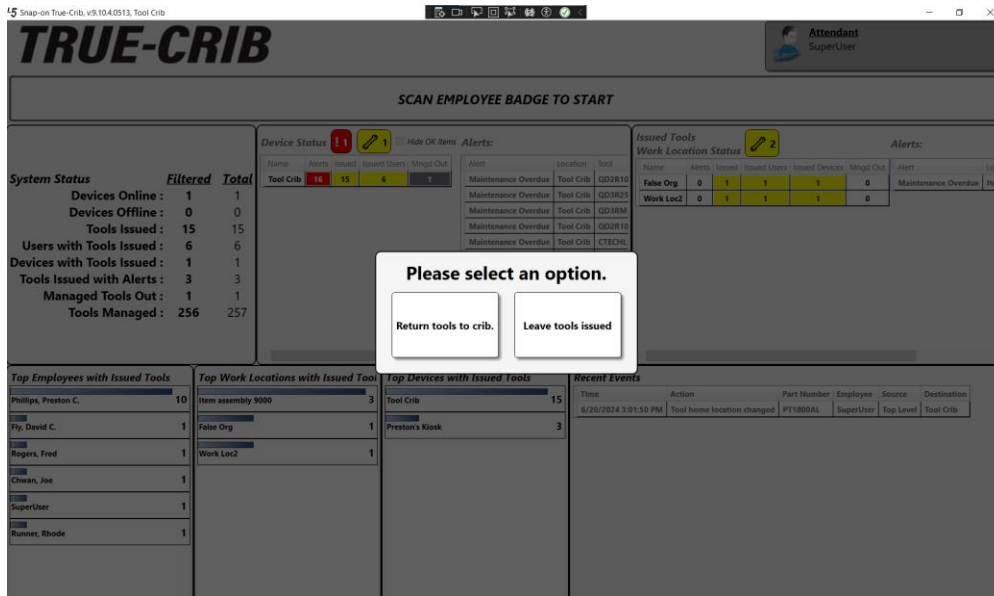
Returning Out of Calibration Tool to Crib

- The user will now return to the tool crib and login as an attendant and then scan the tool with the maintenance overdue status.

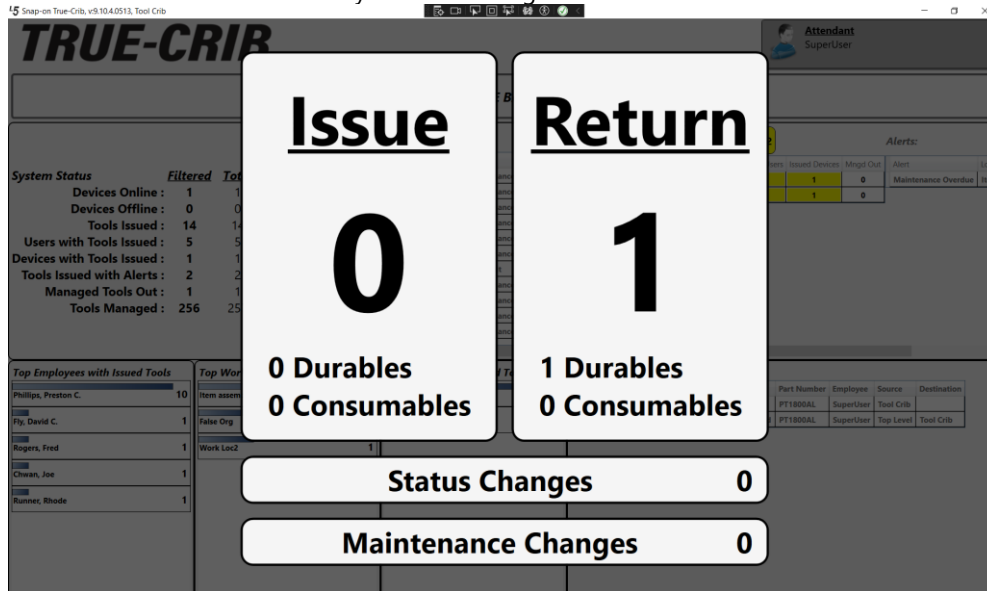
- The user then clicks the **Transfer tool to this device** button.



- The user is then prompted to choose whether the tool should be returned to the crib or left issued. The user clicks the **Return tools to crib.** button.



- The user is then shown a summary screen showing that the tool has been returned to the tool crib.



- The tool has now been moved from the original device to the tool crib. A look at the main screen of that device will confirm it is no longer a part of its inventory.

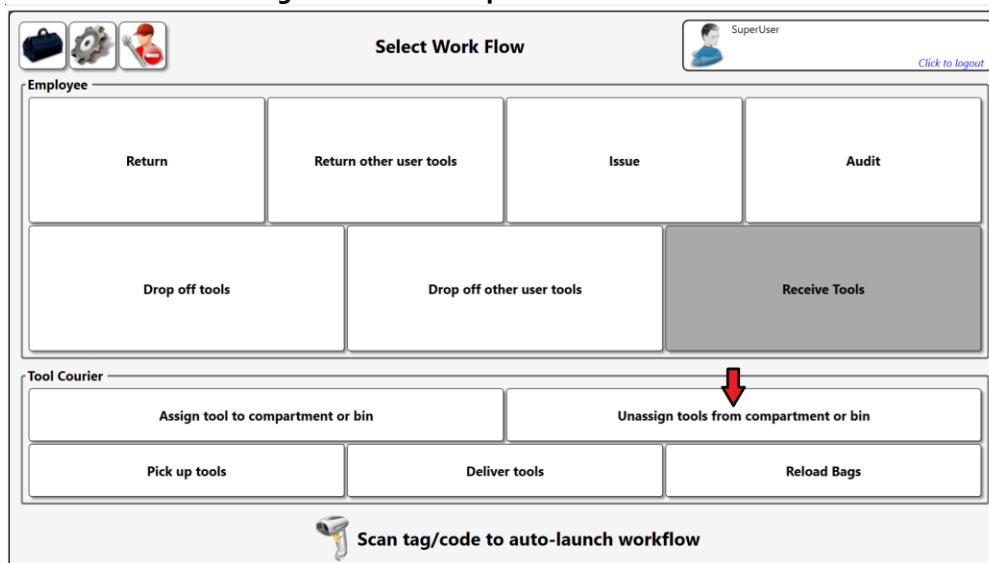
Tool Swap Process from one FlexHub to another FlexHub

The FlexHub now has enhancements that help to simplify the transfer of tools to and from it. This section will illustrate that by walking through the process of transferring a tool from one FlexHub to replace a tool in another FlexHub that needs to be calibrated.

NOTE: Both of the FlexHubs will need to be online for this process to work properly.

Removing a tool from the Donor FlexHub

1. The user scans his badge to log into the FlexHub device.
2. The user clicks the **Unassign tools from compartment or bin** button.



3. When prompted the user will click the **Transfer tools** button to confirm that the tool will be transferred to another device.



- The user will then be prompted to select the device to which the tool will be transferred. After selecting the device from the proffered list, they will click the **OK** button, which looks like a green checkmark.

Select home location

L5ConnectDev Top Level

AWS Crib

Conway Equipment

Z01HC001 Retrofit Red

Z51GP004 Red

Z64DL001 Black

TC Lab

CAB Emulator

Conway Toolnado

Kenosha Toolnado

Lock board pi NTC prototype

Portal

Tustin Toolnado

Z32B001 Blue

Z41B001 Yellow

Z52AN001 Blue

Z52BN006 Yellow

Z64DN007 Red

Z64LN005 Gen 4 Black

Z71CS001 Epiq

Z71MR001 Black

Z72LR002 Red

Z72LR002 with One Tower

ZA7CR000 with Three Towers

ZEAGT998

ZEAGT999

ZEAGU998 Red 36" (Tustin)

Z97AT001

→

✓

✗

- The user will then be prompted to select the tool or tools that are being removed. Click the red arrow button to the right of the tool which is being moved to move this tool to the **Removing** side of the screen.

Select tools to remove

Available

Part Number	Details	
QD2R1000 Door 1	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb.	→
CertToolPIN Door 2	An example tool that requires a certificate and a PIN SuperUser 5/13/2025 3:58 PM	→
CertTool Door 3	Example tool requiring a certification SuperUser 5/13/2025 3:41 PM	→
CertToolPIN Door 4	An example tool that requires a certificate and a PIN	→
CertTool Door 5	Example tool requiring a certification	→
CertToolPIN Door 6	An example tool that requires a certificate and a PIN	→
CertTool Door 7	Example tool requiring a certification	→
CertToolPIN Door 8	An example tool that requires a certificate and a PIN	→
A2A Door 9	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"	→

*Removing

Part Number	Details
-------------	---------

*Remove

- Click the **Remove** button.

Select tools to remove

Available

Part Number	Details	
CertToolPIN Door 2	An example tool that requires a certificate and a PIN SuperUser 5/13/2025 3:58 PM	+
CertTool Door 3	Example tool requiring a certification SuperUser 5/13/2025 3:41 PM	+
CertToolPIN Door 4	An example tool that requires a certificate and a PIN	+
CertTool Door 5	Example tool requiring a certification	+
CertToolPIN Door 6	An example tool that requires a certificate and a PIN	+
CertTool Door 7	Example tool requiring a certification	+
CertToolPIN Door 8	An example tool that requires a certificate and a PIN	+
AZA Door 9	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"	+

*Removing

Part Number	Details	
QD2R1000 Door 1	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive	+

↓

*Remove

- The user will then be prompted to remove the tool from the FlexHub and close the door.

QD2R1000

Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive

Door 1

Remove the tool. Close the door

1	2
3	4
5	6
7	8
9	10
11	12 TAGS / BAGS

Z97AT001 sw:9.15.1.0722 7/23/2025 21:01:07 (UTC)

- The user is logged out and the summary screen is displayed. This will complete the removal of the tool from the donor FlexHub. This will also transfer the home location of the tool to the FlexHub device that was

selected during the process in step 4.

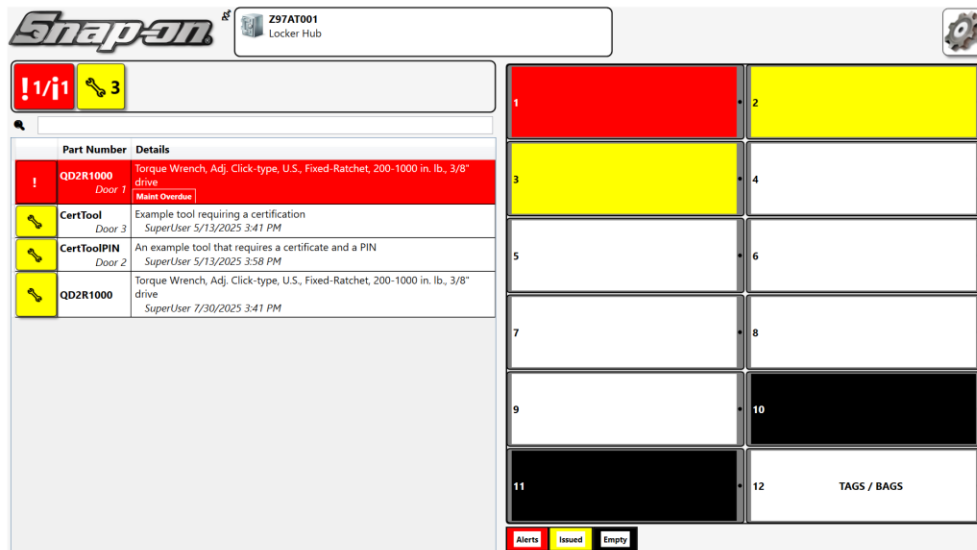
Tool: Transfer - Z97AT001 => ZA7BT000 with One Tower

Finished
Requesting: TC Lab => ZA7BT000 with One Tower
Releasing: Z97AT001 => TC Lab
Start

CONTINUE	Transfer	Removed	Issued	LOGOUT
	1	1	1	
	Status Changes 0			
Maintenance Changes 0			0	

Swapping the Tools

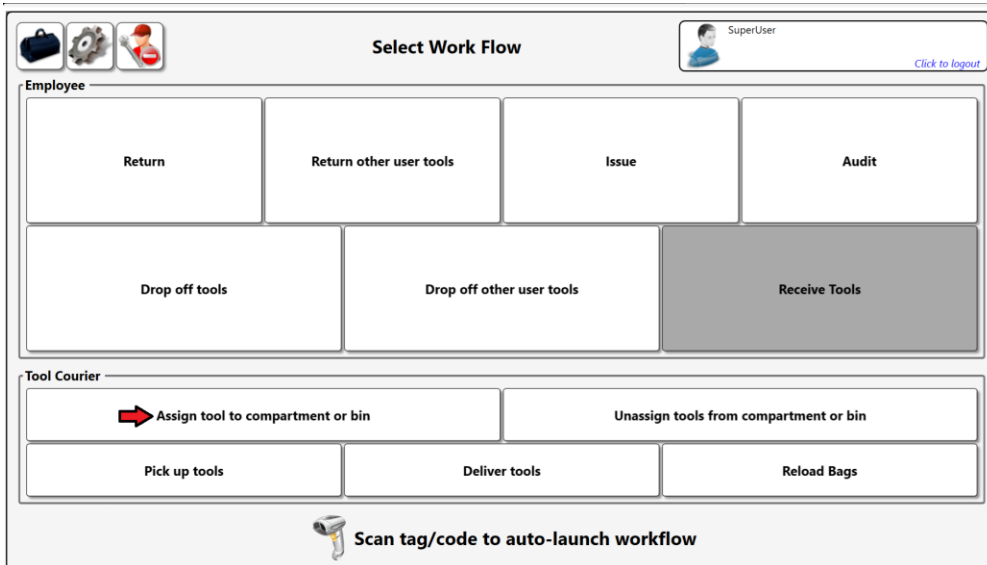
- The user will go to the FlexHub containing the tool that needs replacement and scan their badge to login.



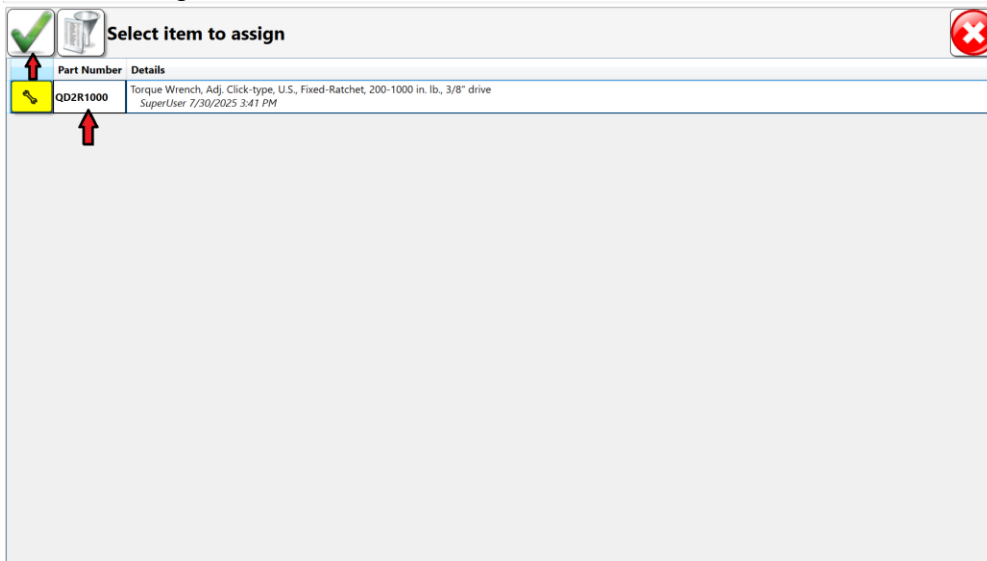
The interface shows a Snap-on logo and a Z97AT001 Locker Hub header. Below the header is a table with 12 slots for tool status. The first slot (1) is red and contains a warning icon and the number 3. The second slot (2) is yellow. The third slot (3) is yellow. The fourth slot (4) is white. The fifth slot (5) is white. The sixth slot (6) is white. The seventh slot (7) is white. The eighth slot (8) is white. The ninth slot (9) is white. The tenth slot (10) is black. The eleventh slot (11) is black. The twelfth slot (12) is white and contains the text 'TAGS / BAGS'. Below the table are three buttons: Alerts, Issued, and Empty.

Part Number	Details
QD2R1000 Door 1	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive Maint Overdue
CertTool Door 3	Example tool requiring a certification SuperUser 5/13/2025 3:41 PM
CertToolPIN Door 2	An example tool that requires a certificate and a PIN SuperUser 5/13/2025 3:58 PM
QD2R1000	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive SuperUser 7/30/2025 3:41 PM

- Then he either scans the barcode of the new tool or clicks the **Assign tool to compartment or bin** button to initiate the transfer.



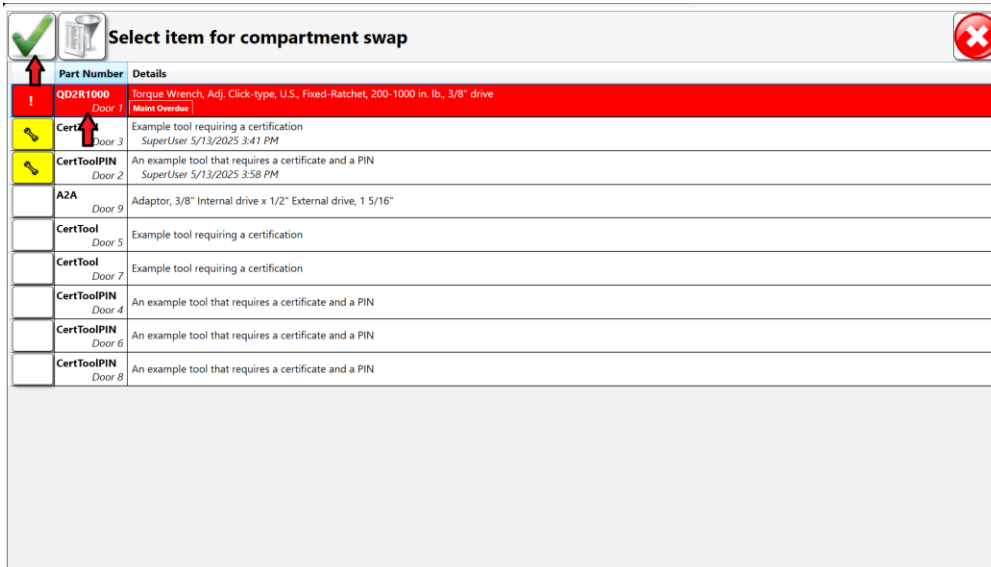
- The user will then select the new tool to replace the tool in need of calibration and then click the **OK** button that looks like a green checkmark.



- When asked how he would like to select the new compartment for the item, he will click the **Pick a tool to swap** button.

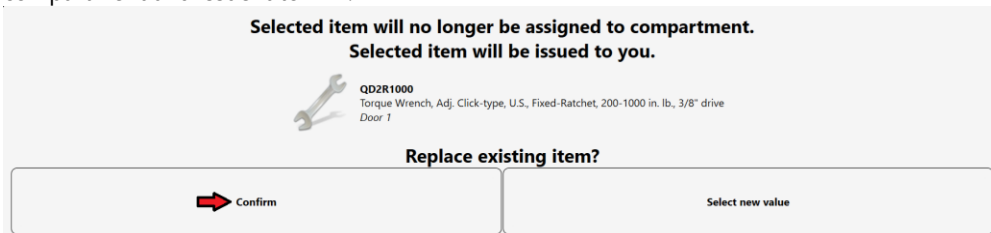


- He then selects the tool in need of replacement and then clicks the **OK** button that looks like a green checkmark.




Part Number	Details
QD2R1000 Door 1	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive Maint Overdue
CertTool Door 3	Example tool requiring a certification SuperUser 5/13/2025 3:41 PM
CertToolPIN Door 2	An example tool that requires a certificate and a PIN SuperUser 5/13/2025 3:58 PM
A2A Door 9	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"
CertTool Door 5	Example tool requiring a certification
CertTool Door 7	Example tool requiring a certification
CertToolPIN Door 4	An example tool that requires a certificate and a PIN
CertToolPIN Door 6	An example tool that requires a certificate and a PIN
CertToolPIN Door 8	An example tool that requires a certificate and a PIN


- He will then click the **Confirm** button when prompted to make sure he wants to remove the tool from the compartment and issue it to him.



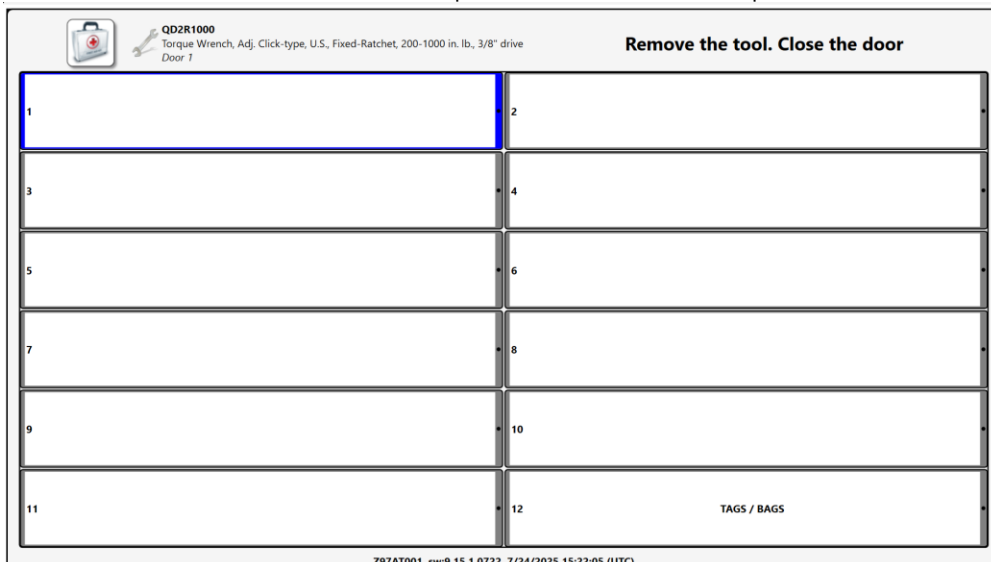
Selected item will no longer be assigned to compartment.
Selected item will be issued to you.


 **QD2R1000**
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive
Door 1

Replace existing item?

 Confirm Select new value

- He will then remove the tool from the compartment and close the compartment door.




 **QD2R1000**
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive
Door 1

Remove the tool. Close the door

1	2
3	4
5	6
7	8
9	10
11	12 TAGS / BAGS

Z97AT001 sw:9.15.1.0722 7/24/2025 15:22:05 (UTC)

8. He will then load the new tool into the compartment and close the door when prompted.












QD2R1000
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive

Load new inventory and then close the door.
Select Tool Not Available from diagnostics menu to skip this step.

1	2
3	4
5	6
7	8
9	10
11	12 TAGS / BAGS

Z97AT001 sw:9.15.1.0722 7/24/2025 15:02:59 (UTC)

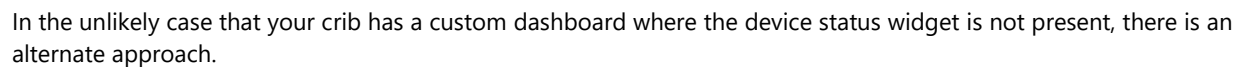
9. A look at the inventory for this FlexHub now shows that the new tool is located in the compartment and the tool in need of calibration is now issued to the user.

Inventory	
Part Number	Details
 QD2R1000	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive SuperUser 7/24/2025 10:02 AM Maint Overdue
 CertTool Door 3	Example tool requiring a certification SuperUser 5/13/2025 3:41 PM
 CertToolPIN Door 2	An example tool that requires a certificate and a PIN SuperUser 5/13/2025 3:58 PM
AZA Door 9	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"
 CertTool Door 5	Example tool requiring a certification
 CertTool Door 7	Example tool requiring a certification
 CertToolPIN Door 4	An example tool that requires a certificate and a PIN
 CertToolPIN Door 6	An example tool that requires a certificate and a PIN
 CertToolPIN Door 8	An example tool that requires a certificate and a PIN
 QD2R1000 Door 1	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive



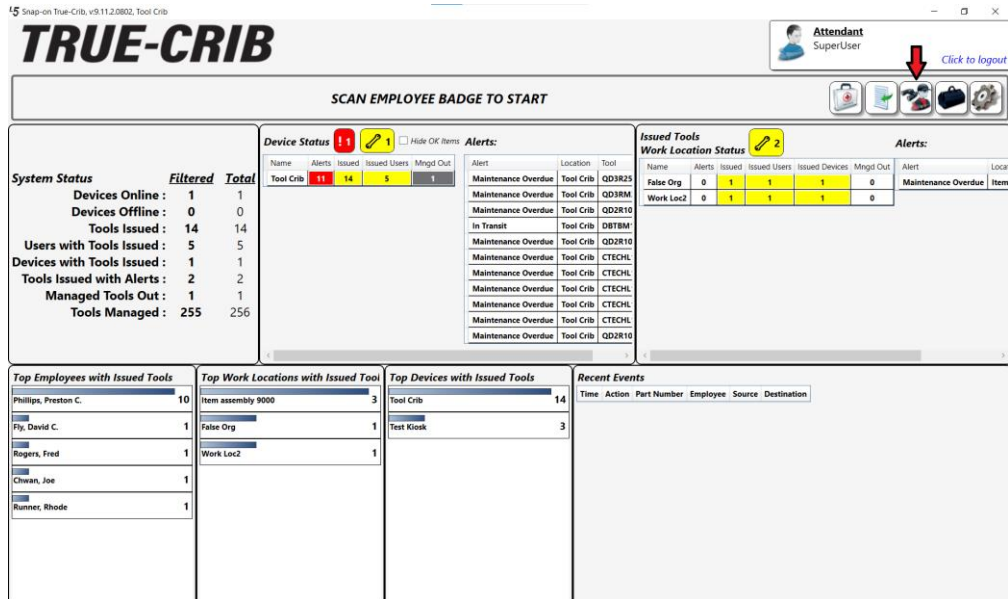
Sometimes a tool may be broken and need to be scrapped and replaced. To accomplish this in the L5 Connect system a tool needs to be **deactivated**. The process will prevent the tool from showing up in inventory or being issued, but all its history will still be available.

- ^{L5} Snap-on True-Crib, v:9.11.2.0802, Tool Crib



- Page 375 of 700
-
- 5 December 2025

- The user clicks the **Administration Mode** button and enters admin credentials.



TRUE-CRIB

Attendant SuperUser [Click to logout](#)

SCAN EMPLOYEE BADGE TO START

System Status

Filtered	Total
Devices Online : 1	1
Devices Offline : 0	0
Tools Issued : 14	14
Users with Tools Issued : 5	5
Devices with Tools Issued : 1	1
Tools Issued with Alerts : 2	2
Managed Tools Out : 1	1
Tools Managed : 255	256

Device Status

Name	Alerts	Issued	Issued Users	Mngtd Out
Tool Crib	11	14	5	1

Alerts:

Alert	Location	Tool
Maintenance Overdue	Tool Crib	QD3R25
Maintenance Overdue	Tool Crib	QD3R25
Maintenance Overdue	Tool Crib	QD3R10
In Transit	Tool Crib	QD3R10
Maintenance Overdue	Tool Crib	QD3R10
Maintenance Overdue	Tool Crib	CTECHL
Maintenance Overdue	Tool Crib	CTECHL
Maintenance Overdue	Tool Crib	CTECHL
Maintenance Overdue	Tool Crib	CTECHL
Maintenance Overdue	Tool Crib	CTECHL
Maintenance Overdue	Tool Crib	QD3R10

Issued Tools

Name	Alerts	Issued	Issued Users	Issued Devices	Mngtd Out
False Org	0	1	1	1	0
Work Loc2	0	1	1	1	0

Alerts:

Alert	Location	Item
Maintenance Overdue	Tool Crib	QD3R10

Top Employees with Issued Tools

Employee	Count
Phillips, Preston C.	10
Fly, David C.	1
Rogers, Fred	1
Chen, Joe	1
Bunnet, Rhode	1

Top Work Locations with Issued Tools

Location	Count
Item assembly 9000	3
False Org	1
Work Loc2	1

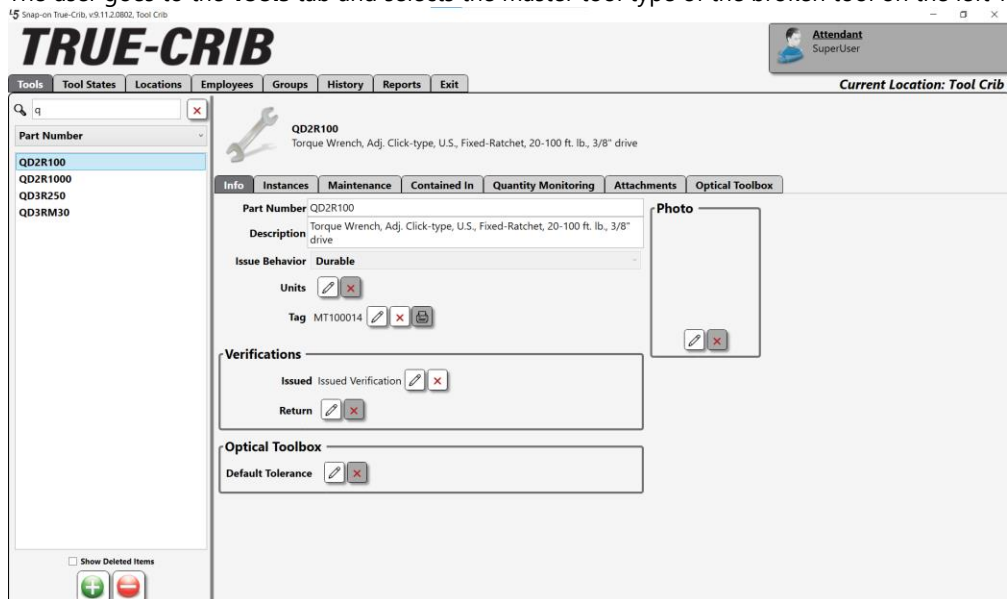
Top Devices with Issued Tools

Device	Count
Tool Crib	14
Test Kiosk	3

Recent Events

Time	Action	Part Number	Employee	Source	Destination
------	--------	-------------	----------	--------	-------------

- The user goes to the **Tools** tab and selects the master tool type of the broken tool on the left-hand side.



TRUE-CRIB

Attendant SuperUser

Current Location: Tool Crib

Tools | Tool States | Locations | Employees | Groups | History | Reports | Exit

Part Number

- QD2R100
- QD2R1000
- QD3R250
- QD3RM30

QD2R100
Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive

Info | Instances | Maintenance | Contained In | Quantity Monitoring | Attachments | Optical Toolbox

Part Number QD2R100

Description Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive

Issue Behavior Durable

Units [Edit] [X]

Tag MT100014 [Edit] [X] [Add]

Verifications

Issued [Edit] [X]

Issued Verification [Edit] [X]

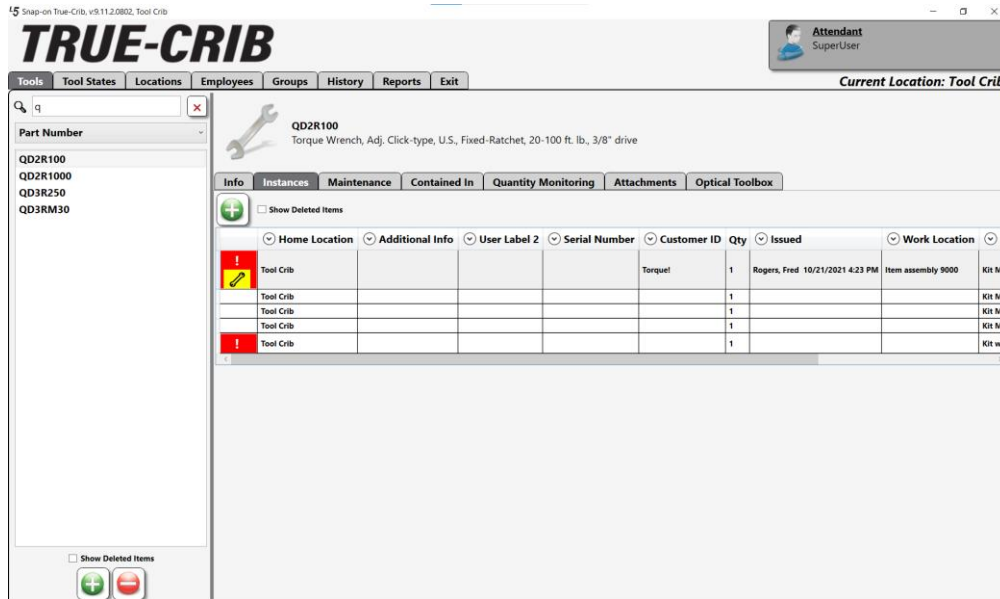
Return [Edit] [X]

Optical Toolbox

Default Tolerance [Edit] [X]

☐ Show Deleted Items

- The user clicks the **Instances** sub-tab.



- The user finds the instance of the tool type that needs to be deactivated and right clicks it to bring up the context menu. Then the user clicks the **Deactivate** option.



- The tool is now deactivated but will still show up in the history tab or reports.




L5 Connect User Manual


Tool Display Formatting


Tool Display Formatting controls the appearance of tool data on device controls. A tool's "extended" information can be added to most device displays in the L5 Connect System. For example, a tool's Serial Number can be added to the "Primary" and/or "Details" columns as shown below. Any changes made to the "Primary" or "Details" columns will be reflected in the headers of the columns, with the value chosen by the user automatically input into the column headers. **Note: Changes will have system wide effects.**


Required Permissions:













- Admin Client Access Edit
- SystemConfigEdit









**Z97BB012**
Tool Kiosk

i6 11



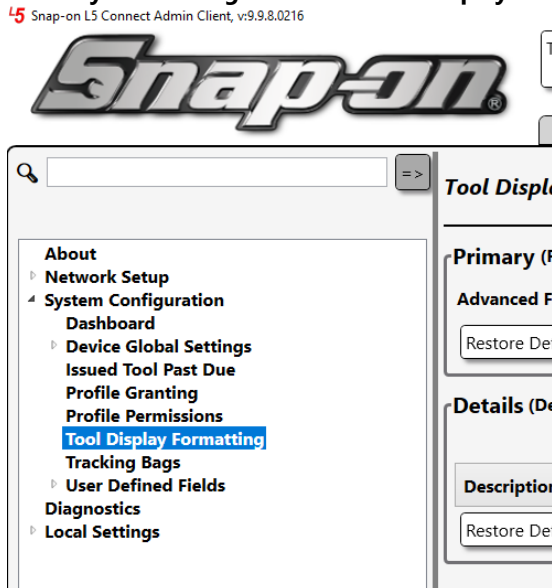
	Part Number Serial Number	Details	
	NT001 Serial#	Allen Wrench Set SuperUser 12/22/2023 9:07 AM, In In Trans	
	434HDC Serial#434HDC-1 Door 11	3/4" DR SET w/CASE & FOAM Socket, Sue 3/7/2024 2:13 PM	
	ATI590L Serial#ATI590L-01 Door 5	Kit - Rivet shaver Socket, Sue 3/7/2024 2:13 PM	
	CTECH4R600A Serial#TW-0001 Door 6	600 ft. lb. torque wrench Socket, Sue 3/7/2024 2:13 PM	
	CTECH4R600A Serial#TW-0002 Door 17	600 ft. lb. torque wrench Socket, Sue 3/7/2024 2:13 PM	
	CTECH4R600A Serial#TW-0003 Door 16	600 ft. lb. torque wrench Socket, Sue 3/7/2024 2:13 PM	

	434HDC Serial#434HDC-1 Door 11	3/4" DR SET w/CASE & FOAM; 434HDC-1	
	CTECH4R600A Serial#TW-0001 Door 6	600 ft. lb. torque wrench; TW-0001	

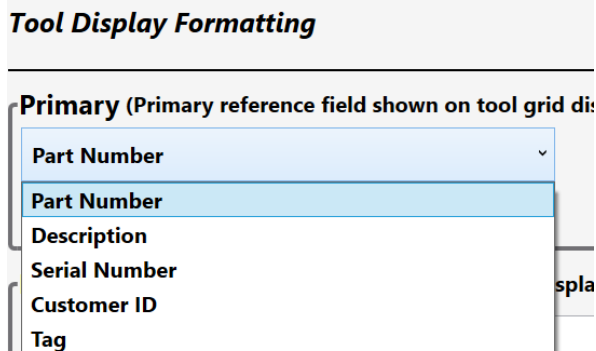
Tools leaving with me			
	Part Number Serial Number	Details	
	CTECH4R600A Serial#TW-0002	600 ft. lb. torque wrench Socket, Sue 3/7/2024 4:28 PM	

Setup Tool Display Formatting

1. To begin, select the **Settings** Tab on the Admin Client
2. Select **System Configuration => Tool Display Formatting** from the list of choices on the left



3. Primary – This is the column that displays the tool's part number by default.
 - a. The value can be changed from default by using the drop-down menu shown below.



- b. Multiple values can be displayed simultaneously by entering "Advanced Mode". Hover over the Advanced Formatting field to see a list of available values and their required formatting. Any desired labels can also be

added as shown below. For example, if you want to display a tools part number and the serial number below it, then you would type the following.

Tool Display Formatting





Primary (Primary reference field shown on tool)

Advanced Formatting:

Details (Detailed information shown on tool)

- \n - New Line
- {0} - Part Number
- {1} - Description
- {2} - Serial Number
- {3} - Customer ID
- {4} - Tag
- {u2} - UDFText
- {u3} - UDFNum
- {u4} - UDFDec
- {u5} - UDFDate
- {u6} - UDFCheck

This information will be displayed on the ATC device as shown below.

	Part Number Serial Number	Details	
	NT001	Allen Wrench Set SuperUser 12/22/2023 9:07 AM, In Transit In Trans	↑
	ATI590L ATI590L-01 Door 5	Kit - Rivet shaver Socket, Sue 3/7/2024 2:13 PM	
	CTECH4R600A TW-0002 Door 17	600 ft. lb. torque wrench Socket, Sue 3/7/2024 2:13 PM	▲
	CTECH4R600A TW-0003 Door 16	600 ft. lb. torque wrench Socket, Sue 3/7/2024 2:13 PM	




You can also add custom text using the advanced formatting option. If you want to display the part number and serial number, you can add a text to distinguish between the two like the example shown below.

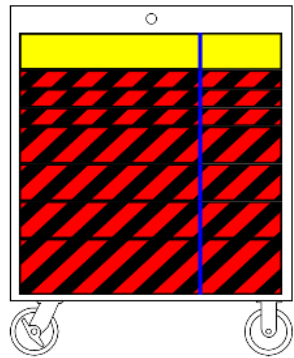
Tool Display Formatting

Primary (Primary reference field shown on tool)

Advanced Formatting:

The information will be displayed on the ATC device like shown below.

	Part Number Serial Number	Details
	A2A Serial#AZ-0200 <i>Dwr 1</i>	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" <i>Socket, Sue 3/7/2024 4:02 PM</i>
	FRHM18 Serial#TW-0002 <i>Dwr 1</i>	Wrench, Metric, Crowfoot, Flare Nut, 18 mm, 6-Point <i>Socket, Sue 3/7/2024 4:02 PM</i>
	TMM10 Serial#AW-0001 <i>Dwr 1</i>	Socket, Metric, Shallow, 10 mm, 6-Point <i>Socket, Sue 3/7/2024 4:02 PM</i>



4. Details

a. Up to three values can be displayed in the "Details" field in the "Simple" mode. Click the **"plus"** to add a field and the red **X** to remove a field.

Details (Detailed information shown on tool grid displays)

X
+

Description
Customer ID

Restore Default
Advanced Mode

b. Additionally, Advanced Mode is available for Details and uses the same formatting as the Primary (Please see the above section for formatting).

Details (Detailed information shown on tool grid displays)

Advanced Formatting: {1};{3}

Restore Default

- \n - New Line
- {0} - Part Number
- {1} - Description
- {2} - Serial Number
- {3} - Customer ID
- {4} - Tag
- {u2} - UDFText
- {u3} - UDFNum
- {u4} - UDFDec
- {u5} - UDFDate
- {u6} - UDFCheck

Tool Display **controls the app**

- When all the desired formatting changes have been made, click the **Save** button in the upper right corner to commit.
- The changes will automatically be pushed to all devices in the system. **Note: a restart of the User Interface may be required before the displays will update.**



L5 Connect User Manual

Tool Quantity Monitoring

When you have a consumable, you need to keep track of the inventory and know when to restock and reorder. You can do this with Quantity Monitoring, which is customizable and can be set anywhere in the location tree to monitor a specific tool. When you set a monitor, it applies to the current Location it is set at and any sub-locations below it.

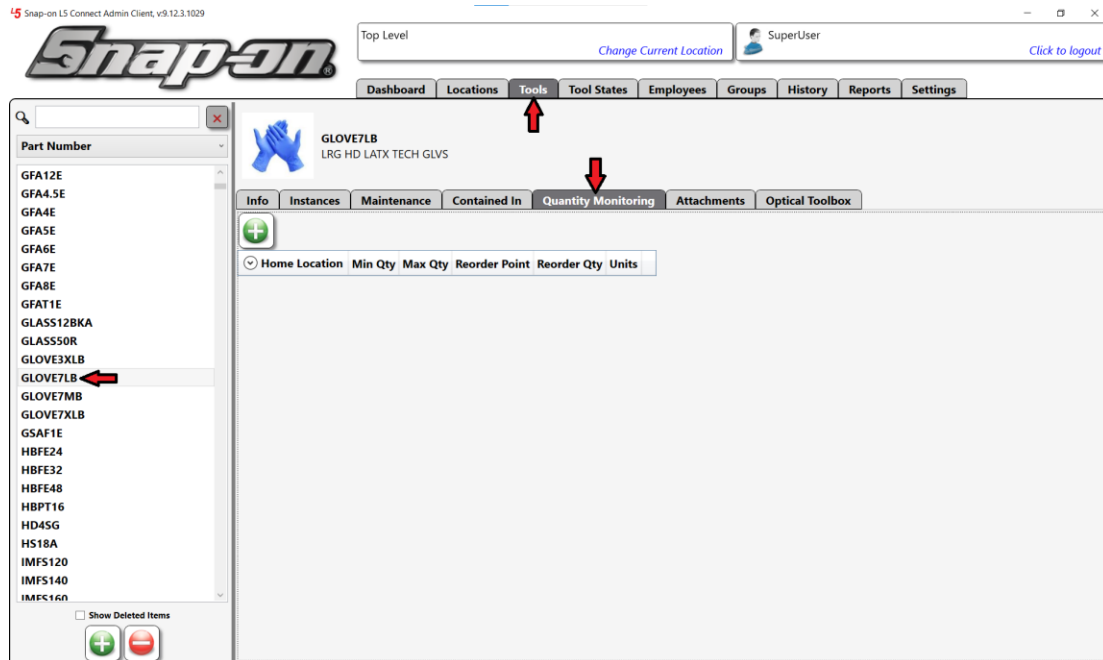
There are two types of Monitors:

- **MIN/MAX** – This Monitor keeps track of the total available inventory. When the count falls below the MIN value, it shows up in the RESTOCK REPORT. This Monitor is typically set at the Device level.
- **REORDER** – This Monitor keeps track of the total available inventory as well. When the count falls below the Reorder Point value, it shows up in the REORDER REPORT. This Monitor is typically set at the Organization Level.

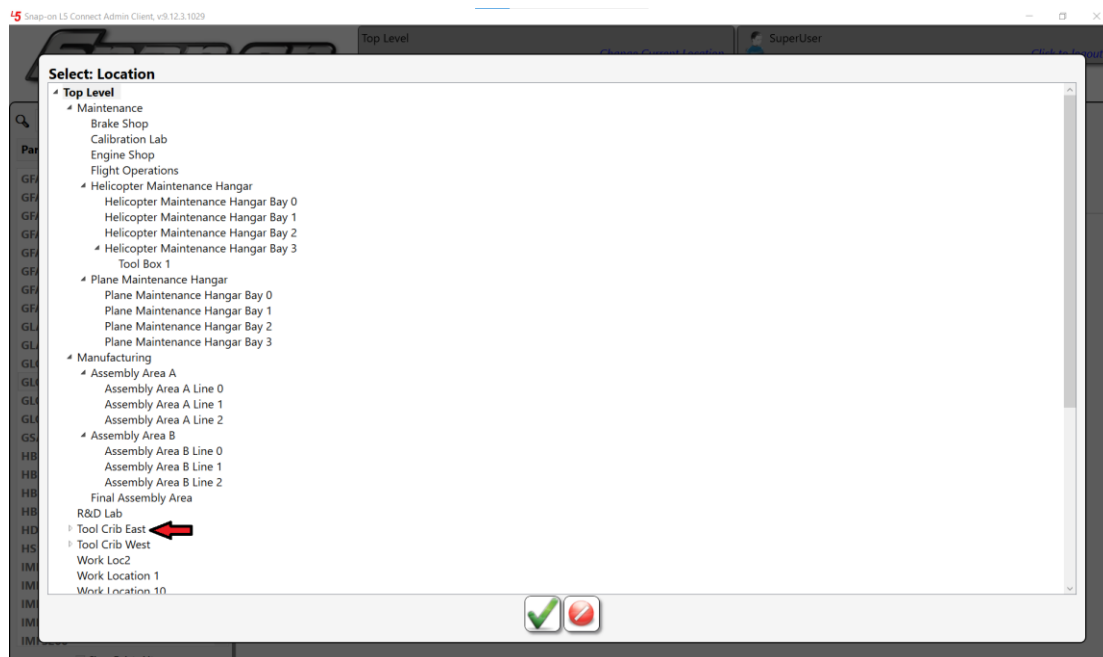
You can create a monitor from either the Tools Tab or the Locations Tab of the Admin Client.

Creating a Monitor from the Tools Tab

In the admin application, open the **Tools** tab and select a consumable tool, then select the Quantity Monitoring Tab.



Click the green **New** button and select the location where you want this Monitor to reside. Here you are creating a restock monitor so you will select the **Tool Crib East** location.







L5 Connect User Manual

Click the green checkmark **OK** button. You are now presented with the Monitor Properties dialog.

GLOVE7LB (Top Level)



Min Qty		1 Pair
Max Qty		1 Pair
Reorder Point		1 Pair
Reorder Qty		1 Pair

Since you are creating a restock monitor, you need to define the **Min Qty** and **Max Qty** values. These are latex gloves, so you want to have at least 50 pairs and should have no more than 250 at this Location. So, you would set the values like this.

GLOVE7LB (Top Level)

Min Qty	50	1 Pair
Max Qty	250	1 Pair
Reorder Point		1 Pair
Reorder Qty		1 Pair

Click the blue **Save** button to save the Monitor. Then click the blue **Save** button to save the tool.



Snap-on L5 Connect Admin Client, v8.12.3.1029

Snap-on


Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

GLOVE7LB
LRG HD LATEX TECH GLVS

Info Instances Maintenance Contained In Quantity Monitoring Attachments Optical Toolbox

 Home Location

Min Qty	Max Qty	Reorder Point	Reorder Qty	Units
50.00	250.00			1 Pair

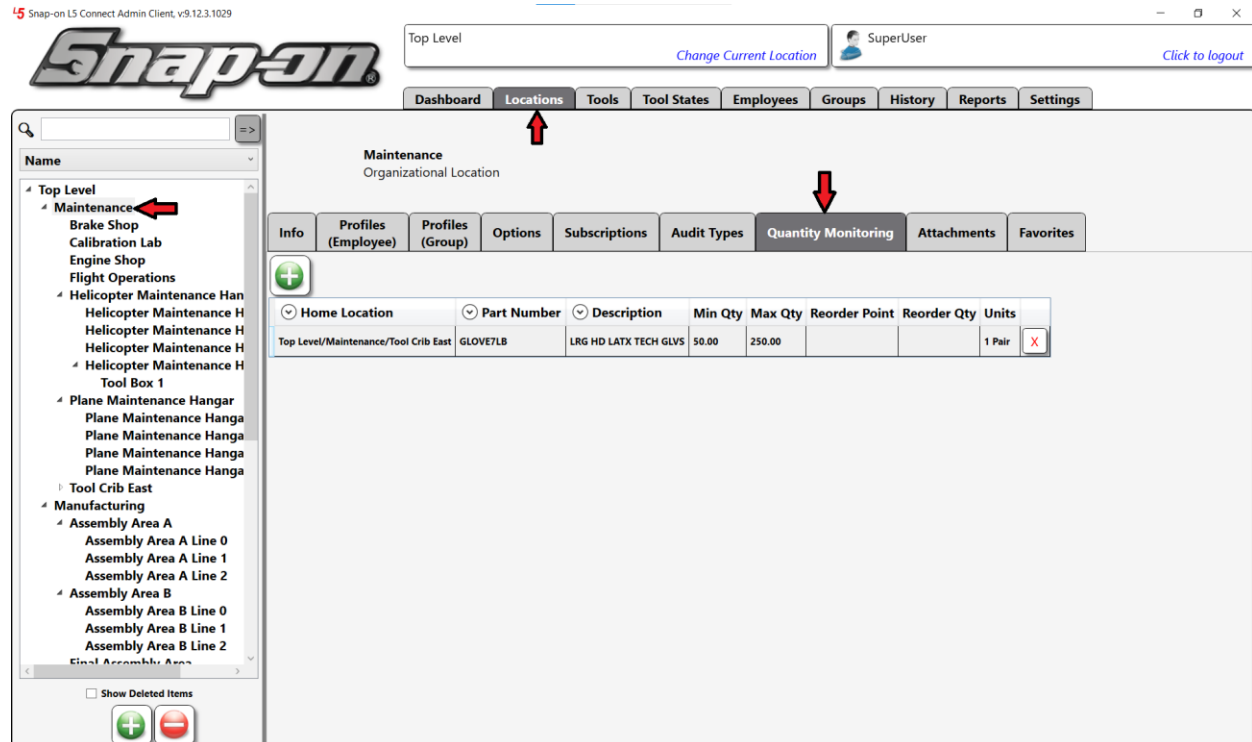
Top Level/Maintenance/Tool Crib East

Show Deleted Items

Creating a Monitor from the Locations Tab

Now that you have a monitor set for restocking, let's create another one for reordering when inventory gets low. You set this at the organizational level so that the monitor can see the inventory levels of all sub-locations.

Open the **Locations** tab, select the **Maintenance** location, and then go to the Quantity Monitoring tab.



Top Level Change Current Location SuperUser Click to logout

Dashboard **Locations** Tools Tool States Employees Groups History Reports Settings

Maintenance
Organizational Location

Info Profiles (Employee) Profiles (Group) Options Subscriptions Audit Types **Quantity Monitoring** Attachments Favorites

Home Location	Part Number	Description	Min Qty	Max Qty	Reorder Point	Reorder Qty	Units
Top Level/Maintenance/Tool Crib East	GLOVE7LB	LRG HD LATX TECH GLVS	50.00	250.00			1 Pair

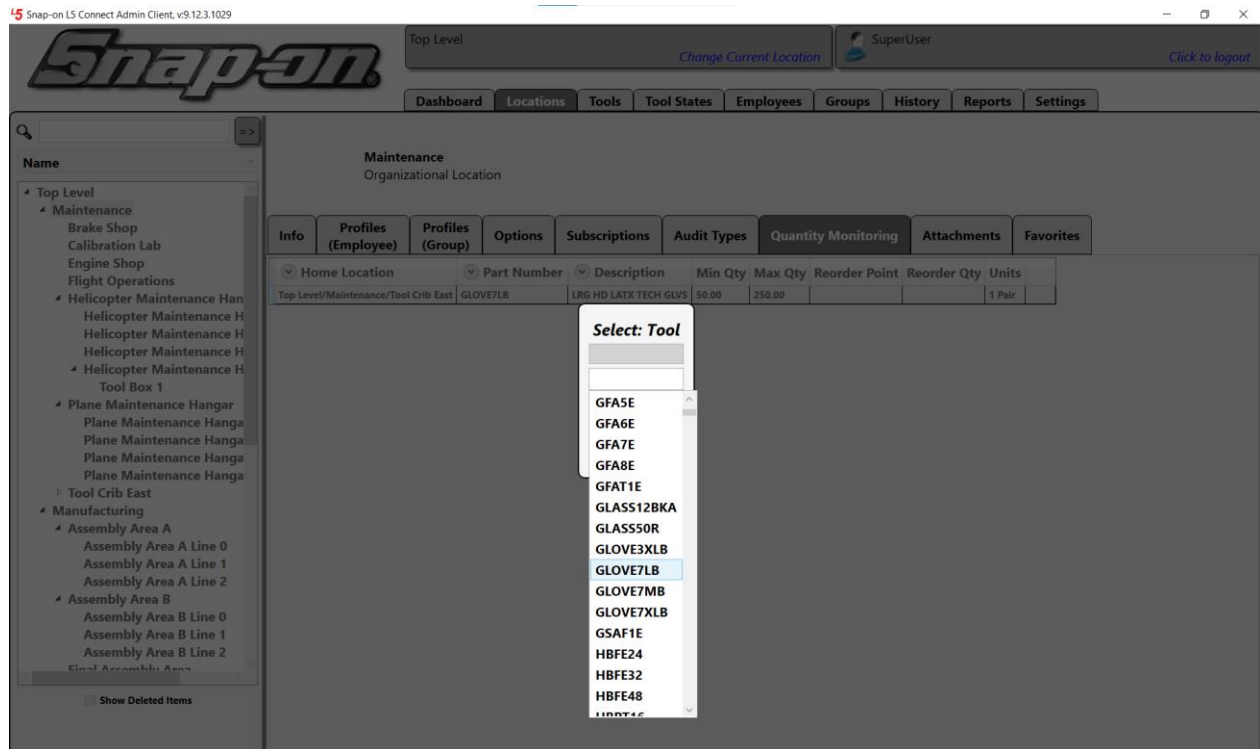
You can see the Monitor you have already created because it is a child location to the one you have selected. You will again click on the green **New** button. This time you are asked to select a tool.





L5 Connect User Manual



Move your mouse to the White Space and select the **GLOVE7XLB** tool.



You are presented with the monitor properties screen again. This time you will set the **Reorder Point** and **Reorder Qty** values. Say that if you have less than 500 pairs of gloves, you will reorder 2000.

GLOVE7LB (Top Level/Maintenance)

Min Qty	<input type="text"/>	1 Pair
Max Qty	<input type="text"/>	1 Pair
Reorder Point	<input type="text" value="500"/>	1 Pair
Reorder Qty	<input type="text" value="2000"/>	1 Pair



L5 Connect User Manual

Click the blue **Save** button to save the Monitor. Then click the blue **Save** button to save the tool.

Snap-on L5 Connect Admin Client, v9.12.3.1029

Snap-on Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

Maintenance
Organizational Location

Info Profiles (Employee) Profiles (Group) Options Subscriptions Audit Types **Quantity Monitoring** Attachments Favorites

Home Location **Part Number** **Description** **Min Qty** **Max Qty** **Reorder Point** **Reorder Qty** **Units**

Top Level/Maintenance/Tool Crib East	GLOVE7LB	LRG HD LATX TECH GLVS	50.00	250.00				1 Pair	X
Top Level/Maintenance	GLOVE7LB	LRG HD LATX TECH GLVS			500	2000		1 Pair	

You now have two monitors set to tell you if you need to restock or reorder this specific part when inventory runs too low.

Deleting a Monitor

If you want to remove a Monitor, select that monitor and then click on the **Delete** button at the end of the monitor's row.

5 Snap-on L5 Connect Admin Client, v9.12.3.1029

Snap-on Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

Maintenance
Organizational Location

Info Profiles (Employee) Profiles (Group) Options Subscriptions Audit Types **Quantity Monitoring** Attachments Favorites

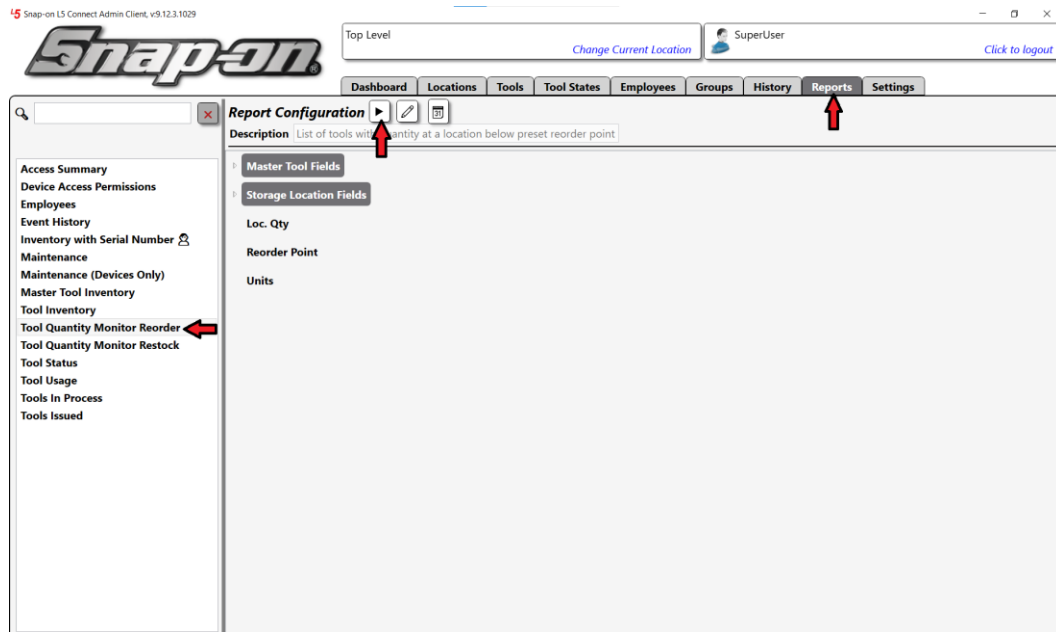
Home Location	Part Number	Description	Min Qty	Max Qty	Reorder Point	Reorder Qty	Units	
Top Level/Maintenance	GLOVE7LB	LRG HD LATX TECH GLVS			500.00	2000.00	1 Pair	
Top Level/Maintenance/Tool Crib East	GLOVE7LB	LRG HD LATX TECH GLVS	50.00	250.00			1 Pair	X

Then click the blue **Save** button to save the change.

Quantity Monitoring Reports

There are two built-in reports that can be run to help with monitoring your tool quantities. There is a **Tool Quantity Monitor Reorder** report and a **Tool Quantity Monitor Restock** report.

You can run these reports by going to the **Reports** tab, selecting the desired report, and clicking the **Run** button.



If you run the reorder report, you will see that the gloves show up because the current quantity is below the reorder point. This would allow you to see all the different consumables you need to reorder in one place.



L5 Connect User Manual

Tool Quantity Monitor Reorder

Filtering

Sticky Filters: Location = Top Level
Run Time: 11/1/2024 10:51 AM : Central Standard Time

☐ Auto-Refresh

Xlsx

Part Number	Description	Storage Location Name	Loc. Qty	Reorder Point	Units
GLOVE7LB	LRG HD LATX TECH GLVS	Top Level/Maintenance	10.00	500.00	1 Pair

If you run the restock report, you will see that since the quantity of gloves is below the minimum quantity, the gloves show up as needing to be restocked. This report lets you quickly see which consumables in your system need to be restocked.

Tool Quantity Monitor Restock

Filtering

Sticky Filters: Location = Top Level
Run Time: 11/1/2024 10:56 AM : Central Standard Time

☐ Auto-Refresh

Xlsx

Part Number	Description	Storage Location Name	Loc. Qty	Min Qty	Units
GLOVE7LB	LRG HD LATX TECH GLVS	Top Level/Maintenance/Tool Crib East	10.00	50.00	1 Pair



L5 Connect User Manual

Importing Updates



L5 Connect User Manual

Importing Updates to Existing Tool Instances

This document will explain how you can update multiple tools at once by using the new **Tool Field Updater** feature of the Admin application. The tools need to be existing tool instances in the L5 Connect system. You will also need an Excel spreadsheet with the new tool field values to import.

Multiple Object Edit Permission

Because the ability to edit multiple tools at once is a powerful tool and could potentially make unintended changes, there has been a new permission added to the L5 Connect system that is required to allow users to edit multiple objects at once. This permission is required in a user profile to allow that user to update multiple objects at once. The built-in **Administrator** and **SuperUser** profiles have this permission. Alternatively, you could create a custom profile with this permission granted. The **Multiple Object Edit** permission is located in the **System Configuration** section of the permissions list. For more information on how to set up custom profiles see Default and Custom Profiles and Permissions.

Creating a Spreadsheet for Importing

You will need to create a spreadsheet with the list of tool instance data that you wish to update before doing the bulk import. If you don't already have a spreadsheet set up, you can easily create one by running a report in the Admin application and then exporting it to an Excel file. **NOTE: You must include the ToolID column in your spreadsheet to properly map the data.** If you wanted to add a customer ID, serial number, and tag to all the tools in a specific toolbox, you could create a custom Tool Inventory report filtered to the toolbox device and with the customer ID, serial number, and tag columns. Run the report and then export it to an Excel file. Then you can edit this file to add the customer ID, serial number, and tag values you wish to update for the tools. For more information on how to create and run custom reports see L5 Connect™ Reports.

Here is an example of what that might look like.

Tool Inventory							
Filtered By: Location = Top Level, Device Serial Number = Z91B/J001							
Run Time: 8/28/2025 10:59 AM : Central Standard Time							
Requested By: SuperUser							
Device Serial Number	Part Number	Description	Drawer	Tool ID	Tool Customer ID	Serial Number	Tag
Z91B001	10MA-SGHF616BR	10MA-SGHF616BR	5	225374	CID225374	SN225374	TA225374
Z91B001	235605	Epoxy Adhesive, 1.69 oz., Gray, Work Life: 3 min.		102908	CID102908	SN102908	TA102908
Z91B001	47ACP	Pliers, Combination Slip-Joint, Industrial Finish, Vinyl Grips, 7 1/2"		102546	CID102546	SN102546	TA102546
Z91B001	47ACP	Pliers, Combination Slip-Joint, Industrial Finish, Vinyl Grips, 7 1/2"	6	225455	CID225455	SN225455	TA225455
Z91B001	6T-SGHF614BR	6T-SGHF614BR	5	225377	CID225377	SN225377	TA225377
Z91B001	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"		102545	CID102545	SN102545	TA102545
Z91B001	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"	6	225454	CID225454	SN225454	TA225454
Z91B001	8MA-SGHF615BR	8MA-SGHF615BR	5	225375	CID225375	SN225375	TA225375
Z91B001	8R-SGHF614BR	8R-SGHF614BR	5	225376	CID225376	SN225376	TA225376
Z91B001	91ACP	Pliers, Adjustable Joint, Interlocking Channel, Industrial Finish, 9 1/4"		102565	CID102565	SN102565	TA102565
Z91B001	91ACP	Pliers, Adjustable Joint, Interlocking Channel, Industrial Finish, 9 1/4"	6	225429	CID225429	SN225429	TA225429
Z91B001	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"		102544	CID102544	SN102544	TA102544
Z91B001	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"	6	225456	CID225456	SN225456	TA225456
Z91B001	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"		102543	CID102543	SN102543	TA102543
Z91B001	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"	6	225458	CID225458	SN225458	TA225458
Z91B001	A2A	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"	1	225142	CID225142	SN225142	TA225142
Z91B001	AC5B	Brush, Hand Scratch, Stainless Steel, 7 7/8"		102552	CID102552	SN102552	TA102552
Z91B001	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. In BH&L Metal Index) (.028" to 3/8")	7	225427	CID225427	SN225427	TA225427
Z91B001	AWBCG1606	Wrench, Ball Hex, T-Handle, 3/32", Red Handle, 9" long	7	225419	CID225419	SN225419	TA225419
Z91B001	AWBCG1607	Wrench, Ball Hex, T-Handle, 7/64", Red Handle, 9" long	7	225420	CID225420	SN225420	TA225420
Z91B001	AWBCG1608	Wrench, Ball Hex, T-Handle, 1/8", Red Handle, 9" long	7	225421	CID225421	SN225421	TA225421
Z91B001	AWBCG1609	Wrench, Ball Hex, T-Handle, 9/64", Red Handle, 9" long	7	225422	CID225422	SN225422	TA225422
Z91B001	AWBCG1610	Wrench, Ball Hex, T-Handle, 5/32", Red Handle, 9" long	7	225423	CID225423	SN225423	TA225423
Z91B001	AWBCG1612	Wrench, Ball Hex, T-Handle, 3/16", Red Handle, 9" long	7	225424	CID225424	SN225424	TA225424
Z91B001	AWBCG1614	Wrench, Ball Hex, T-Handle, 7/32", Red Handle, 9" long	7	225425	CID225425	SN225425	TA225425
Z91B001	AWBCG1616	Wrench, Ball Hex, T-Handle, 1/4", Red Handle, 9" long	7	225426	CID225426	SN225426	TA225426

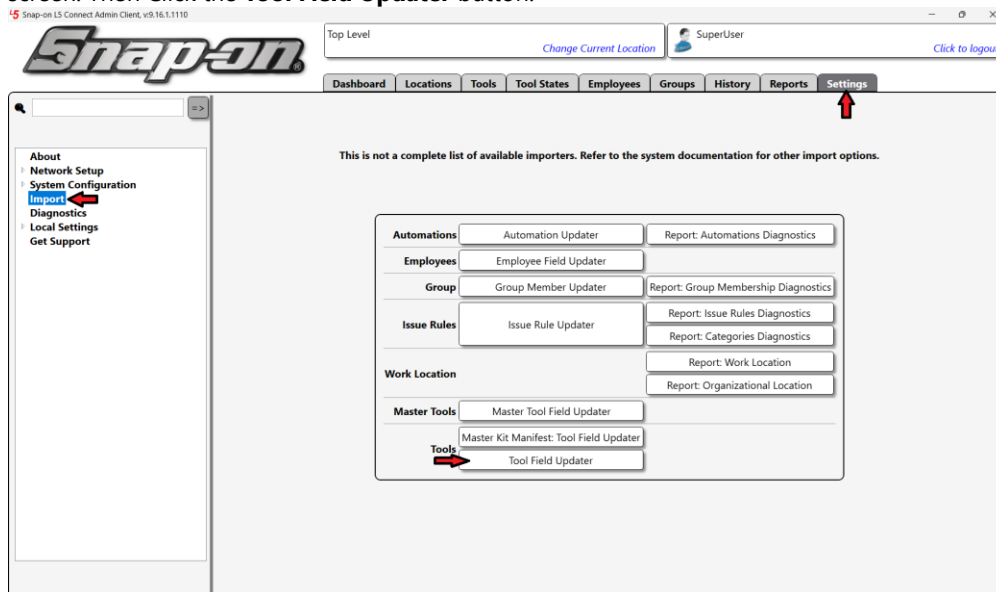
NOTE: Be sure that you have a report copy of the existing tool data before attempting to change it!

Importing Tool Updates

Once you have your updated tool data in your spreadsheet, you are ready to import it into the L5 Connect system.

NOTE: Make sure that any devices containing the tools being updated are online before attempting to perform the update!

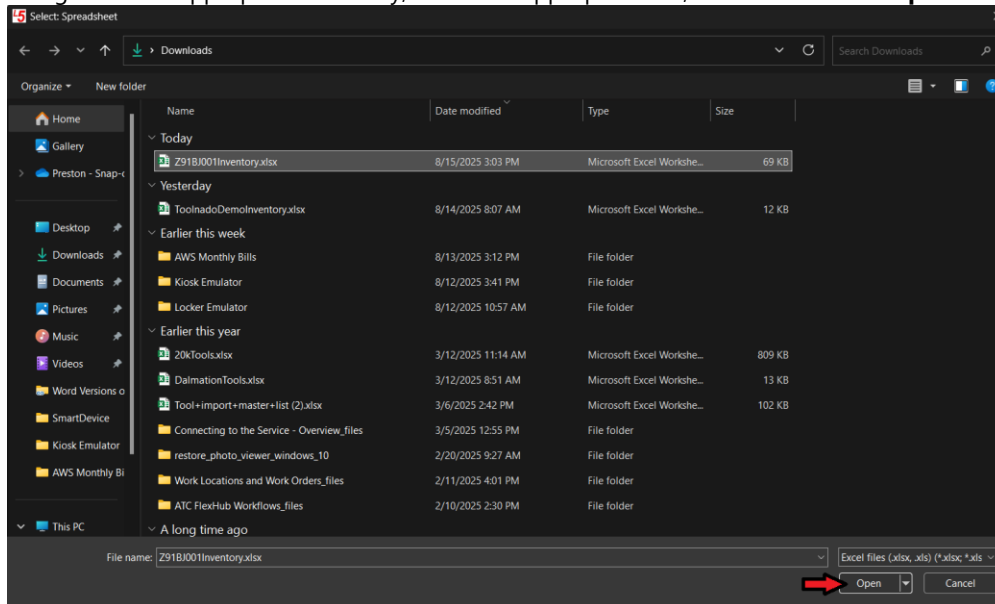
1. Go to the **Settings** tab of the Admin application and select the **Import** list item on the left-hand side of the screen. Then Click the **Tool Field Updater** button.



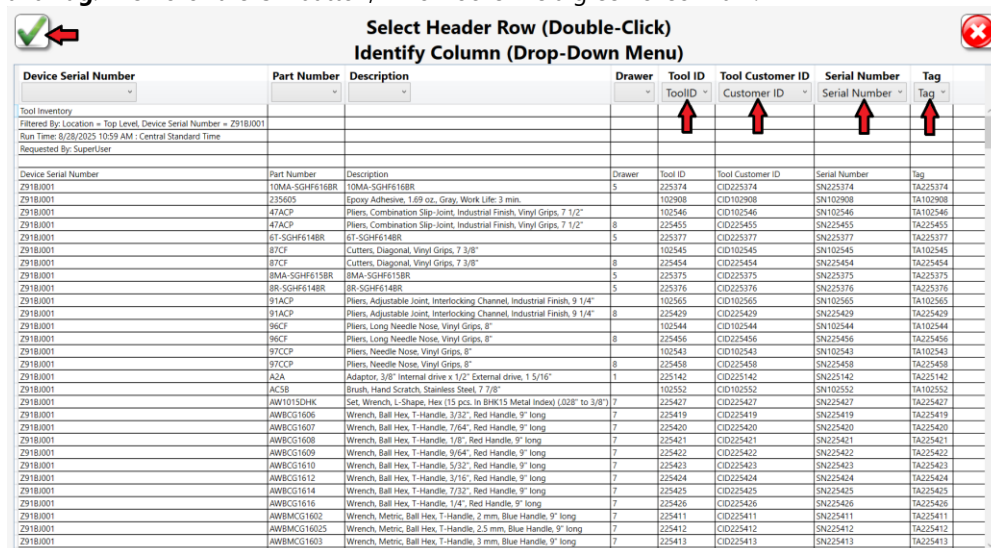
2. When prompted with the warning that the updater will change fields on tool instances, having previously made a backup of your data, click the **Tool Field Updater** button.



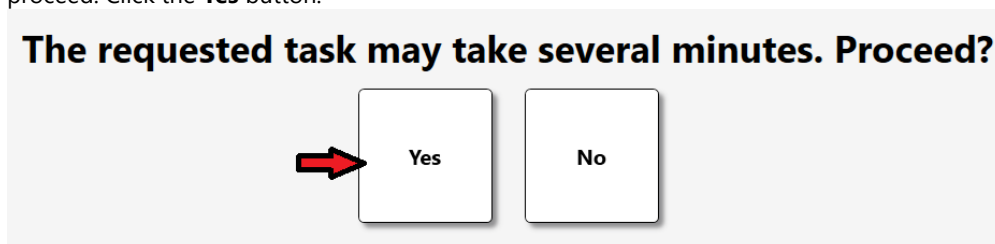
- You will then be presented with a file dialog window to select the Excel spreadsheet with the import data. Navigate to the appropriate directory, select the appropriate file, and then click the **Open** button.



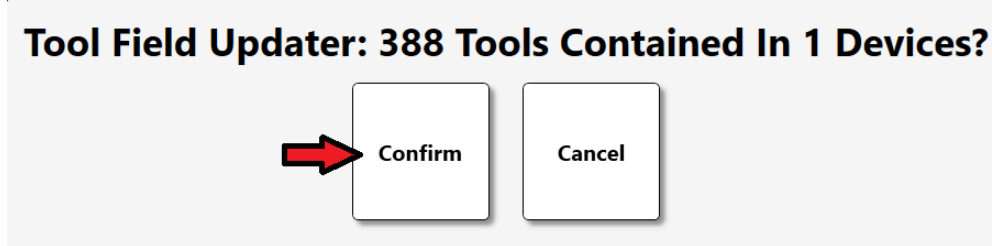
- Map the columns in your spreadsheet to the proper importer fields of **ToolID**, **Customer ID**, **Serial Number**, and **Tag**. Then click the **OK** button, which looks like a green checkmark.



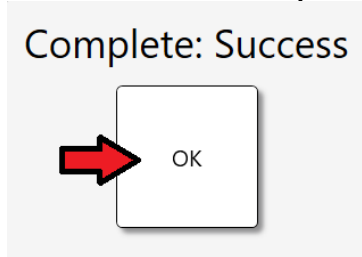
- You will then see a window warning you that the task may take several minutes asking if you wish to proceed. Click the **Yes** button.



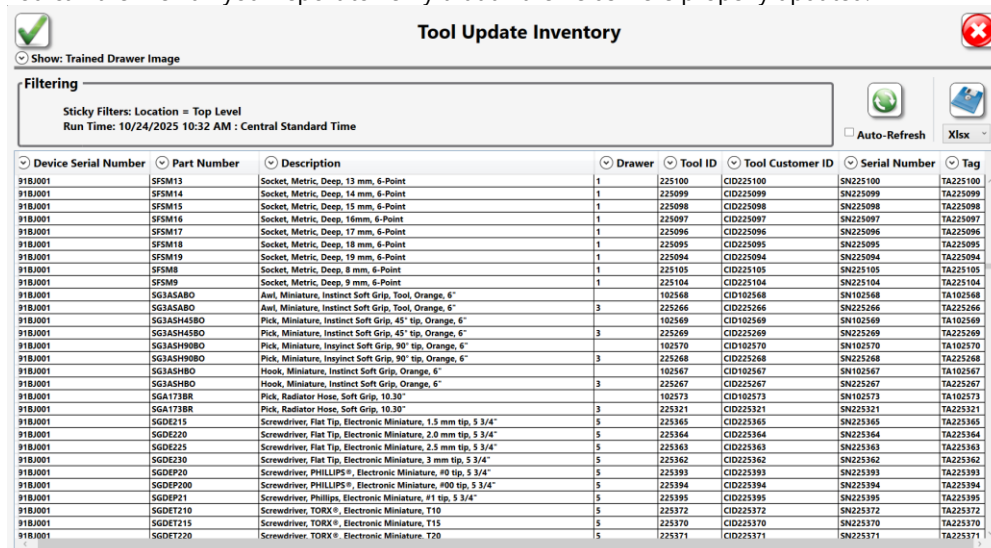
- You will then get one more window confirming the number of tools and devices. If any of the devices are offline, the importer will update the devices that are online but fail to update any devices that are offline. After confirming that all the devices are online, click the **Confirm** button.



- You should then see a **Complete: Success** window. Click the **OK** button.



- You can then re-run your report to verify that all the fields were properly updated.



Device Serial Number	Part Number	Description	Drawer	Tool ID	Tool Customer ID	Serial Number	Tag
918J001	SFSM13	Socket, Metric, Deep, 13 mm, 6-Point	1	225100	CID225100	SN225100	TA225100
918J001	SFSM14	Socket, Metric, Deep, 14 mm, 6-Point	1	225099	CID225099	SN225099	TA225099
918J001	SFSM15	Socket, Metric, Deep, 15 mm, 6-Point	1	225098	CID225098	SN225098	TA225098
918J001	SFSM16	Socket, Metric, Deep, 16 mm, 6-Point	1	225097	CID225097	SN225097	TA225097
918J001	SFSM17	Socket, Metric, Deep, 17 mm, 6-Point	1	225096	CID225096	SN225096	TA225096
918J001	SFSM18	Socket, Metric, Deep, 18 mm, 6-Point	1	225095	CID225095	SN225095	TA225095
918J001	SFSM19	Socket, Metric, Deep, 19 mm, 6-Point	1	225094	CID225094	SN225094	TA225094
918J001	SFSM8	Socket, Metric, Deep, 8 mm, 6-Point	1	225105	CID225105	SN225105	TA225105
918J001	SFSM9	Socket, Metric, Deep, 9 mm, 6-Point	1	225104	CID225104	SN225104	TA225104
918J001	SG3ASABO	Awl, Miniature, Instinct Soft Grip, Tool, Orange, 6"	3	102568	CID102568	SN102568	TA102568
918J001	SG3ASABO	Awl, Miniature, Instinct Soft Grip, Tool, Orange, 6"	3	225266	CID225266	SN225266	TA225266
918J001	SG3ASH45BO	Pick, Miniature, Instinct Soft Grip, 45° tip, Orange, 6"	3	102569	CID102569	SN102569	TA102569
918J001	SG3ASH45BO	Pick, Miniature, Instinct Soft Grip, 45° tip, Orange, 6"	3	225269	CID225269	SN225269	TA225269
918J001	SG3ASH90BO	Pick, Miniature, Instinct Soft Grip, 90° tip, Orange, 6"	3	102570	CID102570	SN102570	TA102570
918J001	SG3ASH90BO	Pick, Miniature, Instinct Soft Grip, 90° tip, Orange, 6"	3	225268	CID225268	SN225268	TA225268
918J001	SG3ASHBO	Hook, Miniature, Instinct Soft Grip, Orange, 6"	3	102567	CID102567	SN102567	TA102567
918J001	SG3ASHBO	Hook, Miniature, Instinct Soft Grip, Orange, 6"	3	225267	CID225267	SN225267	TA225267
918J001	SGA173BR	Pick, Radiator Hose, Soft Grip, 10.30"	3	102573	CID102573	SN102573	TA102573
918J001	SGA173BR	Pick, Radiator Hose, Soft Grip, 10.30"	3	225321	CID225321	SN225321	TA225321
918J001	SGDE215	Screwdriver, Flat Tip, Electronic Miniature, 1.5 mm tip, 5 3/4"	5	225365	CID225365	SN225365	TA225365
918J001	SGDE220	Screwdriver, Flat Tip, Electronic Miniature, 2.0 mm tip, 5 3/4"	5	225364	CID225364	SN225364	TA225364
918J001	SGDE225	Screwdriver, Flat Tip, Electronic Miniature, 2.5 mm tip, 5 3/4"	5	225363	CID225363	SN225363	TA225363
918J001	SGDE230	Screwdriver, Flat Tip, Electronic Miniature, 3 mm tip, 5 3/4"	5	225362	CID225362	SN225362	TA225362
918J001	SGDEP20	Screwdriver, PHILLIPS®, Electronic Miniature, #0 tip, 5 3/4"	5	225393	CID225393	SN225393	TA225393
918J001	SGDEP200	Screwdriver, PHILLIPS®, Electronic Miniature, #00 tip, 5 3/4"	5	225394	CID225394	SN225394	TA225394
918J001	SGDEP21	Screwdriver, PHILLIPS®, Electronic Miniature, #1 tip, 5 3/4"	5	225395	CID225395	SN225395	TA225395
918J001	SGDET210	Screwdriver, TORX®, Electronic Miniature, T10	5	225372	CID225372	SN225372	TA225372
918J001	SGDET215	Screwdriver, TORX®, Electronic Miniature, T15	5	225370	CID225370	SN225370	TA225370
918J001	SGDET220	Screwdriver, TORX®, Electronic Miniature, T20	5	225371	CID225371	SN225371	TA225371



L5 Connect User Manual

Importing Tool Updates from MKM

The L5 Connect system supports importing tool updates from a master kit manifest(MKM) file. This is the file created when laying out an L5 Connect toolbox. This allows a customer specific identifier to be mapped straight from the MKM into the L5 Connect system for the tools in an optical toolbox. This would typically be mapped into the Customer ID or serial number field. You can have one or both fields mapped but at least one must be mapped.

Multiple Object Edit Permission

This feature requires that the user have the permission to edit multiple items at once. Additional setup information can be found in the Multiple Object Edit Permission section of the Importing Updates to Existing Tool Instances document.

Obtaining an MKM File

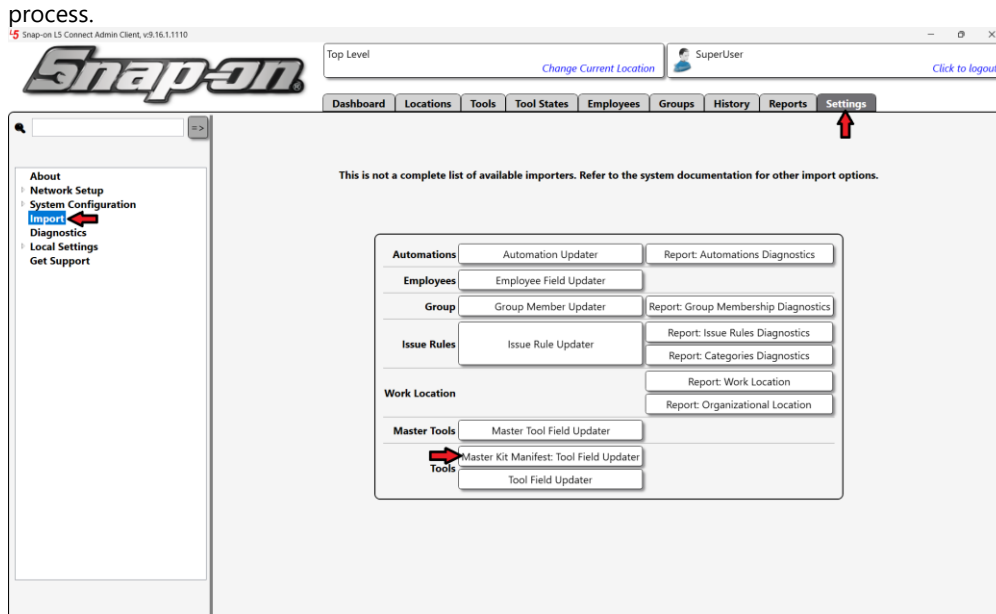
The MKM file is created by the Snap-on sales representative while working with the customer to create the desired tool list and tool layout in foam. This file is used to create the actual foam layers that are inserted into the toolbox drawers and to create the foam files used to train the toolbox. You will need access to your MKM file to continue with this procedure.

Creating a Data Backup

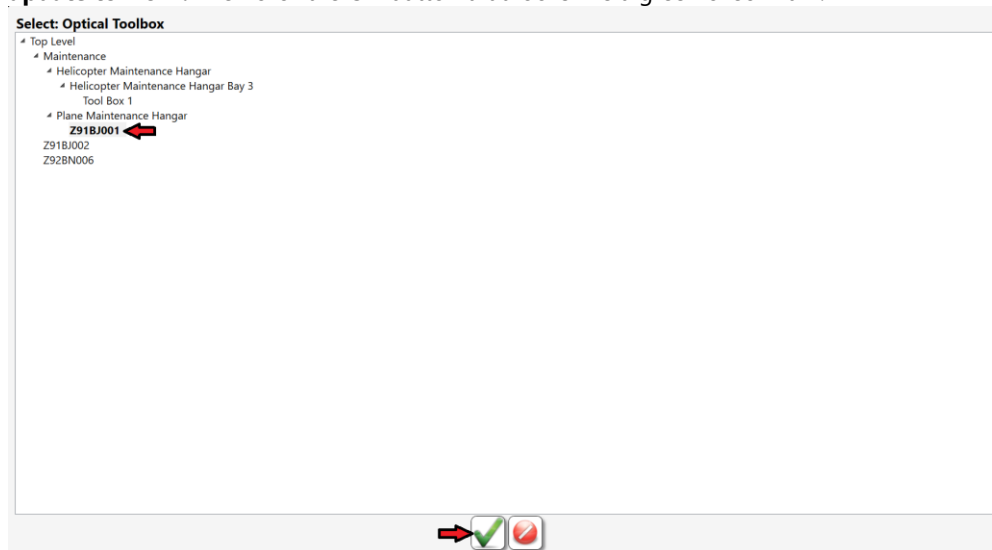
Because updating tools in bulk could potentially make multiple unintended changes to the tools in your L5 Connect system, it is highly recommended that before you begin the tool updating procedure you should run a report to capture all the information related to these tools. This will allow you to have a record of the tool information prior to updating the tool fields in case something goes wrong.

Importing Tool Updates

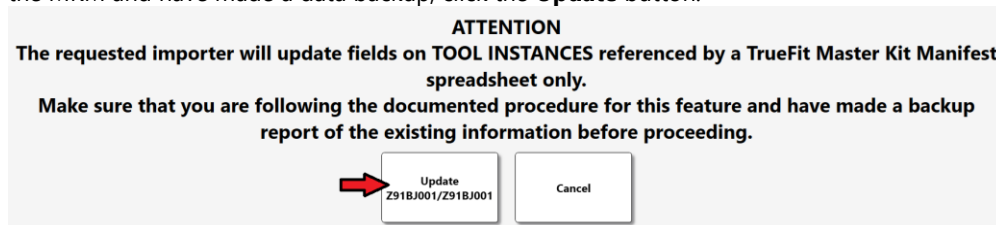
1. Open the Admin application, select the **Settings** tab, and then click the **Import** listbox item on the left-hand side of the screen. Then click the **Master Kit Manifest: Tool Field Updater** button to begin the update



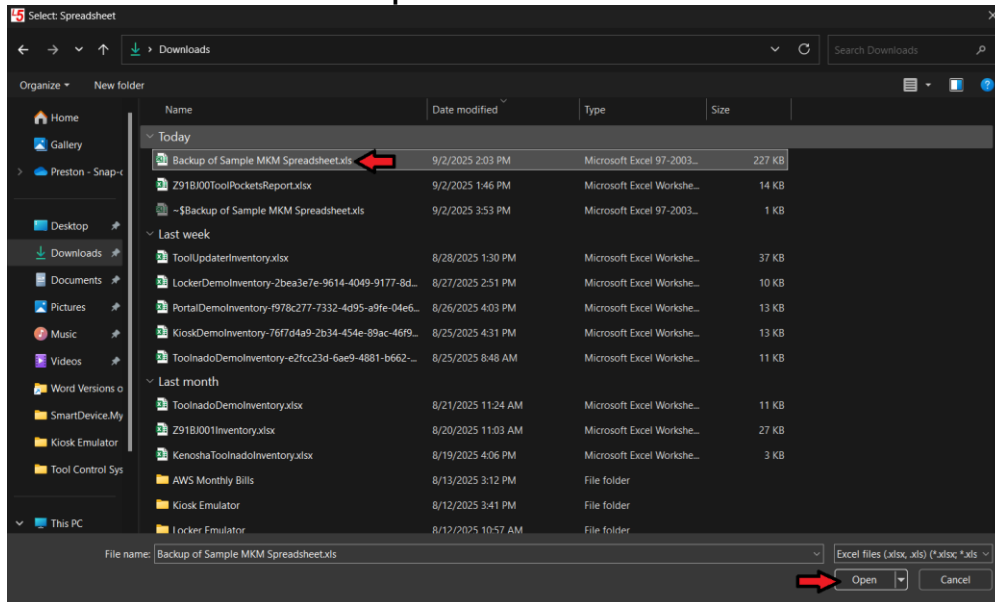
- You will be prompted with a window asking you to choose the optical toolbox for which you would like to update tools. Select the desired toolbox from this list. **NOTE: The device must be online for the tool update to work!** Then click the **OK** button that looks like a green checkmark.



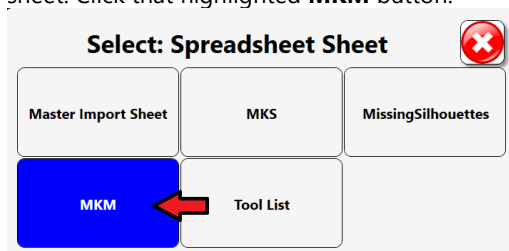
- You will be prompted that you can only perform this type of update from an MKM spreadsheet and to make sure you have created a backup of the pertinent data before continuing. Once you have confirmed you have the MKM and have made a data backup, click the **Update** button.



- You will be prompted to select the MKM file with a file dialog window. Navigate to the proper directory and select the MKM file. Then click the **Open** button.



- The Importer will then prompt you to select the proper sheet of the spreadsheet. It will highlight the MKM sheet. Click that highlighted **MKM** button.



- You will now see the importer window with the MKM data presented in it and be asked to map the columns that should be used for updating. At a minimum, you should map the **ITEM Number**, **Tool in Foam X=Yes**, and **Drawer** columns as well as mapping either one or both of the L5 Connect **Customer ID** and **Serial Number** columns to a column in the MKM data. For this example, you will map the **Customer ID** column to the **Pocket Identification** column of the MKM. **NOTE: the L5 Connect Customer ID field has a unique constraint on it.** There are a lot of columns in the MKM, and you will have to scroll to the right to find all the columns you need. Once you have mapped all the appropriate columns, click the **OK** button, which looks like a green checkmark in the upper left-hand corner of the screen.



Select Header Row (Double-Click)

Identify Column (Drop-Down Menu)

s	Qty (13)	Specific Marking	Serial Number	Column16	Tool In Foam X=Yes Tool In Foam	Silhouette	Pocket Ident. X=Yes	Pocket Identification Customer ID	Chit or Badge Quantity	Drawer
		Kit Quantity = 1 MIM Version Laser Marking								
	Qty	Specific Marking	Serial Number		Tool In Foam X=Yes	Silhouette	Foam Specifications Pocket Ident. X=Yes	Pocket Identification	Chit or Badge Quantity	Layout Specifications From TRUE-FIT Drawer
					X	X	X	32005		DRAWER-01
					X	X	X	32008		DRAWER-01
					X	YES	X	20079626		DRAWER-01
					X	YES	X	20079638		DRAWER-01
					X	X	X	20076938		DRAWER-01
					X	YES	X	20051491		DRAWER-01
					X	X	X	29971		DRAWER-01
					X	X	X	20084887		DRAWER-01
					X	YES	X	63414		DRAWER-01
					X	YES	X	20083728		DRAWER-01
					X	YES	X	20083729		DRAWER-01
					X	YES	X	20083730		DRAWER-01
					X	YES	X	201586		DRAWER-01
					X	YES	X	201587		DRAWER-01
					X	YES	X	20038735		DRAWER-01
					X	YES	X	202635		DRAWER-01
					X	YES	X	34172		DRAWER-01
					X	X	X	20009877		DRAWER-01
					X	X	X	20043475		DRAWER-01
					X	YES	X	20086230		DRAWER-01
					X	YES	X	20062912		DRAWER-01
					X	YES	X	11662		DRAWER-01
					X	X	X	58182		DRAWER-01
					X	X	X	200865		DRAWER-01
					X	X	X	201996		DRAWER-01
					X	X	X	12333		DRAWER-01
					X	YES	X	20059526		DRAWER-01
					X	X	X	4390		DRAWER-01
					X	YES	X	20046533		DRAWER-01
					X	---	X	---		---

- The requested task may take several minutes. Proceed?**

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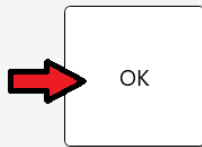
8. You will then be prompted to confirm that you really want to update the specified number of tools. Click the **Confirm** button.

Master Kit Manifest: Tool Field Updater: 148 Tools Contained In 1 Devices?



9. Once the update is complete click the **OK** button to conclude the updater process.

Complete: Success





L5 Connect User Manual

Importing Master Tool Updates

The L5 Connect system supports the ability to bulk update the part number and description of master tools from an Excel spreadsheet. This article will explain the proper procedure for this process.

Multiple Object Edit Permission

This feature requires that the user have the permission to edit multiple items at once. Additional setup information can be found in the Multiple Object Edit Permission section of the Importing Updates to Existing Tool Instances document.

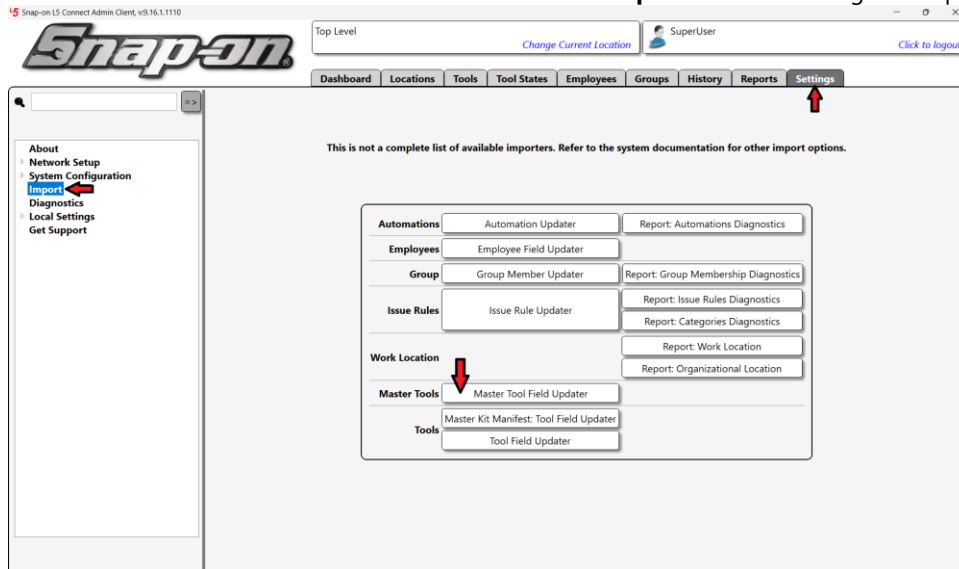
Creating the Spreadsheet/Data Backup

Before mass importing the master tool data, you will need to create a spreadsheet with the new data. It is also highly recommended that you create a backup of the original data before updating. You can accomplish both tasks by running a **Master Tool Inventory** report in the Admin application. Exporting this report to an Excel spreadsheet format can provide you with the fields you need for the updater, **Master Tool ID** and **Part Number**, and/or **Description**, as well as a backup of the original data. For more information on how to create and run custom reports see L5 Connect™ Reports.

1. The first thing you will need to do is go to the **Reports** tab of the Admin application and modify the **Master Tool Inventory** report to include the **ID** field in the **Master Tool Fields**.
2. Then run that report and export the results to an Excel spreadsheet.
3. Save a version of that spreadsheet with the original data as your backup file in case you wish to restore the original data.
4. Then modify the part numbers and descriptions as desired and save that version of the spreadsheet to use with the importer.

Importing Master Tool Updates

1. Open the Admin application, then go to the **Settings** tab, and then click the **Import** listbox item on the left-hand side of the screen. Then click the **Master Tool Field Updater** button to begin the update process.



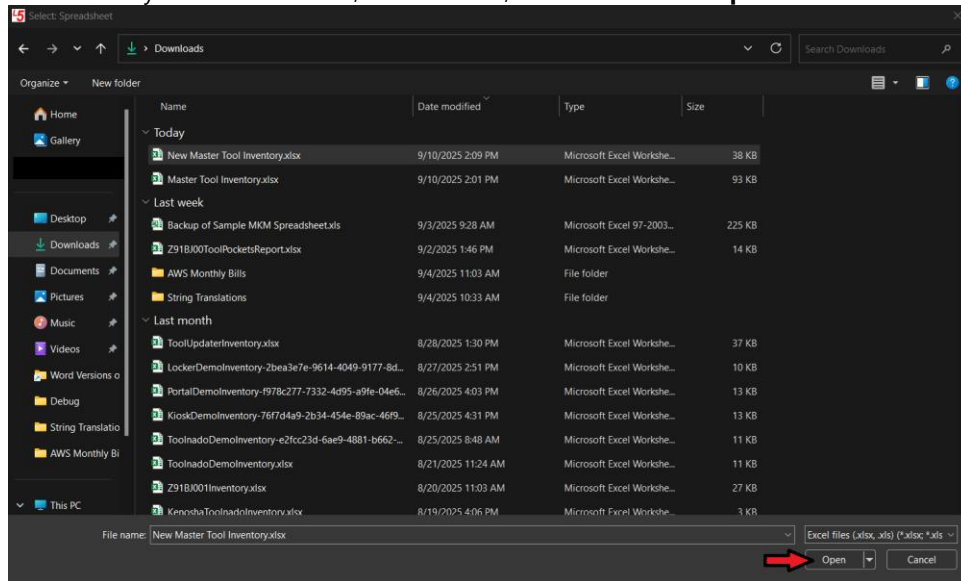
2. When prompted with a warning that you will be updating fields on master tools, click the **Master Tool Field Updater** button.



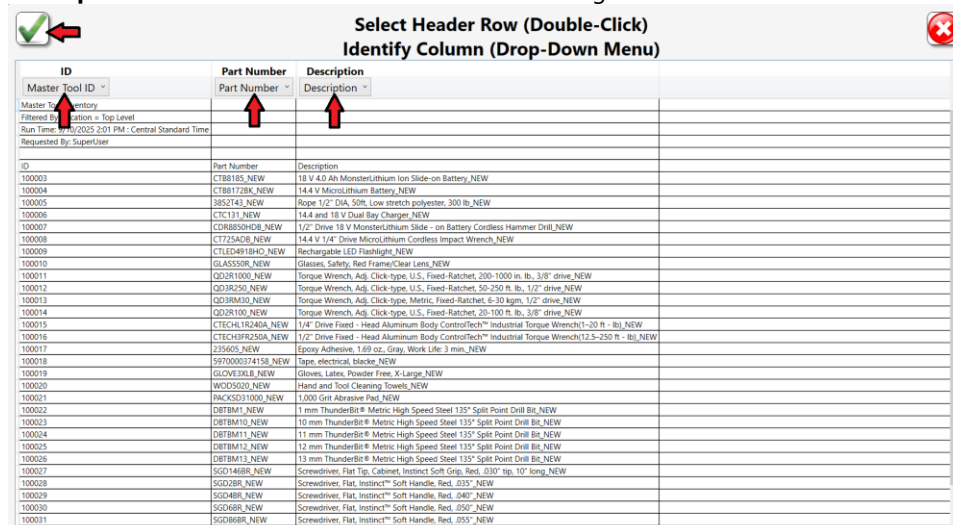


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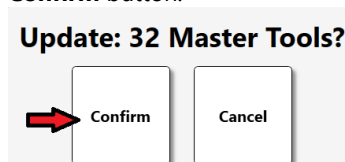
- Next you will be presented with a file dialog window. Browse to the directory where your updated master tool inventory data file is located, select the file, and then click the **Open** button.



- Now the importer window will be displayed. You will need to select the appropriate column header for the columns you wish to map. You will require the **Master Tool ID** column and at least one of **Part Number** and **Description**. Then click the **OK** button that looks like a green checkmark.



- You will be prompted to confirm that you wish to update the listed number of master tools. Click the **Confirm** button.



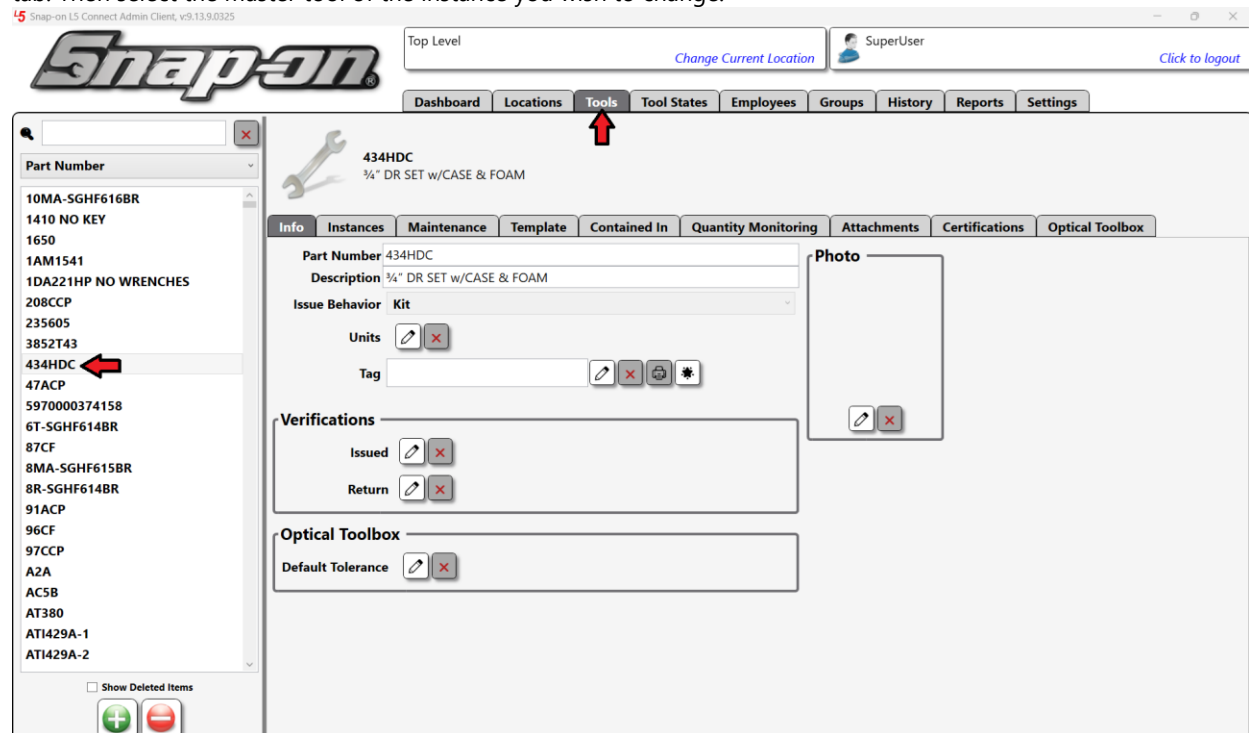
- Once the updater is finished you should see the window with a **Complete: Success** message. Click the **OK** button to close this window and the master tools should be updated in your system.

Changing the Master Tool of a Tool Instance

In some instances, it may be desirable to change the master tool of a tool instance. For instance, you have a set of Allen wrenches in a case that is defined as a single tool in your system, and you decide to make the case a kit and add the individual Allen wrenches as tools in the system. In this case you would create a new kit master tool and transfer the case to that. Then you could set up the individual wrenches and add them to the new kit. Another case where you might want to change the master tool of a tool instance is if part of your organization had stricter requirements for verifications than the rest of the organization. You could create a new master tool for the location that has the stricter requirements. The additional required verifications would be added to that new master tool. All the instances of that tool type in the applicable area could then be changed to the new master. Those modified tool instances would then inherit the required verifications.

Procedure

We will assume that the new master tool already exists for this case. Open the Admin application and go to the **Tools** tab. Then select the master tool of the instance you wish to change.





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Select the **Instances** sub-tab. Then double click the instance of the tool for which you want to change the master tool.

Snap-on L5 Connect Admin Client, v9.13.9.0325

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations **Tools** Tool States Employees Groups History Reports Settings

Part Number

- 10MA-SGHF616BR
- 1410 NO KEY
- 1650
- 1AM1541
- 1DA221HP NO WRENCHES
- 208CCP
- 235605
- 3852T43
- 434HDC
- 47ACP
- 5970000374158
- 6T-SGHF614BR
- 87CF
- 8MA-SGHF615BR
- 8R-SGHF614BR
- 91ACP
- 96CF
- 97CCP
- A2A
- AC5B
- AT380
- AT1429A-1
- AT1429A-2

☐ Show Deleted Items

434HDC
¾" DR SET w/CASE & FOAM

Info **Instances** Maintenance Template Contained In Quantity Monitoring Attachments Certifications Optical Toolbox

☐ Show Deleted Items

Home Location	Additional Info	User Label 2	Serial Number	Customer ID	Qty	Issued	Work Location	Kit
Tool Crib East					1			X
Z93AU001			434HDC-1		1			
Z99LS001			434HDC-5		1			
Z99LS001			434HDC-4		1			
Z99LS001			434HDC-3		1			
Z99LS001			434HDC-2		1			
Z99LS001			434HDC-1		1			

Click the **Change** button that looks like a pencil located next to the part number and description of the tool.

Editing 434HDC

434HDC
¾" DR SET w/CASE & FOAM
Top Level/Maintenance/Tool Crib East

Info Issued Status Kit **Attachments**

Customer ID

Serial Number (Tool)

Additional Info

User Label 2

Tag

Color ID Tag

Home Location Tool Crib East

ToolID 227935

Default Part # / Desc. 434HDC / ¾" DR SET w/CASE & FOAM

Now you can select the new master tool for your tool instance. The search box can be helpful to find the one you want.

Select new value: Master Tool (3/4" DR SET w/CASE & FOAM)

Part Number


DBK001

Once you have selected the new master tool, click the **OK** button that looks like a green checkmark.

Select new value: Master Tool (3/4" DR SET w/CASE & FOAM)

Part Number

DBK001


DBK001
 Drill Bit Kit, Standard

Info | **Instances** | **Maintenance** | **Template** | **Contained In** | **Quantity Monitoring** | **Attachments** | **Certifications** | **Optical Toolbox**

Part Number DBK001
Description Drill Bit Kit, Standard
Issue Behavior Kit
Units
Tag

Verifications
Issued
Return

Optical Toolbox
Default Tolerance

Photo

Now your tool instance has a new master tool!



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Master Tool Tags

The L5 Connect system supports assigning a tag field to a master tool. This could be used to assign a tag to a bin in a True-Crib that contains a quantity of non-serialized durable tool instances of the master tool type. The system could print a bar code of the tag value to be attached to the bin. Then the crib attendant could just scan the barcode to issue a tool instance from the bin or return one as well. **NOTE: These tag values must be unique. Master tools tags must not match any other tag (tool, work location, etc.) in the L5 Connect system.**

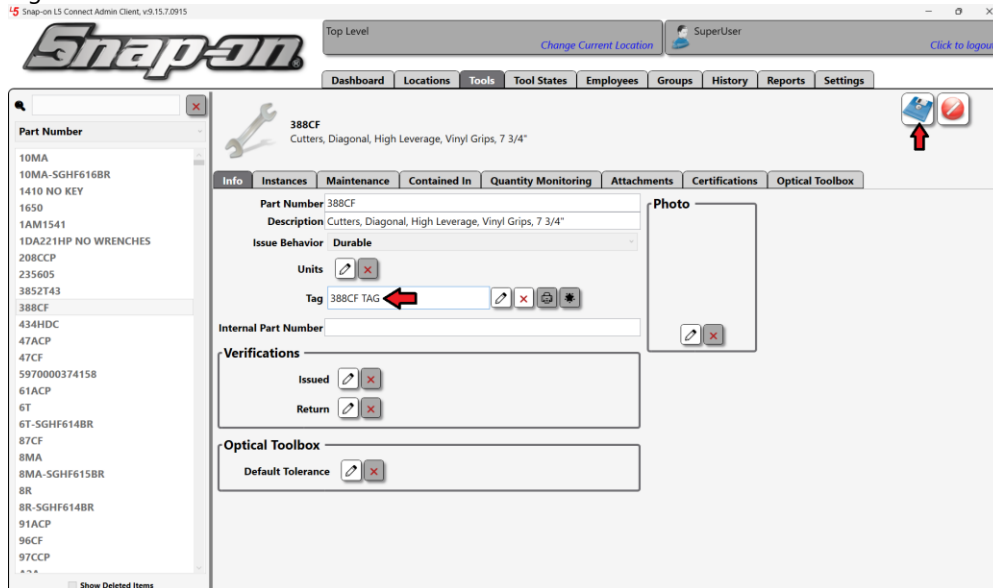
Creating a Master Tool Tag

1. Start the Admin application and go to the **Tools** tab. Then select the master tool to which you would like to add a tag.

The screenshot shows the Snap-on L5 Connect Admin application interface. At the top, there's a navigation bar with tabs: Dashboard, Locations, Tools, Tool States, Employees, Groups, History, Reports, and Settings. The 'Tools' tab is selected, indicated by a red arrow. Below the navigation bar, the main content area displays the configuration for a specific tool, 388CF, which is described as 'Cutters, Diagonal, High Leverage, Vinyl Grips, 7 3/4"'. The tool's 'Issue Behavior' is set to 'Durable'. The 'Tag' field is currently empty, with a red arrow pointing to it. Other fields include 'Units', 'Internal Part Number', 'Verifications' (Issued, Return), and 'Optical Toolbox' (Default Tolerance). A 'Photo' field is also present on the right. On the left side, there's a list of 'Part Number' items, with '388CF' highlighted by a red arrow. The interface includes a 'Show Deleted Items' checkbox and a 'Click to logout' link in the top right corner.

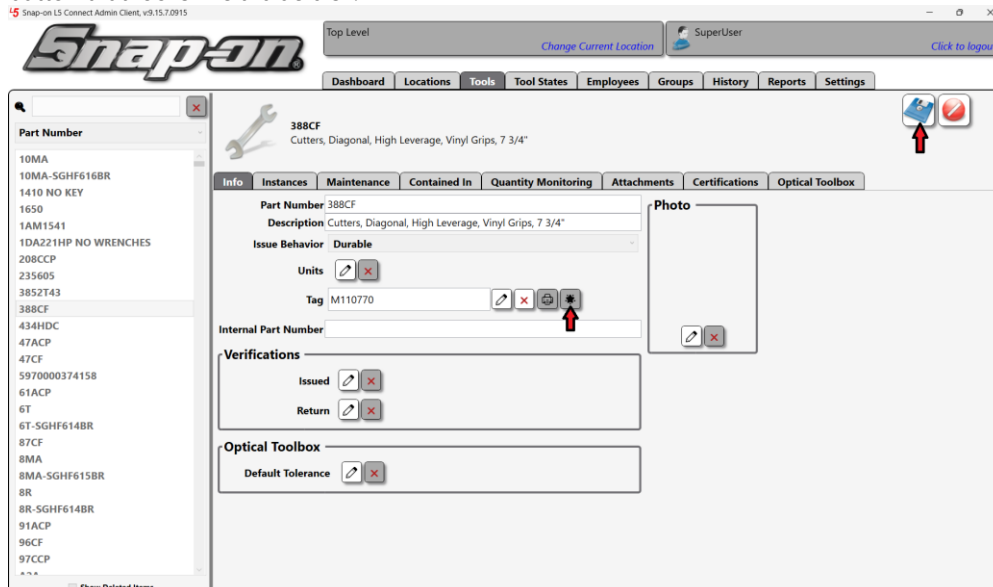
Manually Assigning the Tag

1. To manually assign the tag, click the text box next to the **Tag** label. then type in the value you would like the tag to have. Then click the **Save** button that looks like a blue disk.



Auto Generating the Tag

1. To have the system generate a tag value for you, click **Auto generate value** button, then click the **Save** button that looks like a blue disk.



Using an Existing Barcode

1. You can scan an existing barcode to assign the tag value. To do this you will need an L5 Connect approved barcode scanner attached to the Admin PC. You will also need to install your L5 Connect barcode scanner.



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See the Setting up a Zebra DS2208 Wired & DS3678 Wireless Bar Code Scanner in L5 CONNECT™ document for more details.

2. Once your barcode scanner is set up, click the **Scan the tag** button, which looks like a pencil. **NOTE: Remember that tags in the L5 Connect system must be unique.**

Snap-on L5 Connect Admin Client, v5.15.7.0915

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

Part Number 388CF
Cutters, Diagonal, High Leverage, Vinyl Grips, 7 3/4"

Info Instances Maintenance Contained In Quantity Monitoring Attachments Certifications Optical Toolbox

Part Number 388CF
Description Cutters, Diagonal, High Leverage, Vinyl Grips, 7 3/4"

Issue Behavior Durable

Units

Tag

Internal Part Number

Verifications

Issued

Return

Optical Toolbox

Default Tolerance

Photo

Show Deleted Items

3. You will then be prompted to scan the tag with your barcode scanner.

Scan new tag or bar code.

4. Scan the barcode and then click the **Save** button that looks like a blue disk.



L5 Connect User Manual

Deleting a Master Tool Tag

Once you have created your barcode you can delete it by clicking the **Delete** button, which looks like a red X.

5 Snap-on L5 Connect Admin Client, v3.15.7.0915

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations **Tools** Tool States Employees Groups History Reports Settings

Part Number

- 10MA
- 10MA-SGHF616BR
- 1410 NO KEY
- 1650
- 1AM1541
- 1DA221HP NO WRENCHES
- 208CCP
- 235605
- 3852T43
- 388CF
- 434HDC
- 47ACP
- 47CF
- 5970000374158
- 61ACP
- 6T
- 6T-SGHF614BR
- 87CF
- 8MA
- 8MA-SGHF615BR
- 8R
- 8R-SGHF614BR
- 91ACP

☐ Show Deleted Items

388CF
Cutters, Diagonal, High Leverage, Vinyl Grips, 7 3/4"

Info Instances Maintenance Contained In Quantity Monitoring Attachments Certifications Optical Toolbox

Part Number: 388CF
Description: Cutters, Diagonal, High Leverage, Vinyl Grips, 7 3/4"

Issue Behavior: Durable

Units:

Tag: MT388CF

Internal Part Number:

Verifications

Issued:

Return:

Optical Toolbox

Default Tolerance:

Photo:

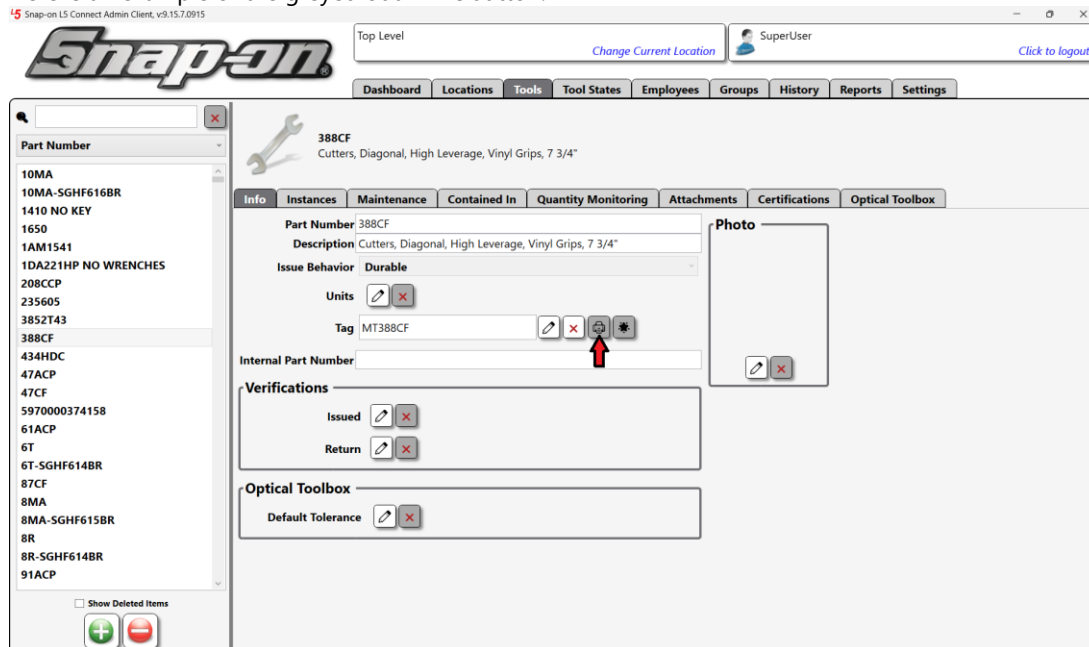


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Printing a Master Tool Tag

If you have an L5 Connect approved label printer connected to the computer on which you are running the Admin app, and it has been properly configured, you can print a barcode label of the master tool tag. **NOTE: If the bar code printer has not been properly set up, the Print button will be greyed out. See the Setting up the Label Printer in L5 CONNECT™ TRUE CRIB™ and Administration App document for more details.**

Here is an example of the greyed out **Print** button.



Mass Deactivation of Master Tools

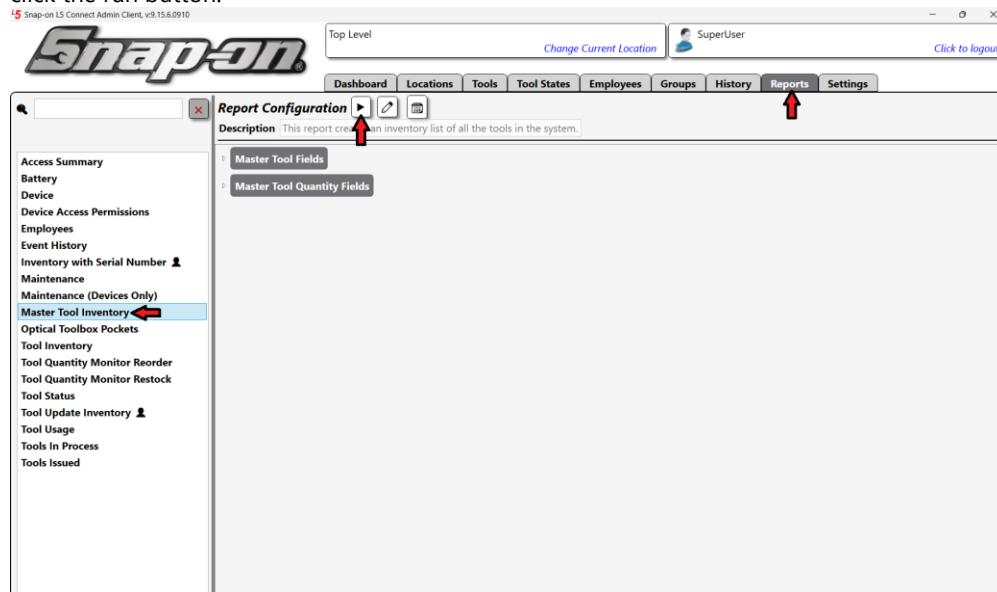
The L5 Connect system now supports the ability to deactivate multiple master tools at once. This document will describe the process to do this. This should be done with care as it will not be easy to restore a large number of master tools that were unintentionally deactivated. In order to be able to deactivate a master tool, there must not be any tool instances of that master tool currently active in the L5 Connect system.

Multiple Object Edit Permission

This feature requires that the user have the permission to edit multiple items at once. Additional setup information can be found in the Multiple Object Edit Permission section of the Importing Updates to Existing Tool Instances document.

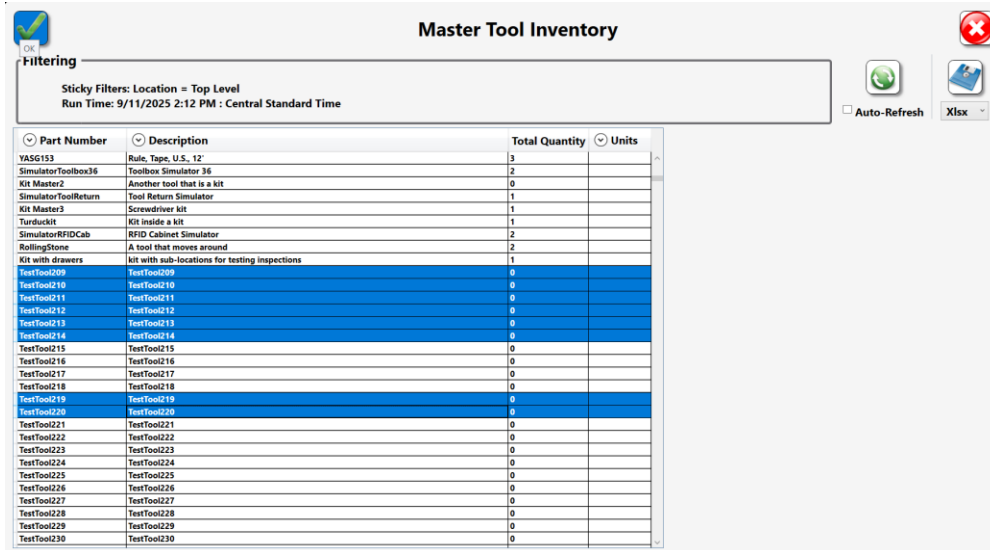
Bulk Deactivating Master Tools

1. Open the Admin application and go to the **Reports** tab. Then select the **Master Tool Inventory** report and click the run button.



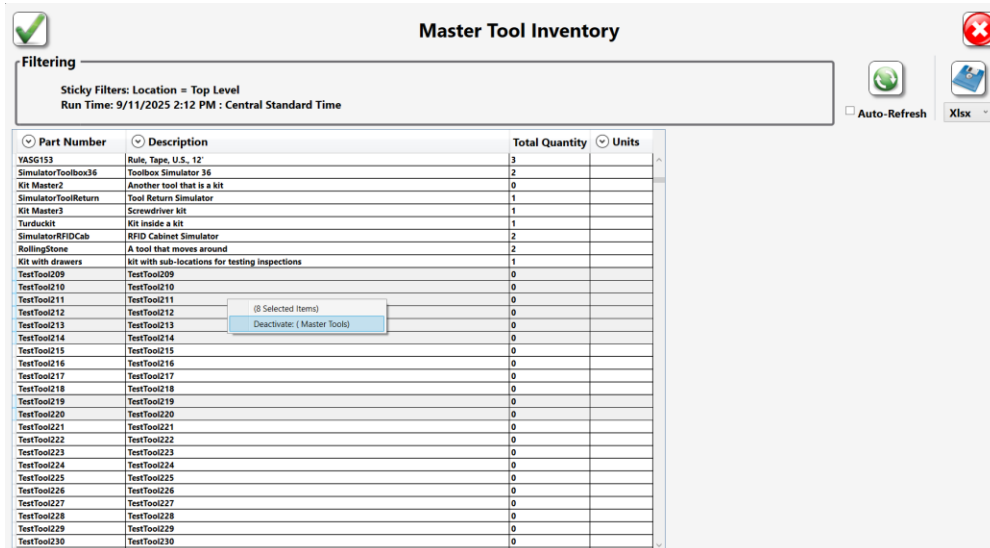
2. Select the master tools in the report that you would like to deactivate. Be sure to check that the **Total Quantity** column shows zero instances active in the system, otherwise you will only be able to deactivate the

tools that have no active instances.



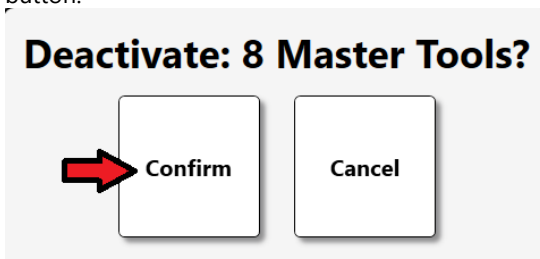
Part Number	Description	Total Quantity	Units
YASG153	Rule, Tape, U.S., 12'	3	
SimulatorToolbox36	Toolbox Simulator 36	2	
Kit Master2	Another tool that is a kit	0	
SimulatorToolReturn	Tool Return Simulator	1	
Kit Master3	Screwdriver kit	1	
Turduckit	Kit inside a kit	1	
SimulatorRFIDCab	RFID Cabinet Simulator	2	
RollingStone	A tool that moves around	2	
Kit with drawers	Kit with sub-locations for testing inspections	1	
TestTool209	TestTool209	0	
TestTool210	TestTool210	0	
TestTool211	TestTool211	0	
TestTool212	TestTool212	0	
TestTool213	TestTool213	0	
TestTool214	TestTool214	0	
TestTool215	TestTool215	0	
TestTool216	TestTool216	0	
TestTool217	TestTool217	0	
TestTool218	TestTool218	0	
TestTool219	TestTool219	0	
TestTool220	TestTool220	0	
TestTool221	TestTool221	0	
TestTool222	TestTool222	0	
TestTool223	TestTool223	0	
TestTool224	TestTool224	0	
TestTool225	TestTool225	0	
TestTool226	TestTool226	0	
TestTool227	TestTool227	0	
TestTool228	TestTool228	0	
TestTool229	TestTool229	0	
TestTool230	TestTool230	0	

- Then right-click on one of the selected tools and choose **Deactivate: (Master Tools)** from the context menu.

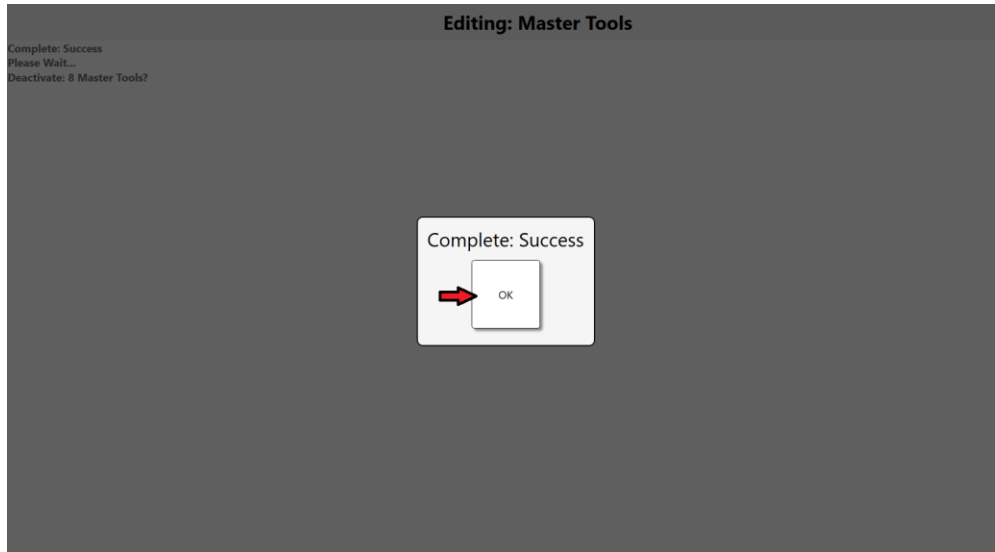


Part Number	Description	Total Quantity	Units
YASG153	Rule, Tape, U.S., 12'	3	
SimulatorToolbox36	Toolbox Simulator 36	2	
Kit Master2	Another tool that is a kit	0	
SimulatorToolReturn	Tool Return Simulator	1	
Kit Master3	Screwdriver kit	1	
Turduckit	Kit inside a kit	1	
SimulatorRFIDCab	RFID Cabinet Simulator	2	
RollingStone	A tool that moves around	2	
Kit with drawers	Kit with sub-locations for testing inspections	1	
TestTool209	TestTool209	0	
TestTool210	TestTool210	0	
TestTool211	TestTool211	0	
TestTool212	TestTool212	0	
TestTool213	TestTool213	0	
TestTool214	TestTool214	0	
TestTool215	TestTool215	0	
TestTool216	TestTool216	0	
TestTool217	TestTool217	0	
TestTool218	TestTool218	0	
TestTool219	TestTool219	0	
TestTool220	TestTool220	0	
TestTool221	TestTool221	0	
TestTool222	TestTool222	0	
TestTool223	TestTool223	0	
TestTool224	TestTool224	0	
TestTool225	TestTool225	0	
TestTool226	TestTool226	0	
TestTool227	TestTool227	0	
TestTool228	TestTool228	0	
TestTool229	TestTool229	0	
TestTool230	TestTool230	0	

- You will then be prompted to confirm the deactivation of the number of selected tools. Click the **Confirm** button.



5. Click the **OK** button to end the mass deactivation.



Reports

The L5 Connect™ system comes with an easy-to-use reporting tool that you can use when you need to get detailed information about your tools and the L5 Connect™ system. These reports can be generated with the **L5 Connect™ Admin Client** or the Admin Mode within **True-Crib™**.

You will be working within the L5 Connect™ Admin Client for this section. Still, the method of generating reports in **True-Crib™** client is identical.

The L5 Connect™ Reporting engine uses three types of reports:

- **Built-in** – these are the pre-configured, hard-coded reports that come preloaded into the system.
- **Personal** – these reports are custom modifications to the Built-in Reports. Only the Employee who creates the Report can use them unless they share it.
- **Shared** – These are Personal Reports that an employee has shared so that anyone with report access can run the Report.

The Icons beside them also represent the type of the Report.

- If there is not an icon that represents a Built-In Report – Report that came preloaded with the system.
- Represents Personal Report – This Report can only be used by the Employee who created it.



- Represents Share Report – Anyone who has access to run reports can run this one.



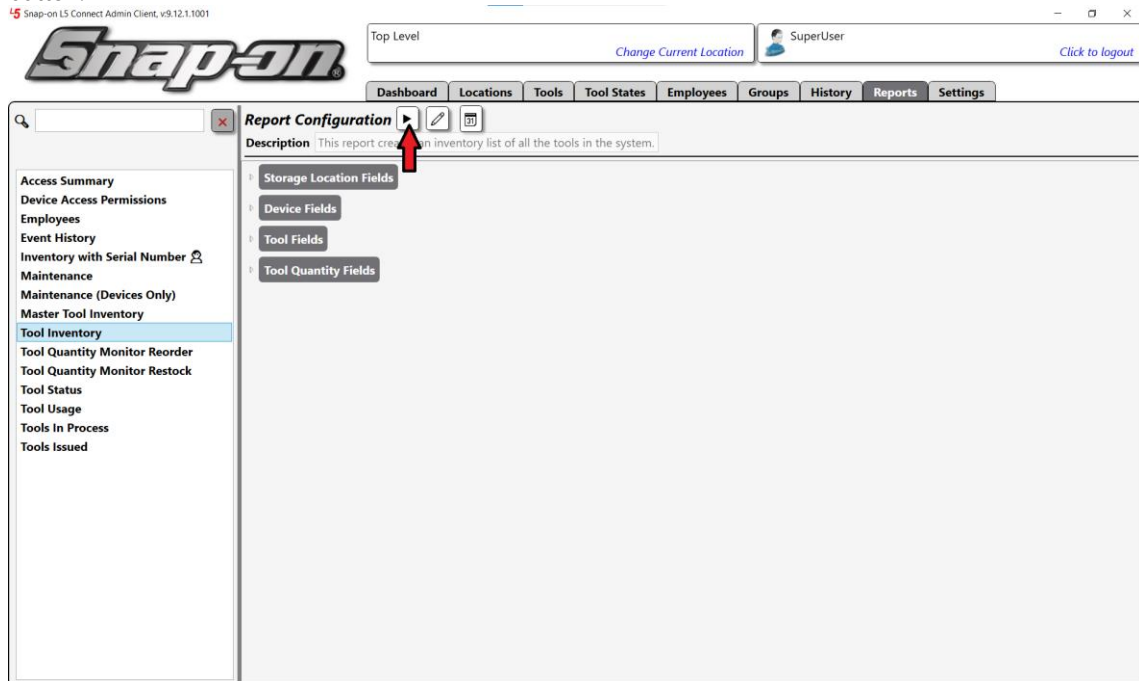
All Personal and Shared Reports are created based on one of the Built-in Reports. When you select one of these Built-in reports, you will then see the Report Customization Sub-screen. On this screen, you can modify the Report presets to customize the Report to fit your needs, then save it as a Personal Report that you can then share. All reports can be printed or exported. The supported formats for export are PDF, XLSX, and RTF.



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Running a Report

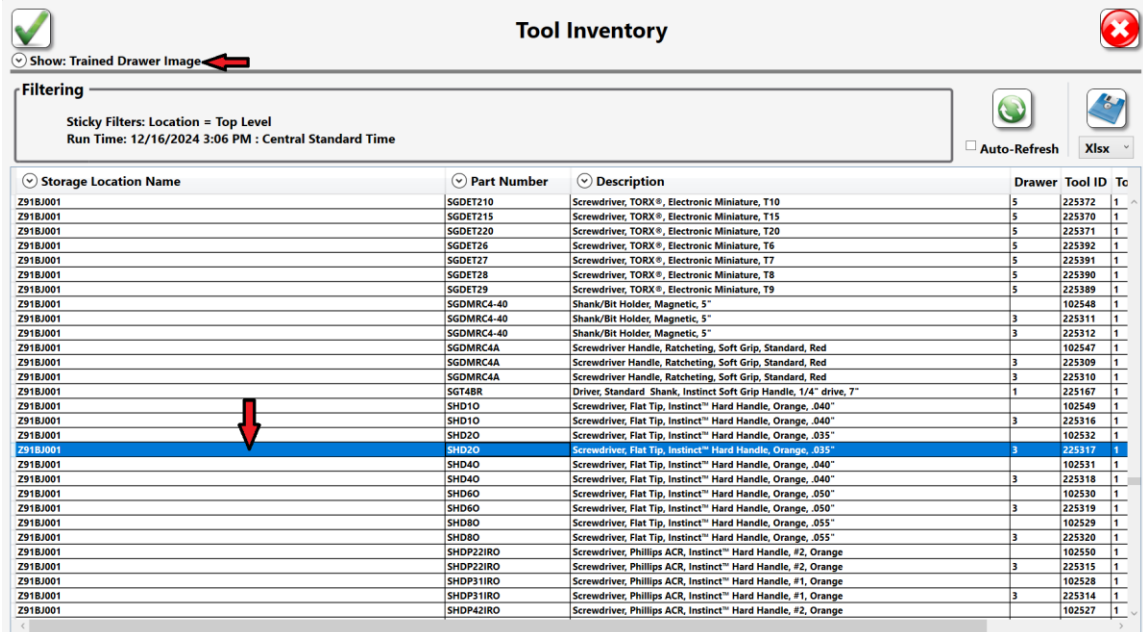
1. To generate a report, you simply need to select which available report you want to run and click the ► button.



2. This will display the results of the desired Report. This report viewer window has the same look and functionality as the screens in the **Tool States** tab. You can filter columns based on string text and you can save the file in xlsx, pdf, or txt format.

Storage Location Name	Part Number	Description	Drawer	Tool ID	To
Z91BJ001	SGDET210	Screwdriver, TORX®, Electronic Miniature, T10	5	225372	1
Z91BJ001	SGDET215	Screwdriver, TORX®, Electronic Miniature, T15	5	225370	1
Z91BJ001	SGDET220	Screwdriver, TORX®, Electronic Miniature, T20	5	225371	1
Z91BJ001	SGDET26	Screwdriver, TORX®, Electronic Miniature, T6	5	225392	1
Z91BJ001	SGDET27	Screwdriver, TORX®, Electronic Miniature, T7	5	225391	1
Z91BJ001	SGDET28	Screwdriver, TORX®, Electronic Miniature, T8	5	225390	1
Z91BJ001	SGDET29	Screwdriver, TORX®, Electronic Miniature, T9	5	225389	1
Z91BJ001	SGDMRC4-40	Shank/Bit Holder, Magnetic, 5"		102548	1
Z91BJ001	SGDMRC4-40	Shank/Bit Holder, Magnetic, 5"	3	225311	1
Z91BJ001	SGDMRC4-40	Shank/Bit Holder, Magnetic, 5"	3	225312	1
Z91BJ001	SGDMRC4A	Screwdriver Handle, Ratcheting, Soft Grip, Standard, Red		102547	1
Z91BJ001	SGDMRC4A	Screwdriver Handle, Ratcheting, Soft Grip, Standard, Red	3	225309	1
Z91BJ001	SGDMRC4A	Screwdriver Handle, Ratcheting, Soft Grip, Standard, Red	3	225310	1
Z91BJ001	SGT4BR	Driver, Standard Shank, Instinct™ Soft Grip Handle, 1/4" drive, 7"	1	225167	1
Z91BJ001	SHD10	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"		102549	1
Z91BJ001	SHD10	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"	3	225316	1
Z91BJ001	SHD20	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"		102532	1
Z91BJ001	SHD20	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"	3	225317	1
Z91BJ001	SHD40	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"		102531	1
Z91BJ001	SHD40	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"	3	225318	1
Z91BJ001	SHD60	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .050"		102530	1
Z91BJ001	SHD60	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .050"	3	225319	1
Z91BJ001	SHD80	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .055"		102529	1
Z91BJ001	SHD80	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .055"	3	225320	1
Z91BJ001	SHDP22IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange		102550	1
Z91BJ001	SHDP22IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange	3	225315	1
Z91BJ001	SHDP31IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #1, Orange		102528	1
Z91BJ001	SHDP31IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #1, Orange	3	225314	1
Z91BJ001	SHDP42IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange		102527	1

- Certain report types support viewing of additional image information. For example, when a tool from an optical toolbox is selected in the Tool Inventory report, the drawer image captured during the training process can be displayed by clicking the **Show: Trained Drawer Image** button.



Tool Inventory

✓ Show: Trained Drawer Image

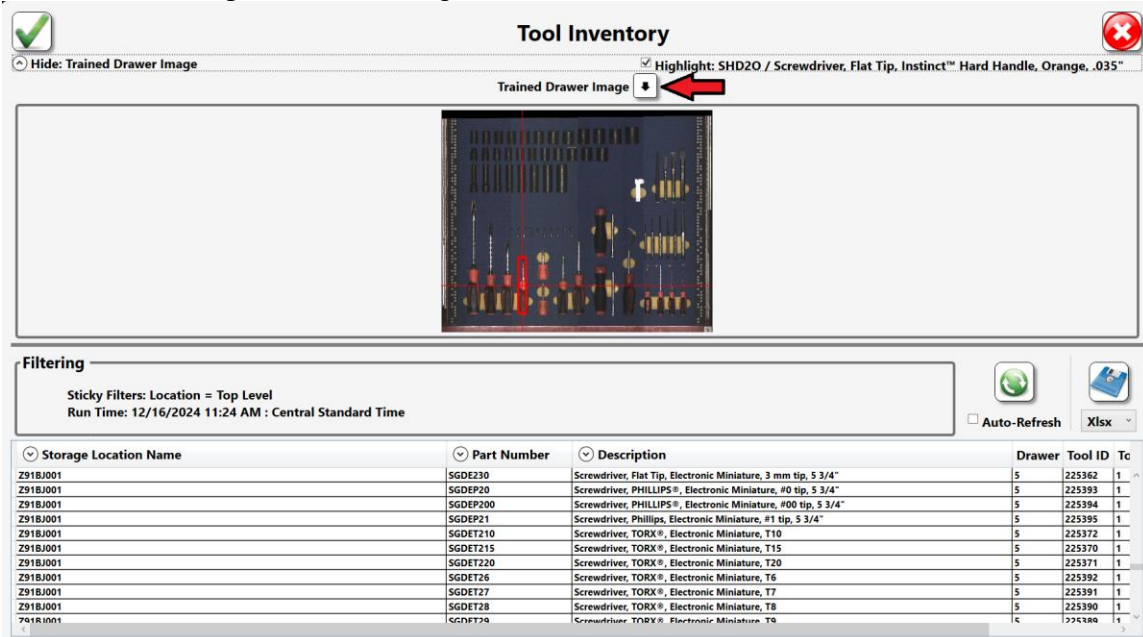
Filtering

Sticky Filters: Location = Top Level
Run Time: 12/16/2024 3:06 PM : Central Standard Time

Auto-Refresh Xlsx

Storage Location Name	Part Number	Description	Drawer	Tool ID	Tc
Z91BJ001	SGDET210	Screwdriver, TORX®, Electronic Miniature, T10	5	225372	1
Z91BJ001	SGDET215	Screwdriver, TORX®, Electronic Miniature, T15	5	225370	1
Z91BJ001	SGDET220	Screwdriver, TORX®, Electronic Miniature, T20	5	225371	1
Z91BJ001	SGDET26	Screwdriver, TORX®, Electronic Miniature, T6	5	225392	1
Z91BJ001	SGDET27	Screwdriver, TORX®, Electronic Miniature, T7	5	225391	1
Z91BJ001	SGDET28	Screwdriver, TORX®, Electronic Miniature, T8	5	225390	1
Z91BJ001	SGDET29	Screwdriver, TORX®, Electronic Miniature, T9	5	225389	1
Z91BJ001	SGDMRC4-40	Shank/Bit Holder, Magnetic, 5"	3	102548	1
Z91BJ001	SGDMRC4-40	Shank/Bit Holder, Magnetic, 5"	3	225311	1
Z91BJ001	SGDMRC4A	Screwdriver Handle, Ratcheting, Soft Grip, Standard, Red	3	225312	1
Z91BJ001	SGDMRC4A	Screwdriver Handle, Ratcheting, Soft Grip, Standard, Red	3	102547	1
Z91BJ001	SGDMRC4A	Screwdriver Handle, Ratcheting, Soft Grip, Standard, Red	3	225309	1
Z91BJ001	SGT4BR	Driver, Standard Shank, Instinct™ Soft Grip Handle, 1/4" drive, 7"	1	225310	1
Z91BJ001	SHD10	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"	1	225167	1
Z91BJ001	SHD10	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"	3	102549	1
Z91BJ001	SHD20	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"	3	225316	1
Z91BJ001	SHD20	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"	3	102532	1
Z91BJ001	SHD20	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"	3	225317	1
Z91BJ001	SHD40	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"	3	102531	1
Z91BJ001	SHD40	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .040"	3	225318	1
Z91BJ001	SHD60	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .050"	3	102530	1
Z91BJ001	SHD60	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .050"	3	225319	1
Z91BJ001	SHD80	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .055"	3	102529	1
Z91BJ001	SHD80	Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .055"	3	225320	1
Z91BJ001	SHDP22IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange	3	102550	1
Z91BJ001	SHDP22IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange	3	225315	1
Z91BJ001	SHDP31IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #1, Orange	3	102528	1
Z91BJ001	SHDP31IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #1, Orange	3	225314	1
Z91BJ001	SHDP42IRO	Screwdriver, Phillips ACR, Instinct™ Hard Handle, #2, Orange	3	102527	1

- You can also save a copy of this image by clicking the button with the downward arrow on it next to the **Trained Drawer Image** title over the image.



Tool Inventory

✓ Hide: Trained Drawer Image

Highlight: SHD20 / Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"

Trained Drawer Image

Filtering

Sticky Filters: Location = Top Level
Run Time: 12/16/2024 11:24 AM : Central Standard Time

Auto-Refresh Xlsx

Storage Location Name	Part Number	Description	Drawer	Tool ID	Tc
Z91BJ001	SGDE230	Screwdriver, Flat Tip, Electronic Miniature, 3 mm tip, 5 3/4"	5	225362	1
Z91BJ001	SGDEP20	Screwdriver, PHILLIPS®, Electronic Miniature, #0 tip, 5 3/4"	5	225393	1
Z91BJ001	SGDEP200	Screwdriver, PHILLIPS®, Electronic Miniature, #00 tip, 5 3/4"	5	225394	1
Z91BJ001	SGDEP21	Screwdriver, Phillips, Electronic Miniature, #1 tip, 5 3/4"	5	225395	1
Z91BJ001	SGDET210	Screwdriver, TORX®, Electronic Miniature, T10	5	225372	1
Z91BJ001	SGDET215	Screwdriver, TORX®, Electronic Miniature, T15	5	225370	1
Z91BJ001	SGDET220	Screwdriver, TORX®, Electronic Miniature, T20	5	225371	1
Z91BJ001	SGDET26	Screwdriver, TORX®, Electronic Miniature, T6	5	225392	1
Z91BJ001	SGDET27	Screwdriver, TORX®, Electronic Miniature, T7	5	225391	1
Z91BJ001	SGDET28	Screwdriver, TORX®, Electronic Miniature, T8	5	225390	1
Z91BJ001	SGDET29	Screwdriver, TORX®, Electronic Miniature, T9	5	225389	1



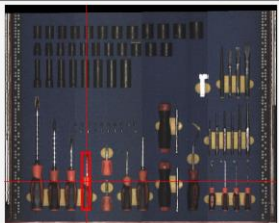
L5 Connect User Manual

5. The red box and crosshairs to help find the specific tool selected can be toggled on and off by selecting or de-selecting the **Highlight: part number/description** checkbox.

Tool Inventory

☒ Hide: Trained Drawer Image ☒ Highlight: SHD20 / Screwdriver, Flat Tip, Instinct™ Hard Handle, Orange, .035"

Trained Drawer Image



Filtering

Sticky Filters: Location = Top Level
Run Time: 12/16/2024 11:24 AM : Central Standard Time

☐ Auto-Refresh Xlsx

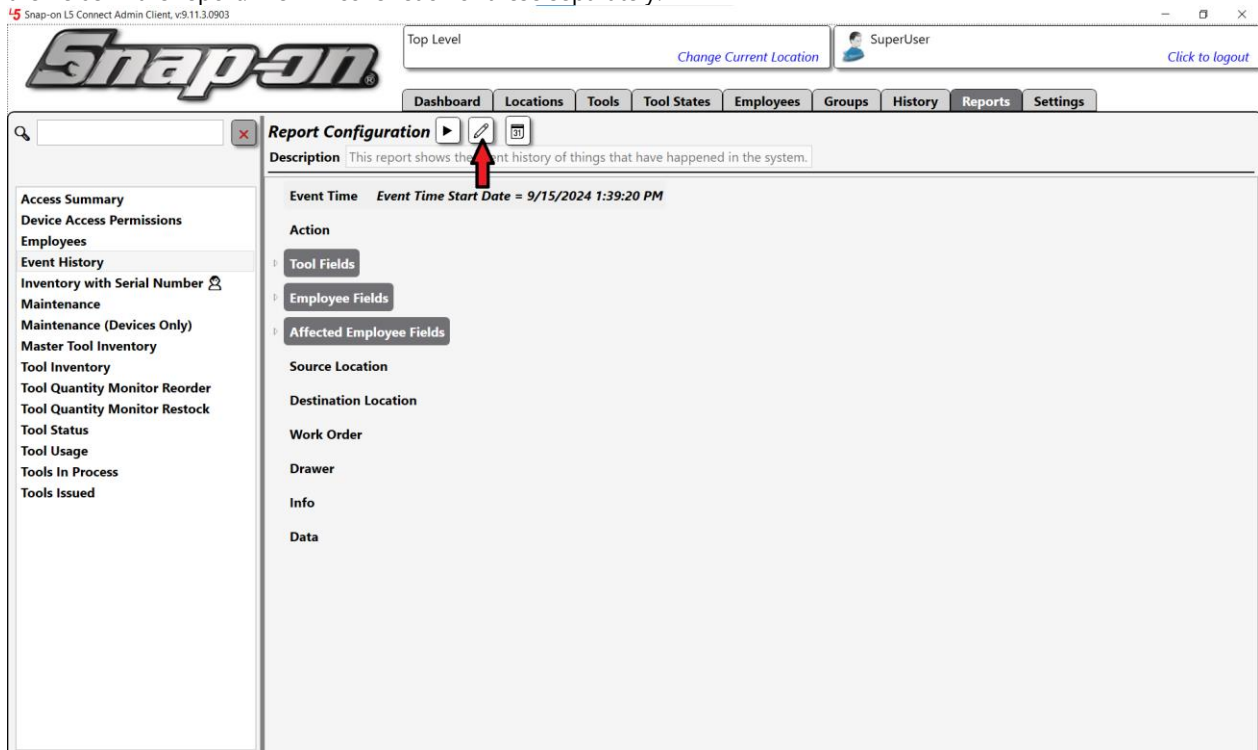
Storage Location Name	Part Number	Description	Drawer	Tool ID	To
Z91BJ001	SGDE230	Screwdriver, Flat Tip, Electronic Miniature, 3 mm tip, 5 3/4"	5	225362	1
Z91BJ001	SGDEP20	Screwdriver, PHILLIPS®, Electronic Miniature, #0 tip, 5 3/4"	5	225393	1
Z91BJ001	SGDEP200	Screwdriver, PHILLIPS®, Electronic Miniature, #00 tip, 5 3/4"	5	225394	1
Z91BJ001	SGDEP21	Screwdriver, Phillips, Electronic Miniature, #1 tip, 5 3/4"	5	225395	1
Z91BJ001	SGDET210	Screwdriver, TORX®, Electronic Miniature, T10	5	225372	1
Z91BJ001	SGDET215	Screwdriver, TORX®, Electronic Miniature, T15	5	225370	1
Z91BJ001	SGDET220	Screwdriver, TORX®, Electronic Miniature, T20	5	225371	1
Z91BJ001	SGDET26	Screwdriver, TORX®, Electronic Miniature, T6	5	225392	1
Z91BJ001	SGDET27	Screwdriver, TORX®, Electronic Miniature, T7	5	225391	1
Z91BJ001	SGDET28	Screwdriver, TORX®, Electronic Miniature, T8	5	225390	1
Z91BJ001	SGDET29	Screwdriver, TORX®, Electronic Miniature, T9	5	225389	1

NOTE: The results of the Report are dependent on the current Location. So, if you want to see all the issued tools for R&D Lab, you should set the current Location to R&D Lab and run the issue tools report.

Creating a Personal Report

Sometimes the built-in reports may not precisely fit your needs. You can customize these reports so that they can. These modifications are saved as new Personal Reports. **NOTE: Custom reports are not supported on the TrueCrib application.**

To create a personal report, click the **Change** button, which looks like a pencil to enable report configuration. You can then do things such as add or remove fields from the report, filter a field, change the width of a column, and reorder the fields in the report. We will cover each of these separately.

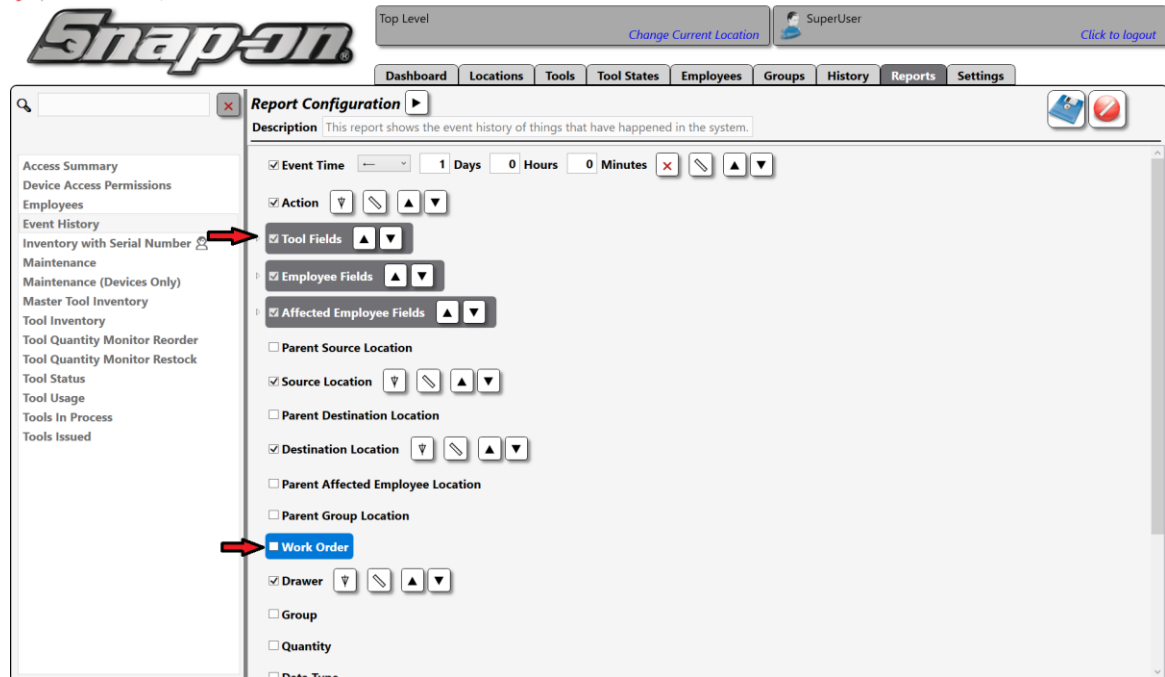


Add/Remove Fields from a Report

1. Let's say that you want your event history report to include tool serial numbers, and you don't use work orders, so you want to hide that column. To hide the **Work Order** column, you would uncheck the checkbox at the beginning of that field. Then expand the **Tool Fields** group of fields by clicking the expander carat at

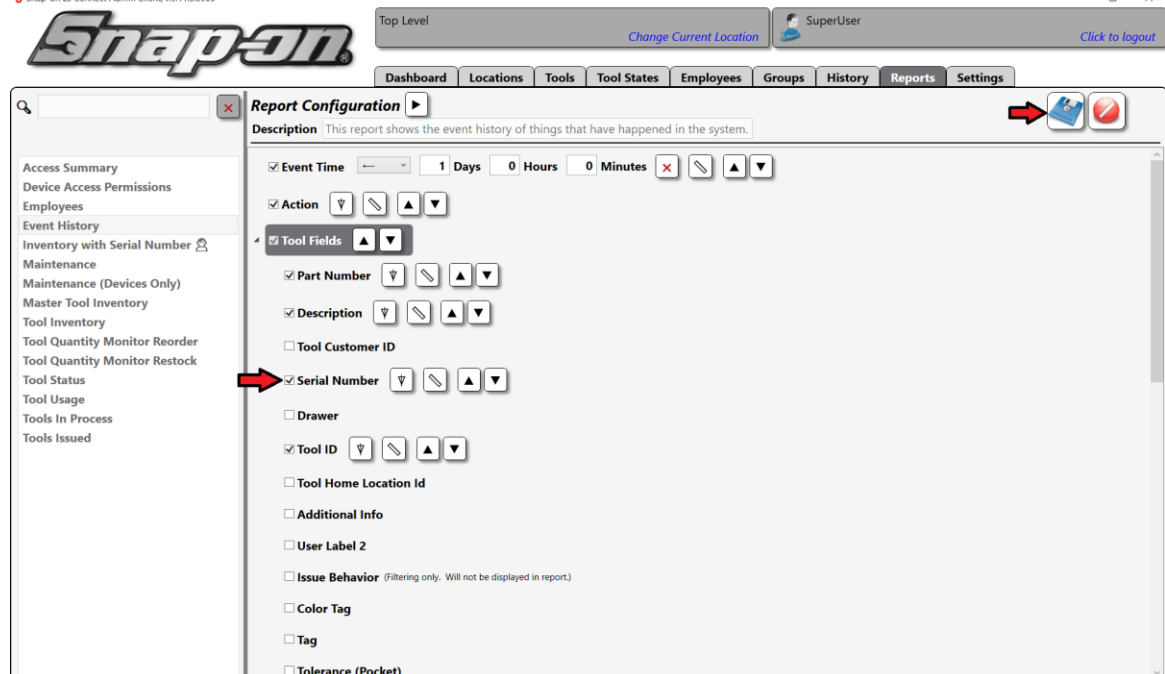
the beginning of the group.

5 Snap-on L5 Connect Admin Client, v9.11.3.0903



2. Select the checkbox for the **Serial Number** field to add that to the report and then click the blue **Save** button that looks like a disk.

5 Snap-on L5 Connect Admin Client, v9.11.3.0903



Filter a Field in a Report

Suppose you wanted this report to pull all the events for a tool with a specific serial number over the last 30 days. To do this you would add filtering to the **Serial Number** and the **Event Time** columns. To add a filter to a column, click



the filtering button.

Date/Time Filtering

There are three types of filtering options for date/time filter types.

<---> Between Dates

<--- In the Last X Days


---> In the Next X Days

So, for the event time filter you would set the filter type to <--- and set the **Days** value to 30 to go back 30 days into the eventlog history.

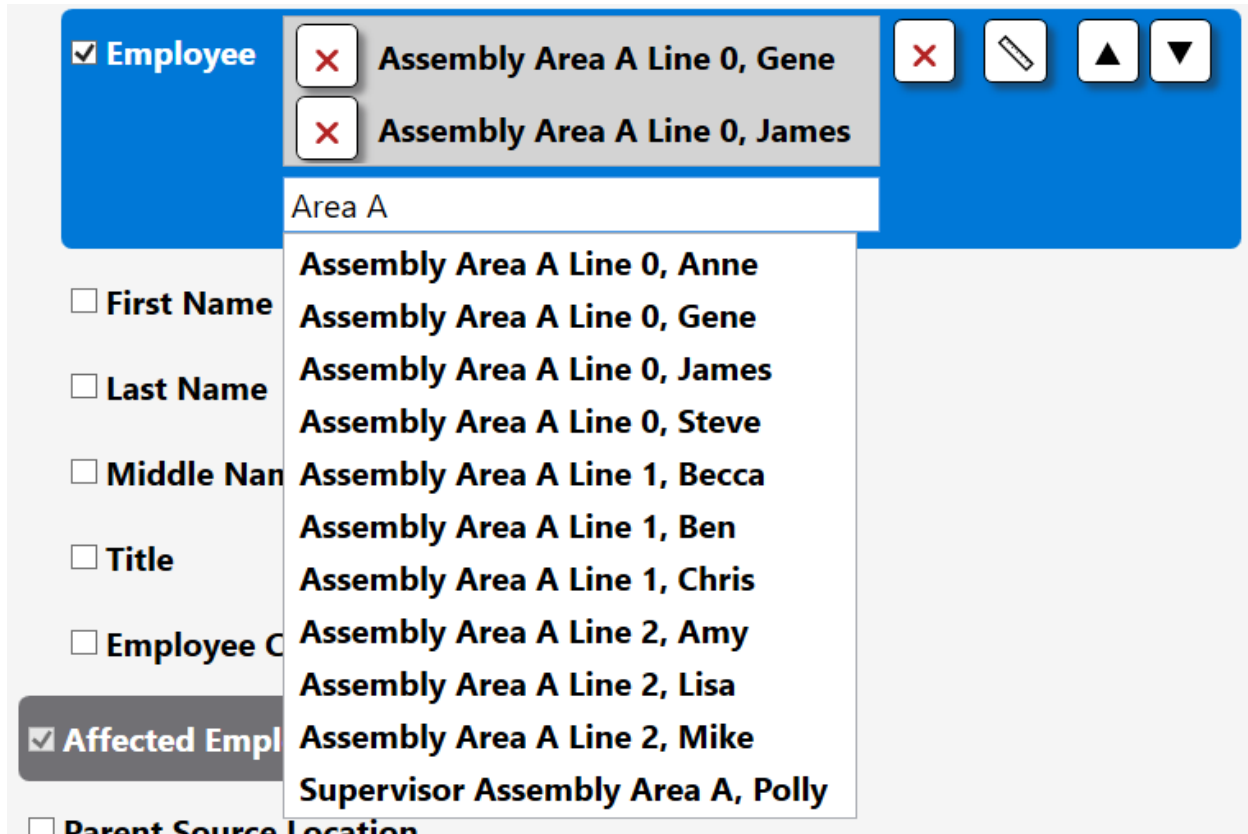


Listbox Filtering

Certain types of fields use listbox filtering. An excellent example of this is the **Employee** field. This field is a combination of **First Name**, **Middle Name**, **Last Name**, and **Title**. To filter by an employee, you would click the **Select New Filter Settings** button, which will display a list box filter.



The top box will display the employees that have been selected. By clicking in the bottom box, it will open the listbox which contains the list of employees from which the user can choose. You can either scroll through the list and select an employee or you can type in the lower box and the list will be filtered by the string typed in the box. This will help to shorten the list from which you need to choose. In this manner you can all multiple choices from the list to the filter until you have it like you want it.



☒ **Employee**

☐ **First Name**

☐ **Last Name**

☐ **Middle Name**

☐ **Title**

☐ **Employee C**

☒ **Affected Empl**

☐ **Parent Source Location**

Area A

- Assembly Area A Line 0, Anne
- Assembly Area A Line 0, Gene
- Assembly Area A Line 0, James
- Assembly Area A Line 0, Steve
- Assembly Area A Line 1, Becca
- Assembly Area A Line 1, Ben
- Assembly Area A Line 1, Chris
- Assembly Area A Line 2, Amy
- Assembly Area A Line 2, Lisa
- Assembly Area A Line 2, Mike
- Supervisor Assembly Area A, Polly

String Filtering

String columns will have a text box into which you can type the string you want to match. Any event where that column contains the string in the filter box will be added to the report. So, to filter the report for a specific **Serial Number**, you click the filter button on that column and input the desired serial number value into the text box.

Numeric Filtering

Columns that contain numeric values such as **Quantity** use a numeric filter. There are 5 options for numeric filters.





- < - Less than filter
- <= - Less than or equal to filter
- = - Equal to filter
- >= - Greater than or equal to filter
- > - Greater than filter

Change the Width of a Column

You can manually adjust the width of any column by clicking on the **Set column width** button, which looks like a ruler. This will expand the information shown for that column to include the default width of the column in a text box which you can modify.



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☒ **Serial Number** 1DR429   Width 1.00   

You can then run the report without saving it to see what difference your change has made and tweak the width until it is where you would like it to be.

Reorder Report Fields

Each of the selected fields will be shown on the report in the order they appear in the list, with the top selected field first in the report and the last selected field in the last column. You can change the order of these columns, with some exceptions. Some fields are grouped together such as **Tool Fields** and **Employee Fields**. These groups cannot be separated, however the fields in the group can be reordered inside the group.

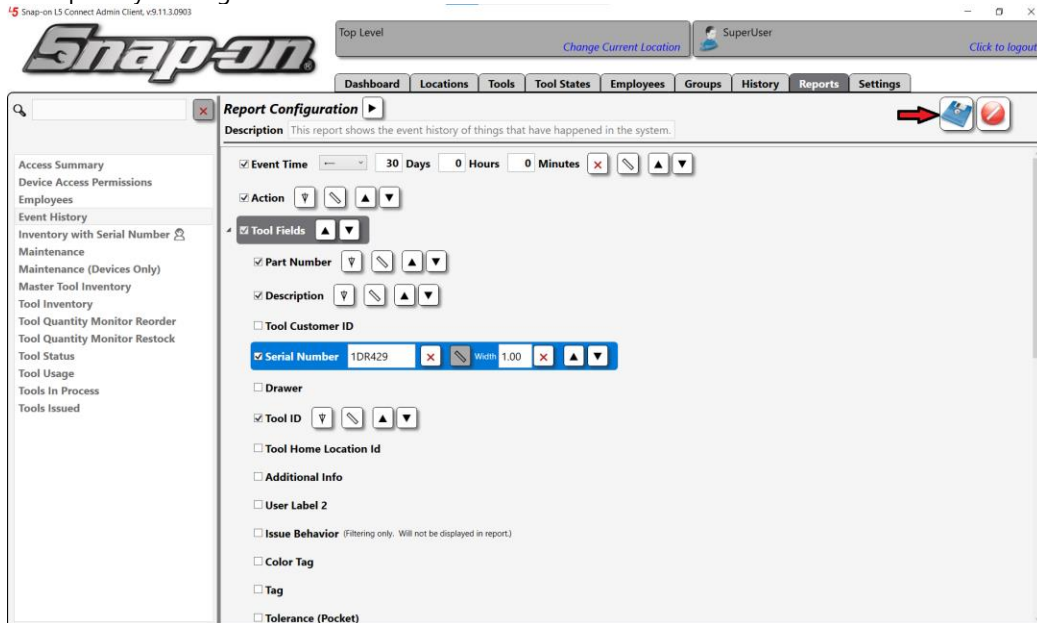
To move a field within the list of fields you would use the **Move up** and **** Move down**** arrows at the end of the field.

☒ **Destination Location**   Width 1.50   

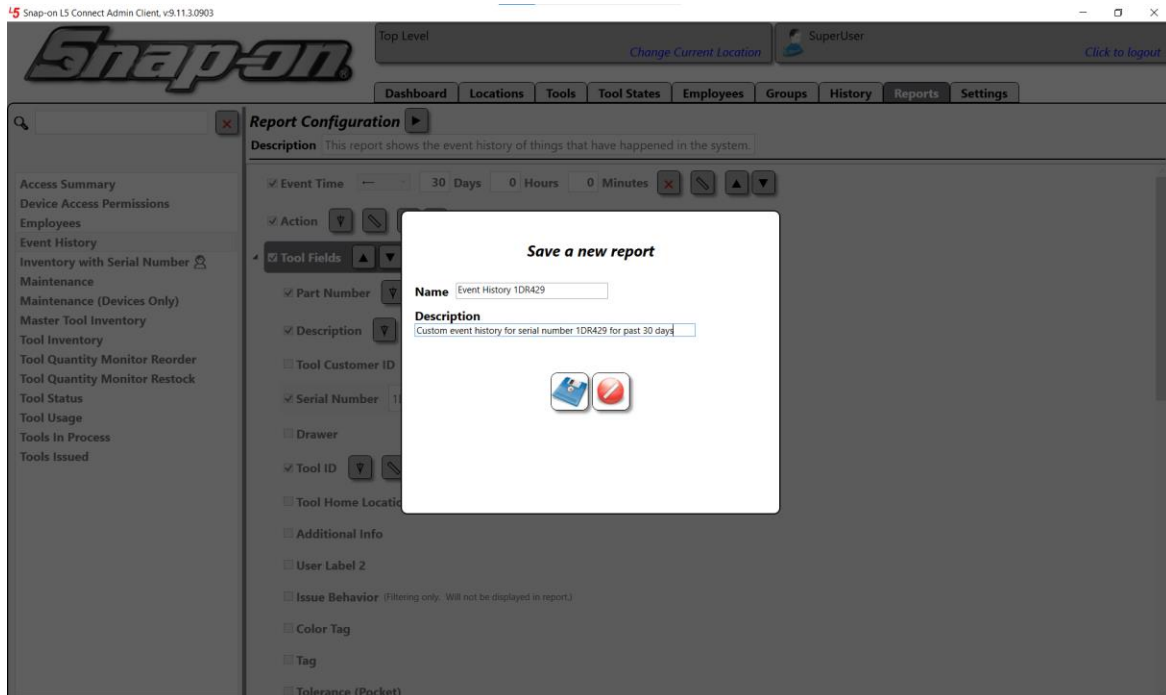
Using these buttons, you can rearrange the columns into the order you wish for your custom report.

Saving a Personal Report

Once you have made all the customizations you need to make and the report looks like you want it to, you can save the report by clicking the blue **Save** button that looks like a disk.



You will be prompted to provide a name and description for your new personal report. Enter the information and click the blue **Save** button.





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Now your new custom personal report shows up in the list of reports. **NOTE: Other people will not see this report in their list of reports.**

5 Snap-on L5 Connect Admin Client, v9.11.3.0903

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

DashboardLocationsToolsTool StatesEmployeesGroupsHistoryReportsSettings

Report Configuration

Description Custom event history for serial number 1DR429 for past 30 days

Event Time Event Time Start Date = 8/17/2024 1:04:44 PM

Action

Tool Fields

Part Number

Description

Serial Number Serial Number = 1DR429

Tool ID

Employee Fields

Affected Employee Fields

Source Location

Destination Location

Drawer

Info

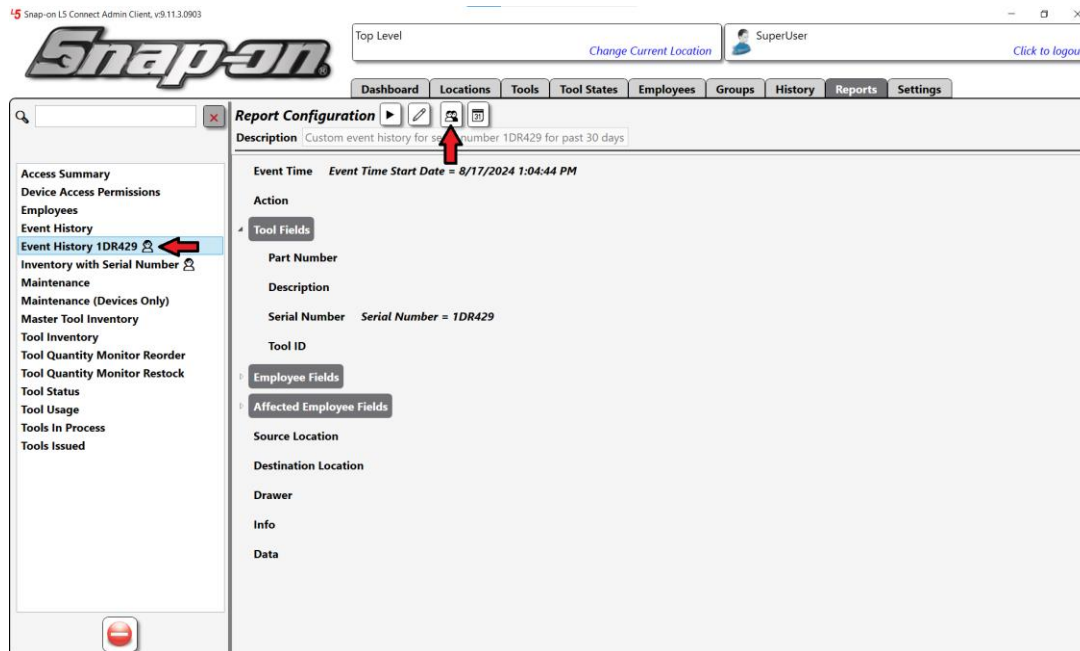
Data

Access Summary
Device Access Permissions
Employees
Event History
Event History 1DR429
Inventory with Serial Number
Maintenance
Maintenance (Devices Only)
Master Tool Inventory
Tool Inventory
Tool Quantity Monitor Reorder
Tool Quantity Monitor Restock
Tool Status
Tool Usage
Tools In Process
Tools Issued

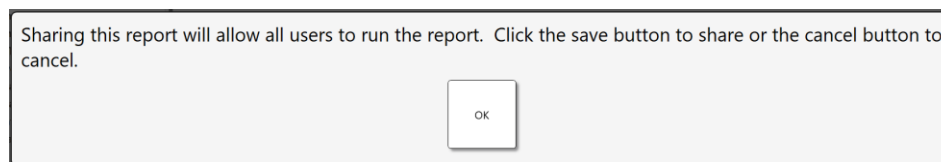
Sharing a Personal Report

If you decide that you would like other users to be able to run your report as well, you can share your report. This will cause it to be seen in the list of reports for anyone who logs into the admin with permission to run reports.

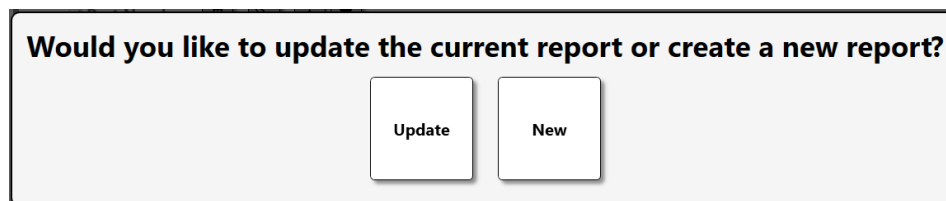
To share your personal report, select the report and then click the **Share report** button.



You will see a message telling you that this will allow other users to run the report. Click the **OK** button to continue and then click the blue **Save** button.



You will now be prompted to update the current report or create a new report. Choosing **Update** will change the current personal report to a shared report. Choosing **New** will cause a copy of the personal report to be saved as the shared report and the user will still have his personal report as well.






For this example, we will choose **New**. You will then be prompted to give this new report a name and description just as you had to do when creating the personal report. Input the requested information and click the blue **Save** button.

Save a new report

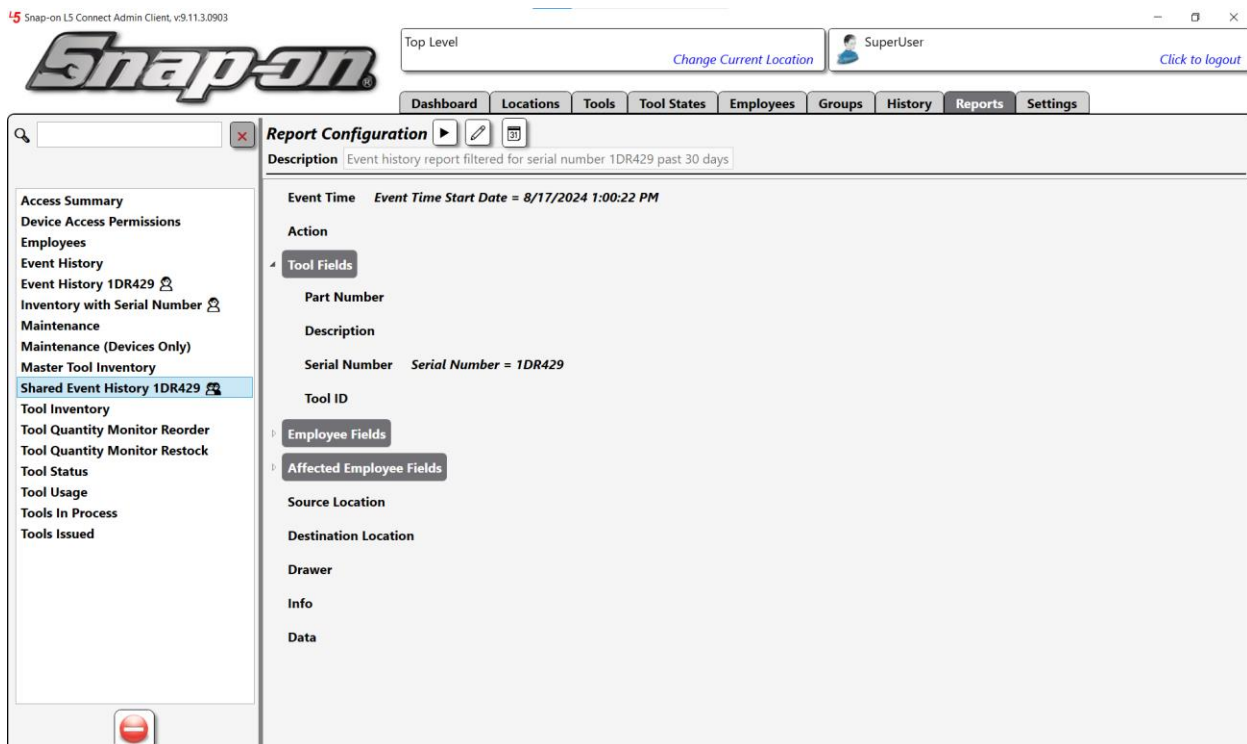
Name

Description



You can now see that your personal report, which only you see, is there as well as the freshly created shared version of the report.



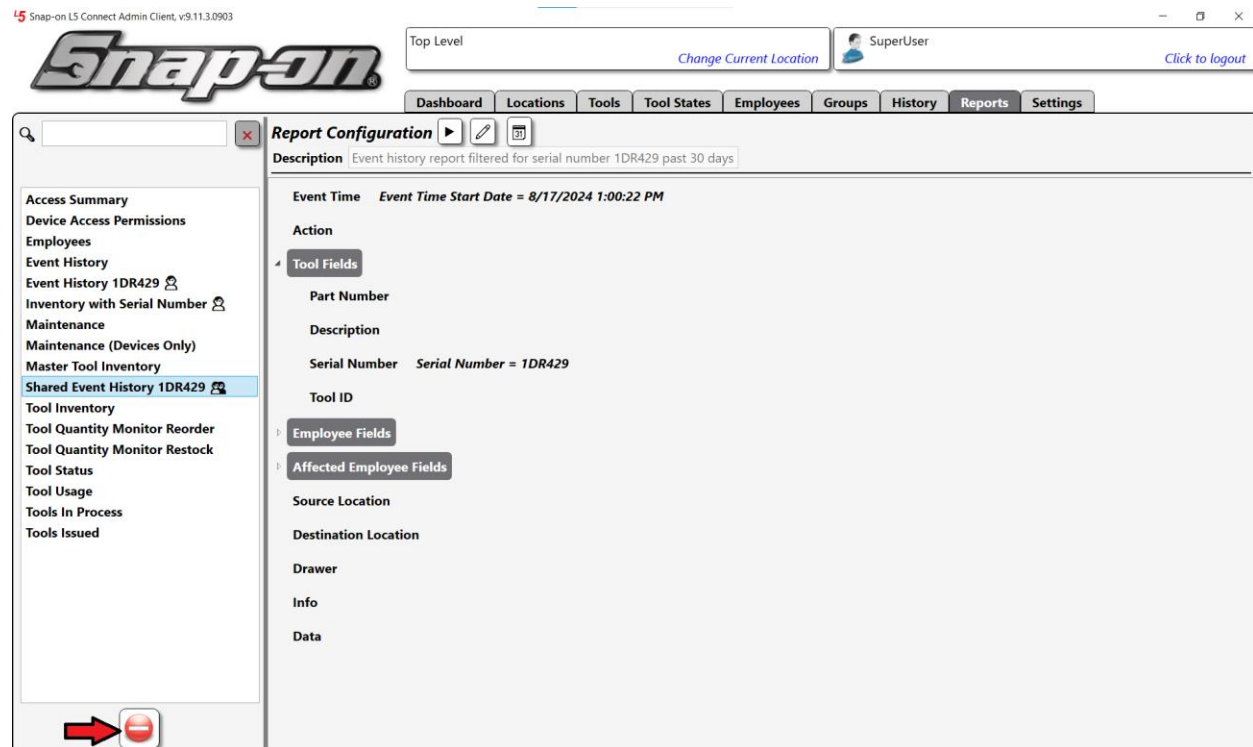
The screenshot shows the Snap-on L5 Connect Admin Client interface. At the top, there's a header with the Snap-on logo, a breadcrumb trail (Top Level), a user profile (SuperUser), and a link to logout. Below the header is a navigation bar with tabs: Dashboard, Locations, Tools, Tool States, Employees, Groups, History, Reports, and Settings. The main content area is titled "Report Configuration" and shows the configuration for a report named "Shared Event History 1DR429". The report description is "Event history report filtered for serial number 1DR429 past 30 days". The report is categorized under "Event Time" with a start date of "8/17/2024 1:00:22 PM". The report is configured with the following fields:

- Tool Fields:**
 - Part Number
 - Description
 - Serial Number (Serial Number = 1DR429)
 - Tool ID
- Employee Fields:**
 - Affected Employee Fields
- Source Location**
- Destination Location**
- Drawer**
- Info**
- Data**

The left sidebar contains a list of navigation items, including "Access Summary", "Device Access Permissions", "Employees", "Event History", "Event History 1DR429", "Inventory with Serial Number", "Maintenance", "Maintenance (Devices Only)", "Master Tool Inventory", "Shared Event History 1DR429", "Tool Inventory", "Tool Quantity Monitor Reorder", "Tool Quantity Monitor Restock", "Tool Status", "Tool Usage", "Tools In Process", and "Tools Issued".

Deleting a Report

You can delete personal or shared reports, however the built-in reports cannot be deleted. To delete a personal or shared report, simply select it in the list and click the **Delete** button at the bottom of the list of reports.



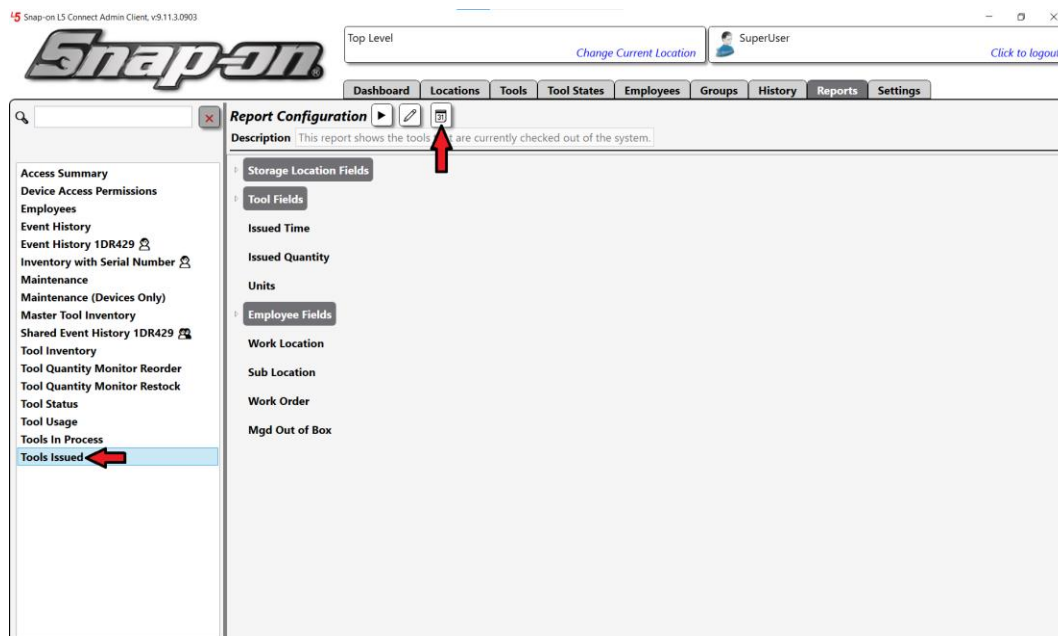
The screenshot shows the Snap-on L5 Connect Admin Client interface. The top navigation bar includes the Snap-on logo, a search bar, and user information (SuperUser). Below the navigation bar is a tabbed menu with options: Dashboard, Locations, Tools, Tool States, Employees, Groups, History, Reports, and Settings. The 'Reports' tab is active, and the 'Report Configuration' window is open. The window title is 'Report Configuration' and it contains a description: 'Event history report filtered for serial number 1DR429 past 30 days'. The window is divided into sections: Event Time (Event Time Start Date = 8/17/2024 1:00:22 PM), Action, Tool Fields (Part Number, Description, Serial Number = 1DR429, Tool ID), Employee Fields, Affected Employee Fields (Source Location, Destination Location, Drawer, Info, Data), and a 'Delete' button at the bottom left. A red arrow points to the 'Delete' button.

Scheduling a Report

You can schedule a report to automatically be run at a specific time and sent to the appropriate users. For example, you want a report each day that lets you know what tools are still issued at the end of the workday. You can schedule the **Tools Issued** report to run each day at 5 PM. You can then assign the report to be delivered to each of the supervisors so they can take any action if needed.

NOTE: You will need to have set up the SMTP settings and email addresses of the intended recipients beforehand, as these reports are emailed. See the SMTP Configuration document for more details.

To schedule this report, you would select the **Tools Issued** report and then click the **Schedule Report** button, which looks like a calendar.



This will open the report scheduling window. You will need to provide the information necessary to schedule the report. Start by adding a description of the report.

Creating scheduled report: Tools Issued

Description

Destination
☒ Employee
 ☐ Group

Attachment

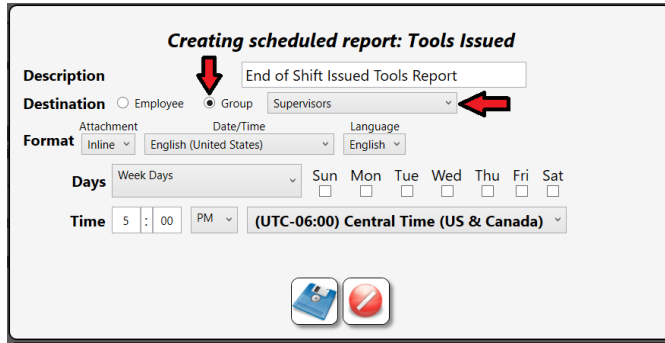
Format

Days

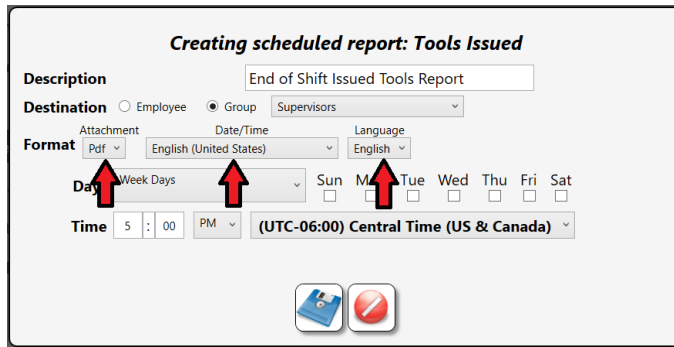
☐ Sun
 ☐ Mon
 ☐ Tue
 ☐ Wed
 ☐ Thu
 ☐ Fri
 ☐ Sat

Time

Next, you will need to provide the destination. It can be either an individual employee or a group of employees. For this case we would choose the **Group** radio button and then select the **Supervisors** group from the pull-down menu that will list all the groups available.

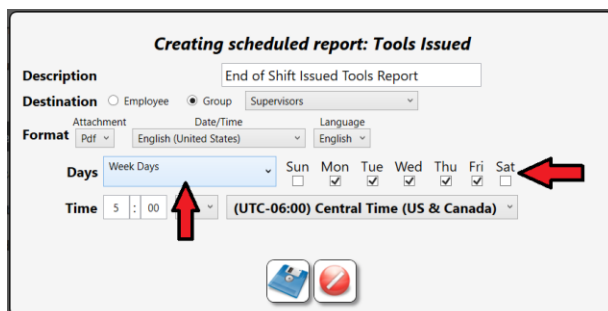


Next, we need to choose the Format for the report. The first thing we need to set is the **Attachment** type. The report can be a PDF, Xlsx, or an Rtf file attachment, or it can be put right into the body of the email itself with the **Inline** option. For this case we will select a PDF attachment to the email. You also need to select the **Date/Time** format that should be used in the report. This will make sure the dates in your report are presented in a format to your liking. And you will also want to set your **Language** for the report from the pull-down menu.



The next thing you need to configure is when the report will be run. The **Days** pull-down has three options.

- Week Days - Whatever days are selected in the individual day checkboxes
- Day of Month - A specific day of the month selected from an accompanying pull-down
- Last Day of Month - The last day of each month





L5 Connect User Manual

Now we have the days the report should be run set but we still need to add the time on those days that it will be run. Set your time with the **Time** box. Don't forget to also set the AM/PM value in the pull-down menu. And lastly, select your time zone from the time zone pull-down menu.

Creating scheduled report: Tools Issued

Description: End of Shift Issued Tools Report

Destination: ☐ Employee ☒ Group Supervisors

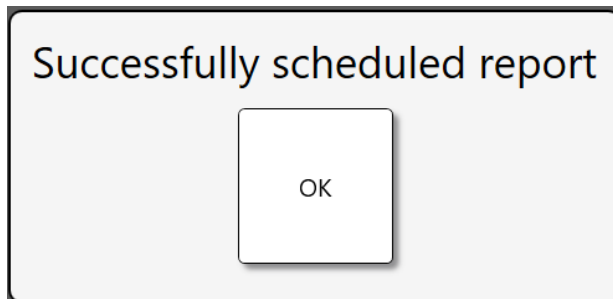
Attachment: Date/Time: Language: English

Format: Pdf English (United States) English

Days: Week Days Sun Mon Tue Wed Thu Fri Sat

Time: 5 : 00 PM (UTC-06:00) Central Time (US & Canada)

Once everything is set properly, click the blue **Save** button to schedule your report, then click the **OK** button.



This has created a scheduled report "Subscription" for the Supervisors group. To verify that this is the case, you can go to the **Groups** tab and select the **Supervisors** group. Then click on the **Subscriptions** sub-tab.

Top Level Change Current Location SuperUser Click to logout

Dashboard Locations Tools Tool States Employees Groups History Reports Settings

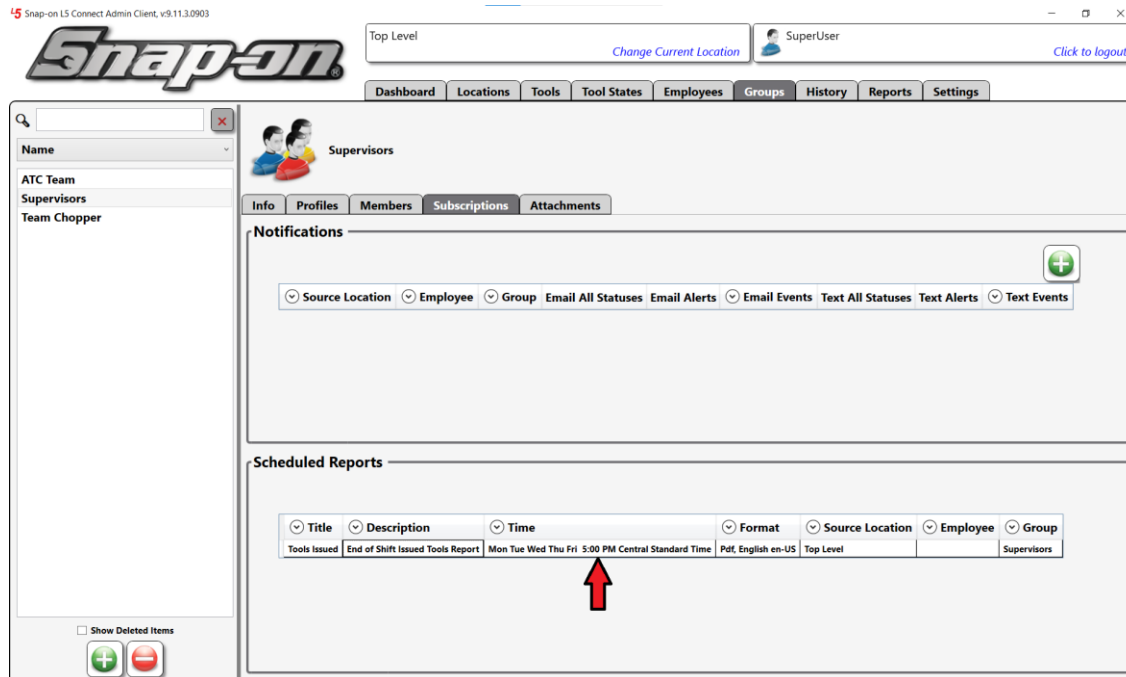
Supervisors

Info Profiles Members Subscriptions Attachments

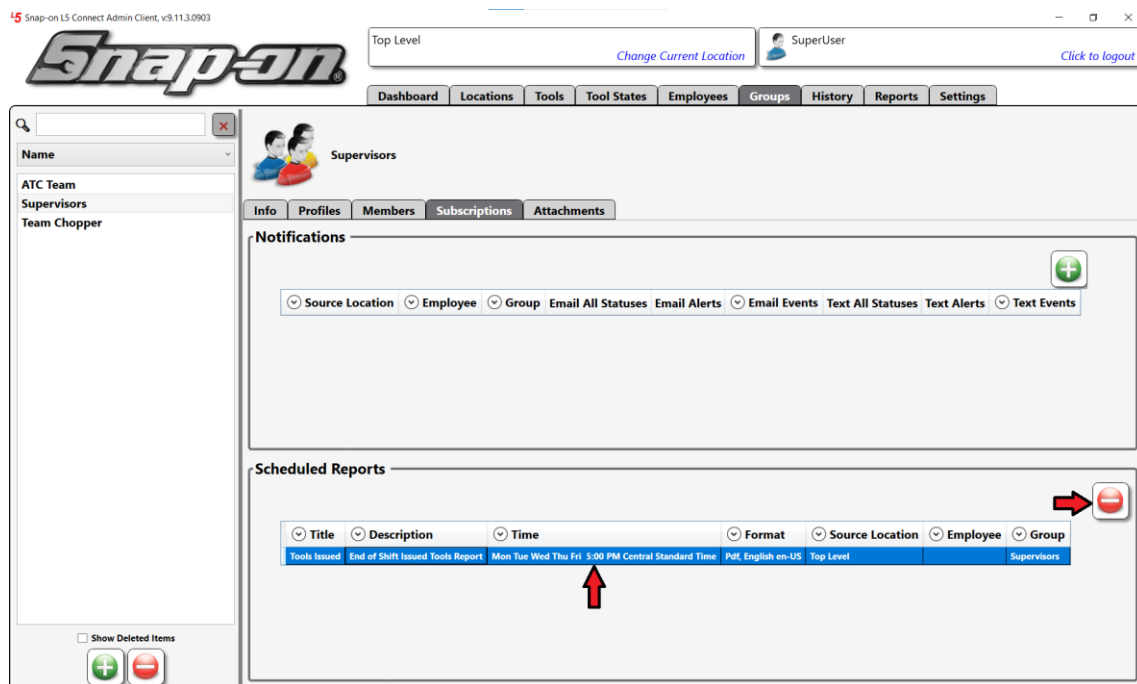
Employee Is Member

Assembly Area A Line 0, Anne	<input type="checkbox"/>
Assembly Area A Line 0, Gene	<input type="checkbox"/>
Assembly Area A Line 0, James	<input type="checkbox"/>
Assembly Area A Line 0, Steve	<input type="checkbox"/>
Assembly Area A Line 1, Berca	<input type="checkbox"/>
Assembly Area A Line 1, Ben	<input type="checkbox"/>
Assembly Area A Line 1, Chris	<input type="checkbox"/>
Assembly Area A Line 2, Amy	<input type="checkbox"/>
Assembly Area A Line 2, Lisa	<input type="checkbox"/>
Assembly Area A Line 2, Mike	<input type="checkbox"/>
Assembly Area B Line 0, Dean	<input type="checkbox"/>
Assembly Area B Line 0, Liv	<input type="checkbox"/>
Assembly Area B Line 0, Sara	<input type="checkbox"/>
Assembly Area B Line 1, Jess	<input type="checkbox"/>
Assembly Area B Line 1, Jim	<input type="checkbox"/>
Assembly Area B Line 1, Opal	<input type="checkbox"/>
Assembly Area B Line 2, Art	<input type="checkbox"/>
Assembly Area B Line 2, Bo	<input type="checkbox"/>
Assembly Area B Line 2, Kim	<input type="checkbox"/>
Helicopter Maintenance Hangar, Ali	<input type="checkbox"/>
Helicopter Maintenance Hangar, Ed	<input type="checkbox"/>
Helicopter Maintenance Hangar, Fred	<input type="checkbox"/>
Helicopter Maintenance Hangar, George	<input type="checkbox"/>
Helicopter Maintenance Hangar, Jen	<input type="checkbox"/>
Helicopter Maintenance Hangar, Kate	<input type="checkbox"/>
Helicopter Maintenance Hangar, Ted	<input type="checkbox"/>

You can see your scheduled report listed in the **Scheduled Reports** section.



If you would like to delete this subscription, select the report, and then click the **Delete** button.



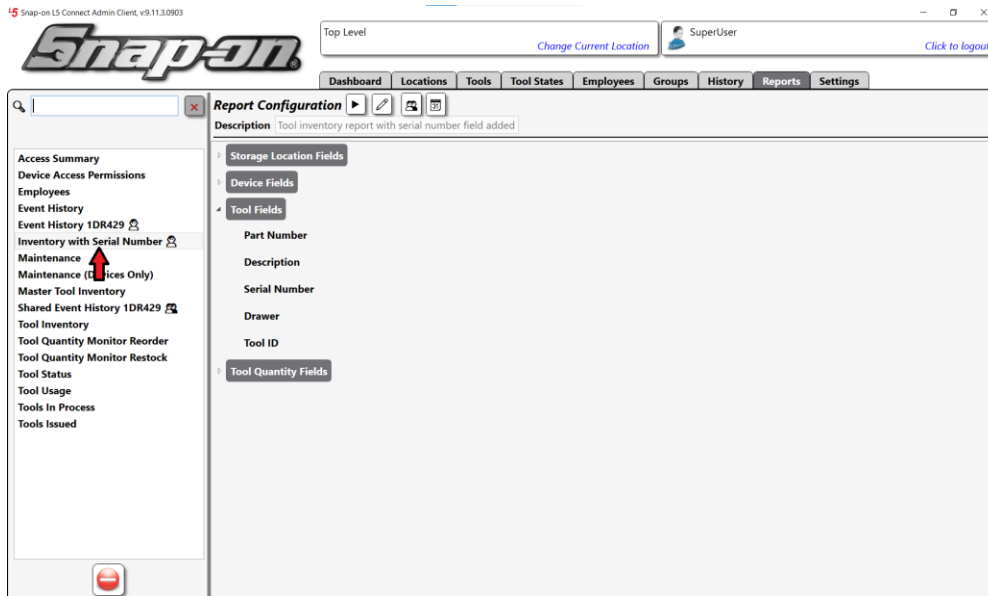
NOTE: For the employees to actually receive the scheduled report they must have an email address configured in their employee info and the system must be configured with an SMTP server as previously noted.



L5 Connect User Manual

Tool States Tab

Since the **Tool States** tab is powered by the reports engine, you can create custom reports and use them to customize your **Tool States** displays. Let's say you wanted to have the **Serial Number** field displayed on the **Tool Inventory** sub-tab of the **Tool States** tab. First you would create a custom report where you added the **Serial** **Number** field to that report and save it.





L5 Connect User Manual

Then you would go to the **Tool States** tab and select the **Inventory** sub-tab. In the **Filtering** area at the top of the screen you would use the **Custom Reports** pull-down menu to select your newly created report, and you will have the serial number column added to the screen.

Snap-on L5 Connect Admin Client, v9.12.6.1125

Snap-on Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools **Tool States** Employees Groups History Reports Settings

Status Issued **Inventory** Maintenance In Process

Show: Trained Drawer Image

Filtering

Custom Reports Total Quantity
Inventory with Serial Number

Auto-Refresh Xlsx

Storage Location Name	Part Number	Description	Drawer	Tool ID	Total Quantity	Units
Tool Box 1	1410 NO KEY	SiouX 1410 Drill		102260	1	
Tool Box 1	1650	Prybar, 16"	7	102272	1	
Tool Box 1	1AM1541	SiouX 45 Degree Angle Air Drill		102261	1	
Tool Box 1	1DAJ21HP NO WRENCHES	SiouX 1DAJ21HP Die Grinder		102259	1	
Tool Box 1	208CCP	Pliers, Angle Nose	7	102278	1	
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finish, Vinyl Grips, 7 1/2"		102168	1	
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finish, Vinyl Grips, 7 1/2"		102227	1	
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"		102167	1	
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"		102226	1	
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel, Industrial Finish, 9 1/4"		102187	1	
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel, Industrial Finish, 9 1/4"		102246	1	
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"		102166	1	
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"		102225	1	
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"		102165	1	
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"		102224	1	
Tool Box 1	A2A	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"	1	102412	1	
Tool Box 1	AC5B	Brush, Hand Scratch, Stainless Steel, 7 7/8"		102174	1	
Tool Box 1	AC5B	Brush, Hand Scratch, Stainless Steel, 7 7/8"		102233	1	
Tool Box 1	AT780	Impact Wrench, Air, Heavy Duty, 3/8" Drive (35-150 ft. lb.)		102258	1	
Tool Box 1	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. in BHK15 Metal Index) (.028" to 3/8")	7	102274	1	
Tool Box 1	AWM110DHK	Set, Metric, Wrench, L-Shape, Hex, Long (11 pcs. in BHK11 Metal Index) (2 to 12 mm)	7	102275	1	
Tool Box 1	B58HLP	Pliers, Linemans, Blue-Point, 8"		102148	1	
Tool Box 1	B58HLP	Pliers, Linemans, Blue-Point, 8"		102207	1	
Tool Box 1	BADJC10	Wrench, Adjustable, Composite Handle, Blue-Point®, 10"		102257	1	
Tool Box 1	BADJC6	Wrench, Adjustable, Composite Handle, Blue-Point®, 6"	5	102312	1	
Tool Box 1	BADJC8	Wrench, Adjustable, Composite Handle, Blue-Point®, 8"	5	102311	1	
Tool Box 1	8P16B	Hammer, Ball Peen, 16 oz.	7	102270	1	
Tool Box 1	BTC10	Cleaner, Side Terminal	7	102276	1	
Tool Box 1	BTC3A	Brush, Terminal	7	102279	1	
Tool Box 1	CSABC	Carbon Scraper, Rigid, Black, 7/8" Blade Width, 7 5/8"		102194	1	
Tool Box 1	CSABC	Carbon Scraper, Rigid, Black, 7/8" Blade Width, 7 5/8"		102253	1	

Snap-on L5 Connect Admin Client, v9.12.6.1125

Snap-on Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools **Tool States** Employees Groups History Reports Settings

Status Issued **Inventory** Maintenance In Process

Show: Trained Drawer Image

Filtering

Custom Reports Total Quantity
Inventory with Serial Number

Auto-Refresh Xlsx

Storage Location Name	Part Number	Description	Serial Number	Drawer	Tool ID	Total Quantity	Units
Tool Box 1	1410 NO KEY	SiouX 1410 Drill			102260	1	
Tool Box 1	1650	Prybar, 16"		7	102272	1	
Tool Box 1	1AM1541	SiouX 45 Degree Angle Air Drill			102261	1	
Tool Box 1	1DAJ21HP NO WRENCHES	SiouX 1DAJ21HP Die Grinder			102259	1	
Tool Box 1	208CCP	Pliers, Angle Nose		7	102278	1	
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finish, Vinyl Grips, 7 1/2"			102168	1	
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finish, Vinyl Grips, 7 1/2"			102227	1	
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"			102167	1	
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"			102226	1	
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel, Industrial Finish, 9 1/4"			102187	1	
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel, Industrial Finish, 9 1/4"			102246	1	
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"			102166	1	
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"			102225	1	
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"			102165	1	
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"			102224	1	
Tool Box 1	A2A	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"	1		102412	1	
Tool Box 1	AC5B	Brush, Hand Scratch, Stainless Steel, 7 7/8"			102174	1	
Tool Box 1	AC5B	Brush, Hand Scratch, Stainless Steel, 7 7/8"			102233	1	
Tool Box 1	AT780	Impact Wrench, Air, Heavy Duty, 3/8" Drive (35-150 ft. lb.)			102258	1	
Tool Box 1	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. in BHK15 Metal Index) (.028" to 3/8")	7		102274	1	
Tool Box 1	AWM110DHK	Set, Metric, Wrench, L-Shape, Hex, Long (11 pcs. in BHK11 Metal Index) (2 to 12 mm)	7		102275	1	
Tool Box 1	B58HLP	Pliers, Linemans, Blue-Point, 8"			102148	1	
Tool Box 1	B58HLP	Pliers, Linemans, Blue-Point, 8"			102207	1	
Tool Box 1	BADJC10	Wrench, Adjustable, Composite Handle, Blue-Point®, 10"			102257	1	
Tool Box 1	BADJC6	Wrench, Adjustable, Composite Handle, Blue-Point®, 6"	5		102312	1	
Tool Box 1	BADJC8	Wrench, Adjustable, Composite Handle, Blue-Point®, 8"	5		102311	1	
Tool Box 1	8P16B	Hammer, Ball Peen, 16 oz.	7		102270	1	
Tool Box 1	BTC10	Cleaner, Side Terminal	7		102276	1	
Tool Box 1	BTC3A	Brush, Terminal	7		102279	1	
Tool Box 1	CSABC	Carbon Scraper, Rigid, Black, 7/8" Blade Width, 7 5/8"			102194	1	
Tool Box 1	CSABC	Carbon Scraper, Rigid, Black, 7/8" Blade Width, 7 5/8"			102253	1	

NOTE: Certain report types support viewing of additional image information. For example, when a tool from an optical toolbox is selected in the Tool Inventory report, the drawer image captured during the training process can be displayed by clicking the Show: Trained Drawer Image button.



L5 Connect User Manual

Reports and the History Tab

In the past there have been many requests to be able to customize the display of the events on the history tab. Software version 9.11.4.x and higher will support custom report functionality on the Administration Client history tab as described below, which will allow such customization.

The new **History** tab will be powered by the reporting engine allowing customization of the eventlog display grid. The first step is to go to your **Reports** tab and create a custom **Event History** report. Then go to the new **History** tab. You will notice in the **Filtering** section of the screen that there is a **Custom Reports** pull-down menu. From this you can select your custom **Event History** report, and your event history display will change to your desired layout.

15 Snap-on L5 Connect Admin Client, v9.11.3.0903

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups **History** Reports Settings

Hide: Archive Image Highlight: SimulatorToolbox36 / Toolbox Simulator 36

Drawer Open Image Drawer Closed Image

Image not associated with the selected event

Image not associated with the selected event

Filtering

Custom Reports Event Time 1 Days 0 Hours 0 Minutes Drawer Auto-Refresh

Event History 1DR429

Event Time	Action	Part Number	Description	Serial Number	Tool ID	Employee	Affected Employee	Source Location	Destination Location
9/15/2024 1:01:38 AM	Status Set	SimulatorToolbox36	Toolbox Simulator 36		102458			2918J001	
9/15/2024 1:01:38 AM	Box Shutdown							2918J001	
9/14/2024 12:00:00 AM	Status Set	AW1013DNH	Set, Wrench, L-Shape, Hex (13 pos. in BWH13 Metal Index) L28" to 3/8"	225427				2918J001	
9/14/2024 12:00:00 AM	Status Set	Q83148	Wrench, Combination, Standard Length, 7/16", 12-Point	225227				2918J001	
9/13/2024 4:15:32 PM	Status Cleared	SimulatorToolbox36	Toolbox Simulator 36		102458			2918J001	
9/13/2024 4:15:31 PM	Box Startup							2918J001	
9/13/2024 3:53:46 PM	Status Set	LS47CPORTAL	RFID Portal Emulator	225767				2918J001	
9/13/2024 3:53:46 PM	Status Set	LS47CPORTAL	RFID Portal Emulator	225864				2918J001	
9/13/2024 3:53:46 PM	Status Set	LS46K5000	34" Optical Toolbase - AC, Generation 3	190125				2918J001	
9/13/2024 3:53:46 PM	Status Set	SimulatorRFIDCab	RFID Cabinet Simulator	225495				2918J001	
9/13/2024 3:53:46 PM	Status Set	SimulatorRFIDCab	RFID Cabinet Simulator	225777				2918J001	
9/13/2024 3:53:46 PM	Status Set	SimulatorToolbox36	Toolbox Simulator 36	102458				2918J001	

Notice the **Serial Number** column has been added, and the **Work Order** field has been removed based on the custom report we created earlier. Additionally, the displayed data is filtered by the serial number "1DR429" and the previous 30-day date range. Also note that the shared version was available for selection too.

15 Snap-on L5 Connect Admin Client, v9.11.3.0903

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups **History** Reports Settings

Hide: Archive Image Highlight: FAM11E / Socket Driver, Metric, Hex, Standard, 11 mm

Drawer Open Image Drawer Closed Image

Image not associated with the selected event

Image not associated with the selected event

Filtering

Custom Reports Event Time 30 Days 0 Hours 0 Minutes Drawer Auto-Refresh

Event History 1DR429

Event Time	Action	Part Number	Description	Serial Number	Tool ID	Employee	Affected Employee	Source Location	Destination Location
9/16/2024 10:10:01 AM	Tool serial number changed	FAM11E	Socket Driver, Metric, Hex, Standard, 11 mm	1DR429	225173	SuperUser		2918J001	
9/16/2024 10:10:01 AM	Status Set	FAM11E	Socket Driver, Metric, Hex, Standard, 11 mm	1DR429	225173			2918J001	



L5 Connect User Manual

Dashboard Setup

The dashboard is the home screen of the admin client. It provides a customizable, real-time display of your L5 Connect system, data of all your L5 Connect™ Device's statuses and alerts. The True-Crib and ATC Portal also have dashboards as well. This document will discuss how to customize your dashboards to suit your business needs.

Widgets

The building blocks of the dashboard are widgets. Widgets are pre-made self-contained panes that show different aspects of the L5 Connect system such as device status, or a graph of the top employees with tools out.

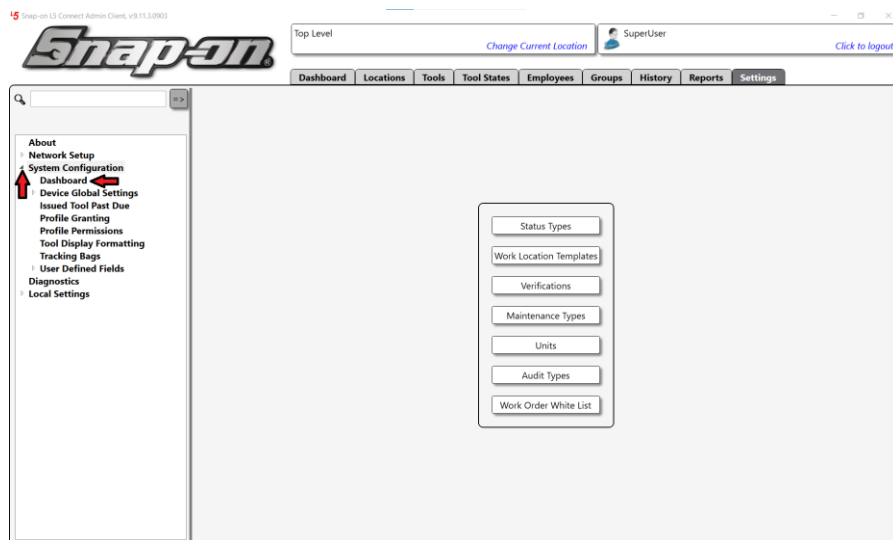
By default, the Dashboard displays seven widgets:

1. System Status – Displays the total number of objects in the system and the total in the current view.
2. Device Status – Displays all L5 Connect™ Devices in the current view and their status.
3. Work Location Status – Displays all Work Locations in the current view and their status.
4. Top Employees with Issued Tools – Displays the Employees with the most issued tools.
5. Top Work Locations with Issued Tools – Displays the Work Locations with the most issued tools.
6. Top Devices with Issued Tools – Displays the L5 Connect™ Devices with the most tools issued.
7. Recent Events – Displays a list of events since the user logged into the client.

Dashboard Editor

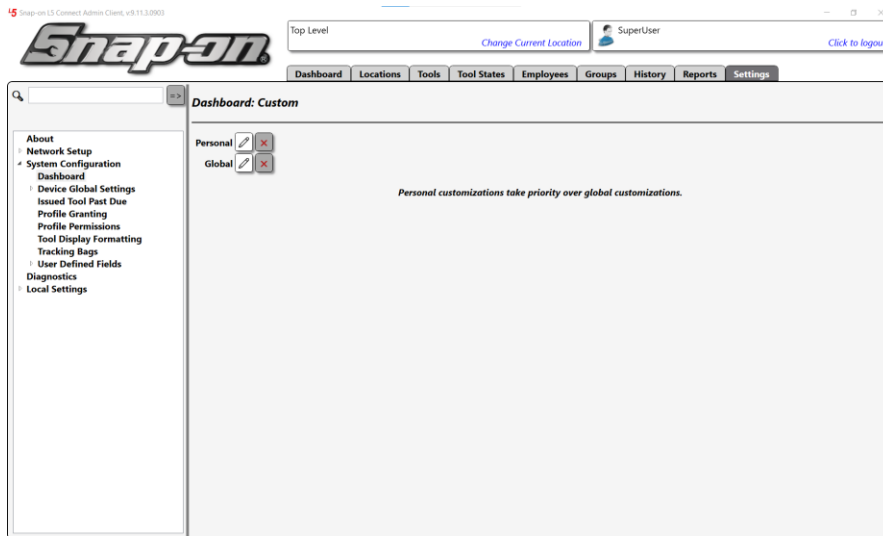
The dashboard editor provides a way to customize your dashboard. You can change which widgets are displayed and where they are on the screen. You cannot edit the widgets themselves, however.

To access Dashboard Editor, you need to go to **Settings** tab and expand the **System Configuration** item. Then select the **Dashboard** sub-item.



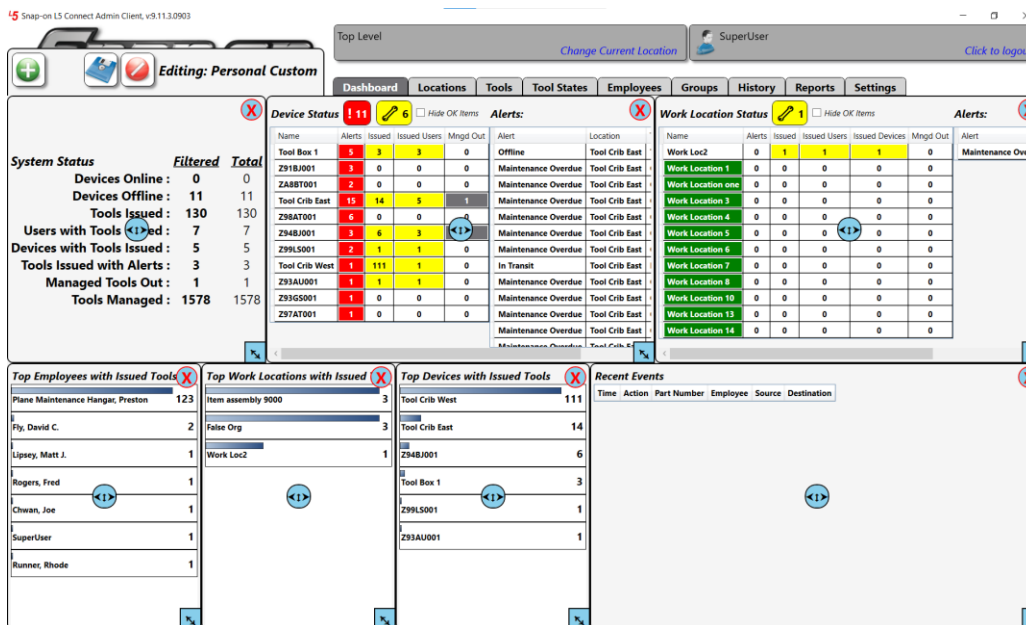
You will have the option to create a personal custom dashboard or a global custom dashboard. As noted on the screen, personal customizations take priority over global customizations. The process for creating the custom dashboard is the same for either type.

NOTE: To create a global custom dashboard, you will need an admin login with the **Organizational Location Edit** permission.



Click the **Change** button, which looks like a pencil, for the **Personal** dashboard. You are taken to an editable version of the dashboard. The dashboard controls are located in the top left corner of the screen.

- **Add a Widget (green plus)** – This allows you to pick from the Widget library and add one to the screen.
- **Save Current Layout (blue disk)** – saves current layout and exits the editor.
- **Cancel Changes (red slash)** – discards change and exits the editor.
- **Current Layout** – displays the current mode you are editing.



Each widget in the Dashboard Editor has three controls to modify its Location on the screen:



Resizes the Widget



Moves the Widget



Removes the Widget

Using these controls, you can add or remove widgets, resize widgets, and relocate widgets to get the screen like you want it. Besides the seven widgets that are on the default screen, there is also a custom report widget which allows you to add a widget with a custom report to the screen.



L5 Connect User Manual

True-Crib Dashboard

The True-Crib dashboard can be customized in the same manner as the admin dashboard. To customize the dashboard log into the crib as an attendant, and then click the **Main Menu** button, which looks like a gear.

15 Snap-on True-Crib, v9.11.3.0903, Tool Crib East

TRUE-CRIB

Attendant SuperUser [Click to logout](#)

SCAN EMPLOYEE BADGE TO START

System Status

	Filtered	Total
Devices Online :	1	1
Devices Offline :	0	0
Tools Issued :	14	14
Users with Tools Issued :	5	5
Devices with Tools Issued :	1	1
Tools Issued with Alerts :	2	2
Managed Tools Out :	1	1
Tools Managed :	256	257

Device Status 11 14 5 1 ☐ Hide OK Items

Alerts:

Name	Alerts	Issued	Issued Users	Mngd Out	Alert	Location	%
Tool Crib East	11	14	5	1	Maintenance Overdue	Tool Crib East	C
					Maintenance Overdue	Tool Crib East	C
					Maintenance Overdue	Tool Crib East	C
					In Transit	Tool Crib East	C
					Maintenance Overdue	Tool Crib East	C
					Maintenance Overdue	Tool Crib East	C
					Maintenance Overdue	Tool Crib East	C
					Maintenance Overdue	Tool Crib East	C
					Maintenance Overdue	Tool Crib East	C
					Maintenance Overdue	Tool Crib East	C

Issued Tools 1
Work Location Status 1

Name	Alerts	Issued	Issued Users	Issued Devices	Mngd Out	Alert	Local
Work Loc2	0	1	1	1	0	Maintenance Overdue	Item

Top Employees with Issued Tools

Plane Maintenance Hangar, Preston	10
Fly, David C.	1
Rogers, Fred	1
Chwan, Joe	1
Runner, Rhode	1

Top Work Locations with Issued Tools

Item assembly 9000	3
False Org	1
Work Loc2	1

Top Devices with Issued Tools

Tool Crib East	14
Z94B/J001	3

Recent Events

Time	Action	Part Number	Employee	Source	Destination
------	--------	-------------	----------	--------	-------------

Then click the **System Changes** button on the **Main Menu** window.

15 Snap-on True-Crib, v9.11.3.0903, Tool Crib East

TRUE-CRIB

Attendant

Main Menu

Inventory

Device Status

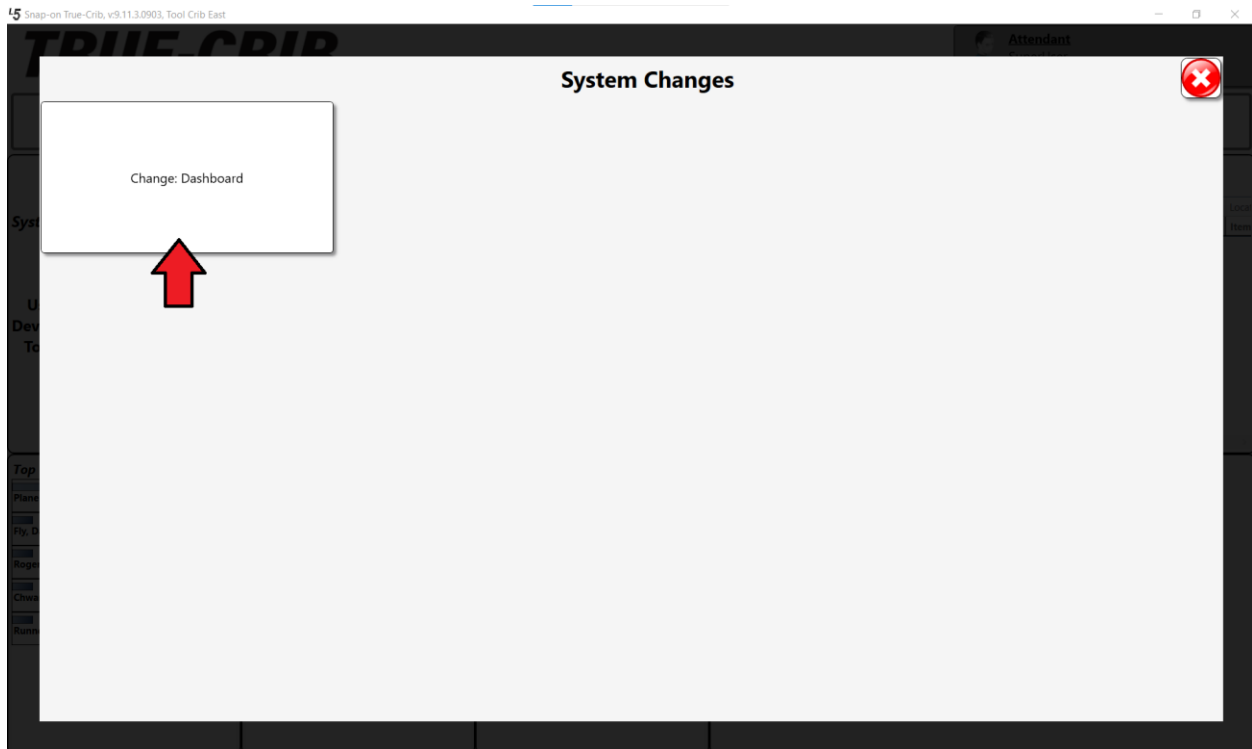
I/T Settings

System Changes

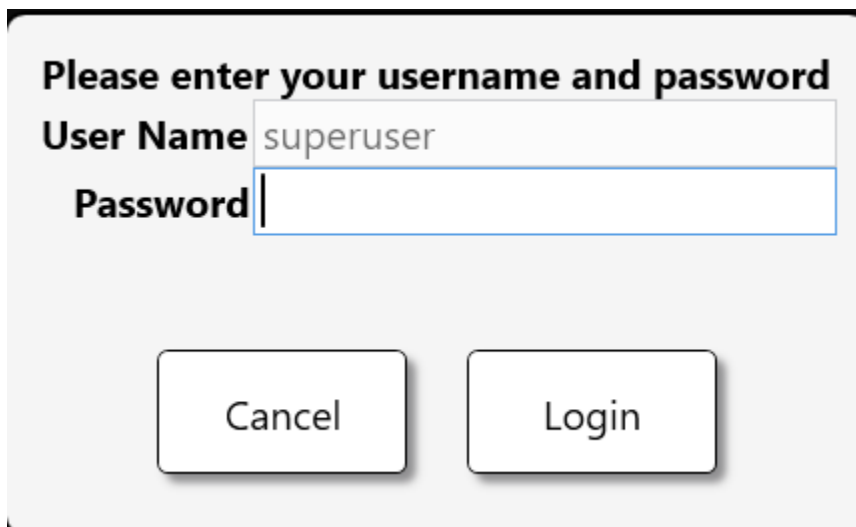
Troubleshooting

About

Then click the **Change: Dashboard** button.



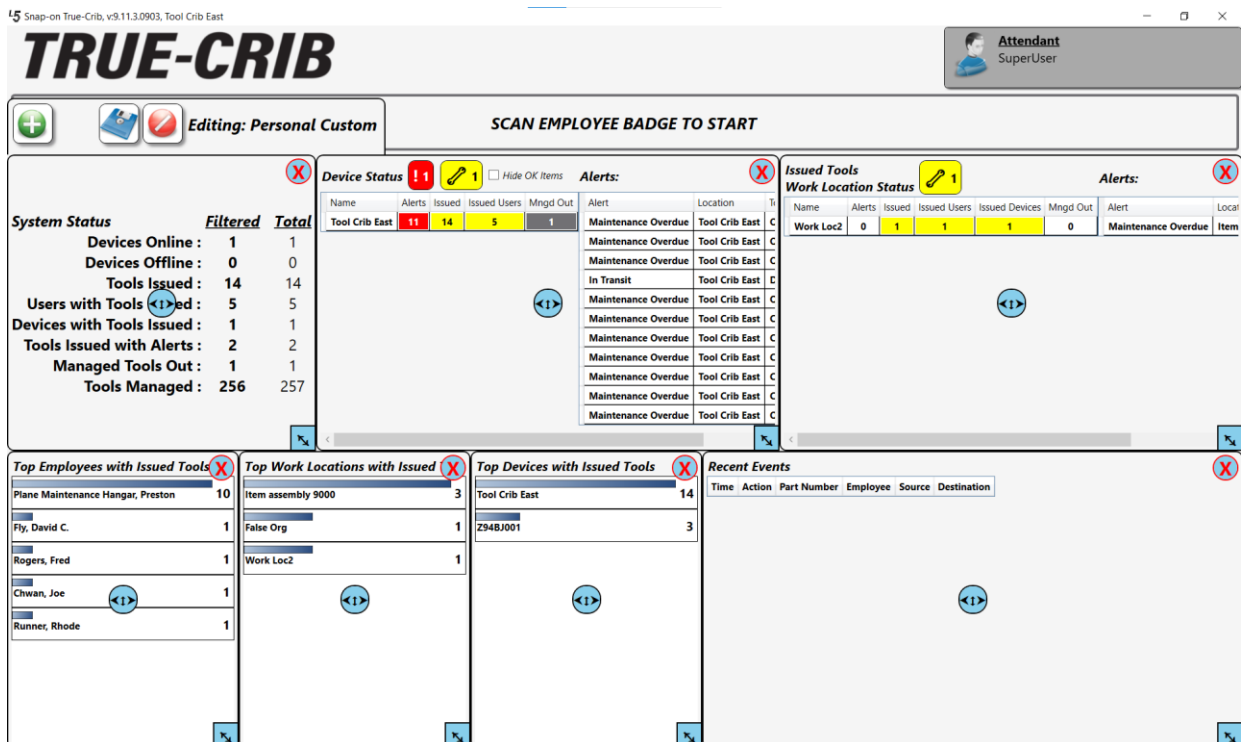
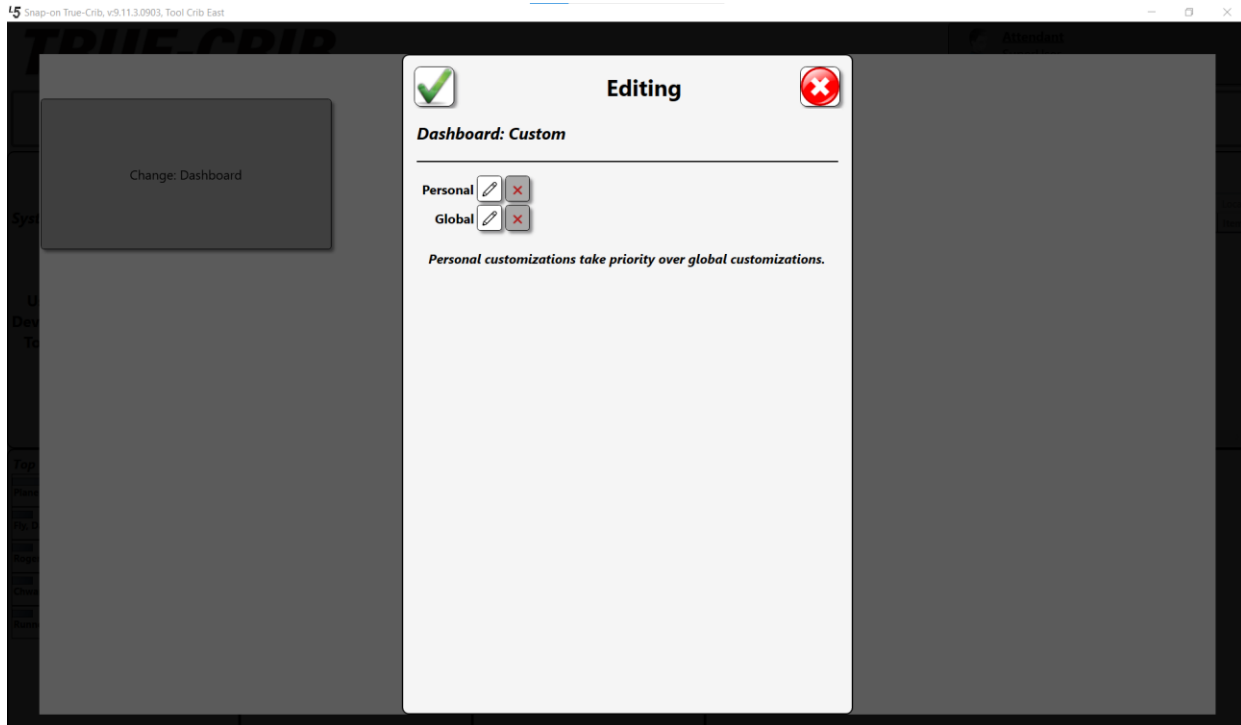
Provide your admin **User Name** and **Password** to authenticate.

A screenshot of a login dialog box. The dialog box has a light gray background and a dark gray border. At the top, it says 'Please enter your username and password'. Below this, there are two input fields. The first field is labeled 'User Name' and contains the text 'superuser'. The second field is labeled 'Password' and is empty. At the bottom of the dialog box, there are two buttons: 'Cancel' and 'Login'.



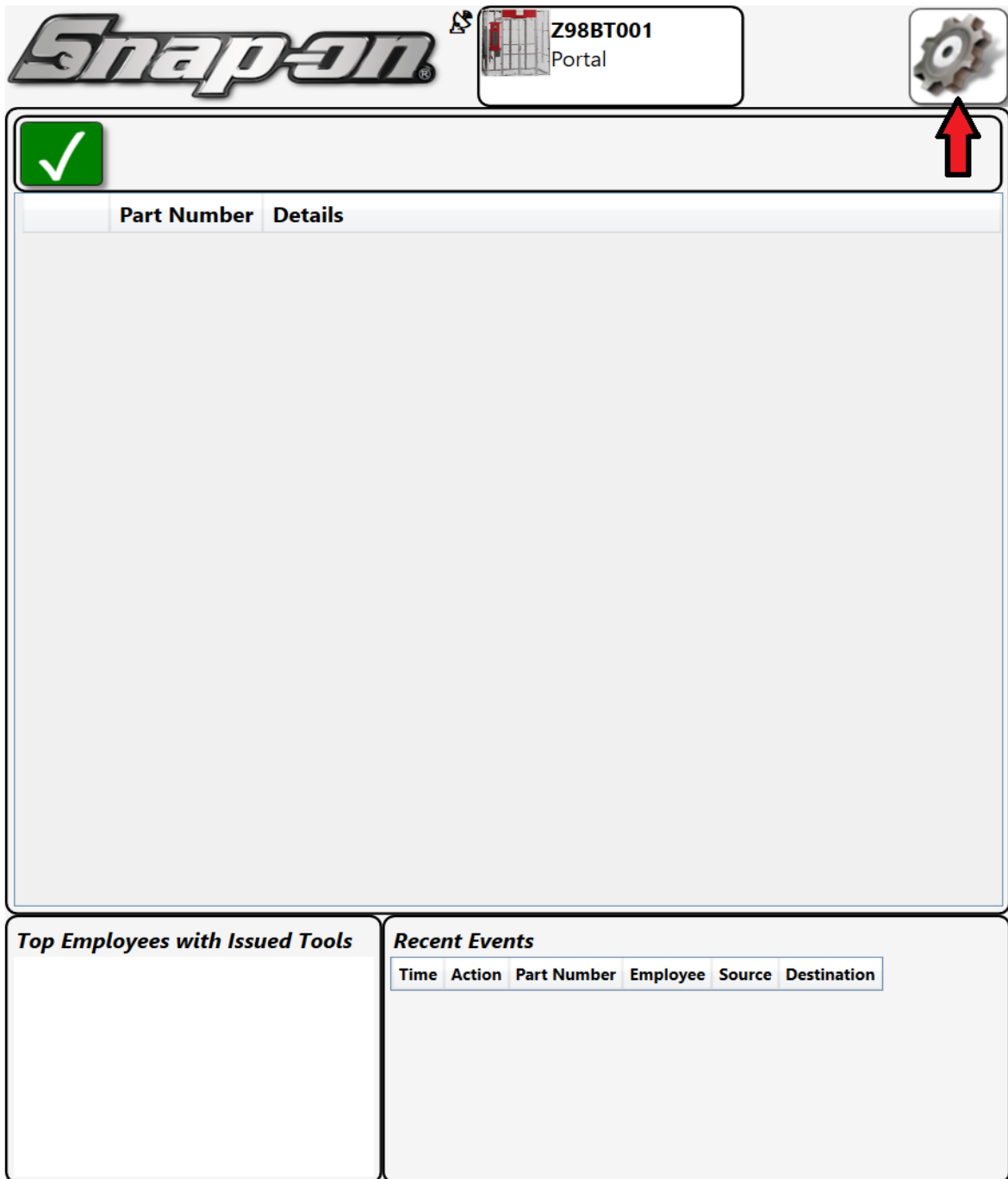
L5 Connect User Manual



From this screen you can select a **Personal** or **Global** customization and then you will be at the dashboard editing screen just like with the admin dashboard.




ATC Portal Dashboard


The portal dashboard can also be customized in the same manner as the admin dashboard. To customize the portal dashboard, make sure nobody is logged into the portal and click the **Main Menu** button, which looks like a gear.





Z98BT001
Portal





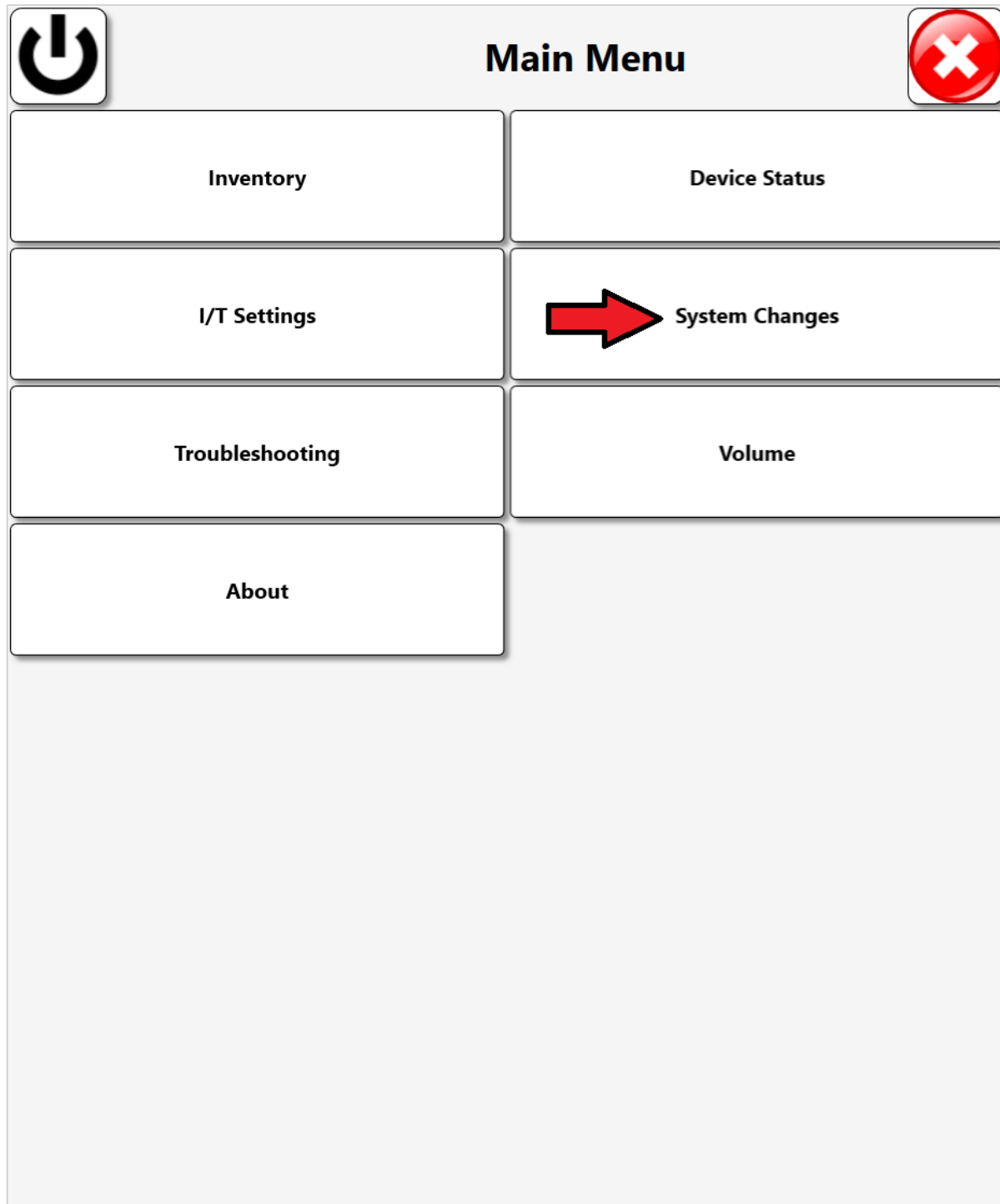
Part Number	Details
-------------	---------

Top Employees with Issued Tools

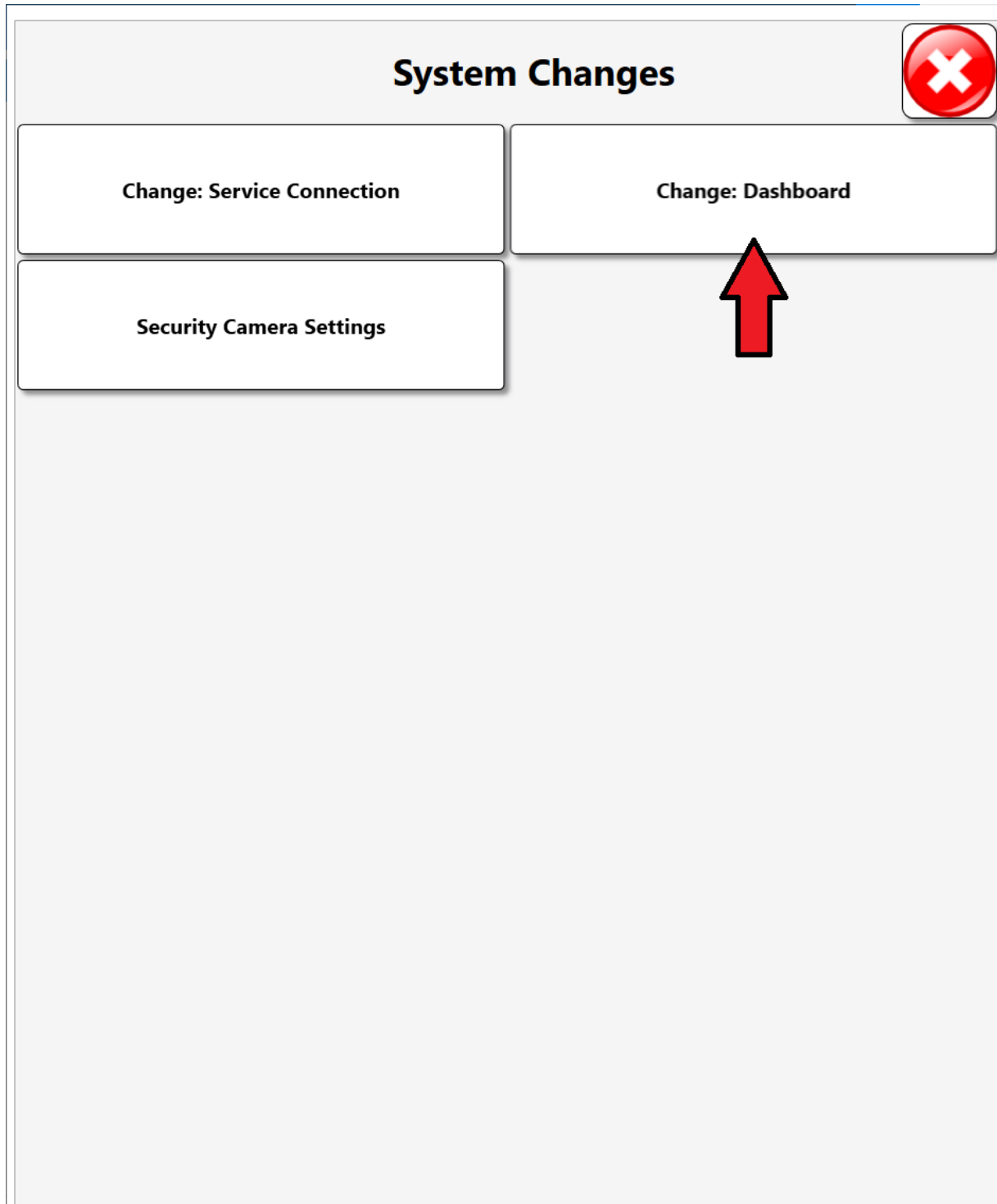
Recent Events

Time	Action	Part Number	Employee	Source	Destination
------	--------	-------------	----------	--------	-------------

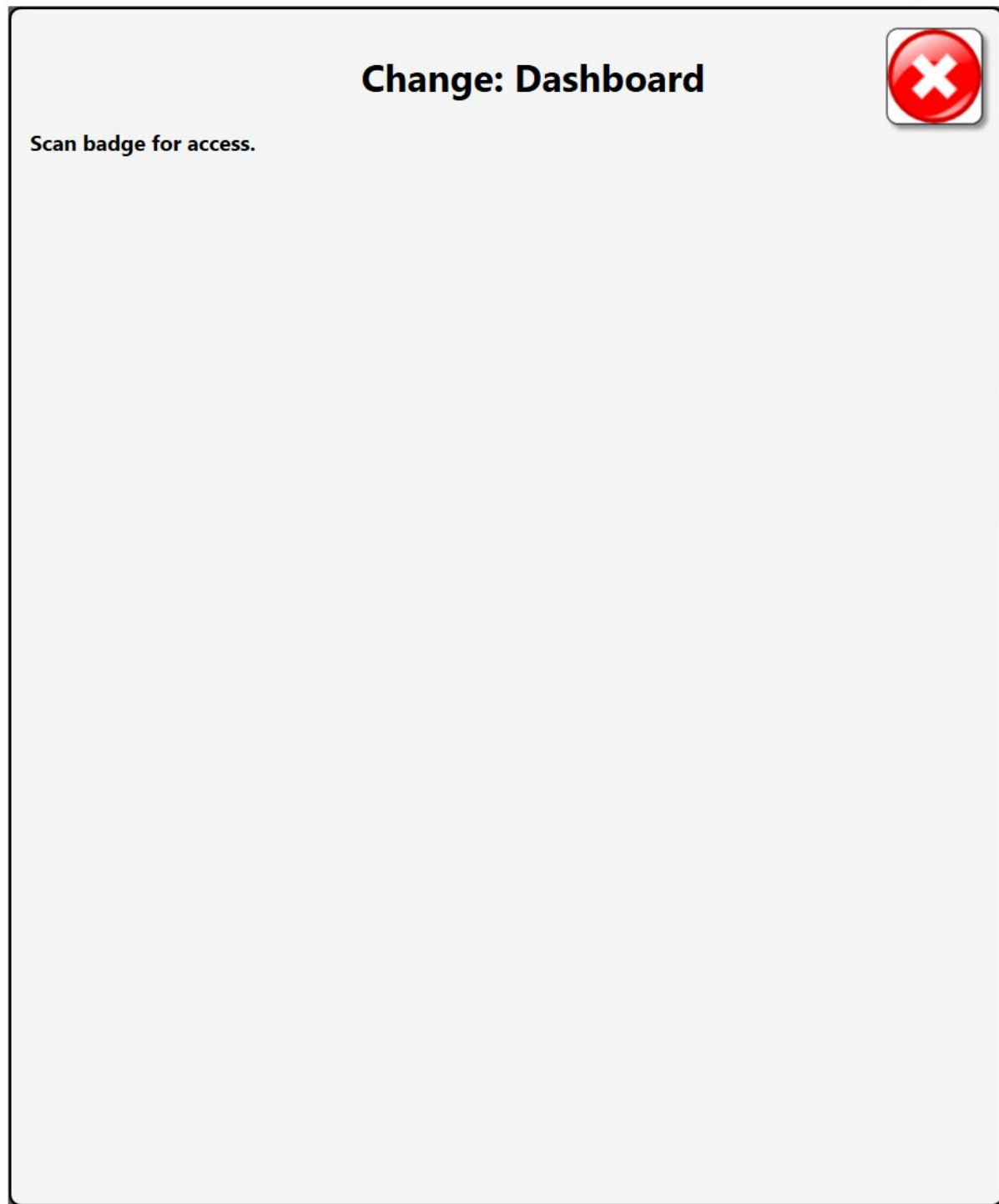
Then click the **System Changes** button on the **Main Menu** window.



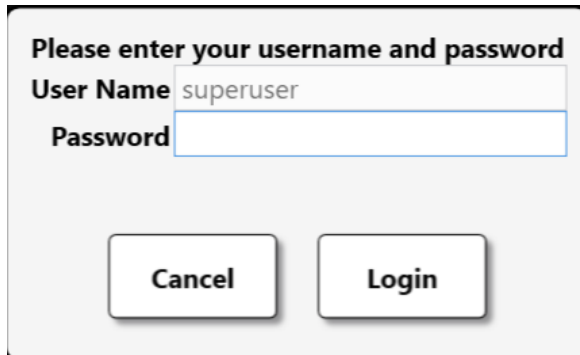
Then click the **Change: Dashboard** button.



You will then be prompted to scan your badge for access.



After scanning your badge, you will be prompted to input your admin credentials to authenticate.

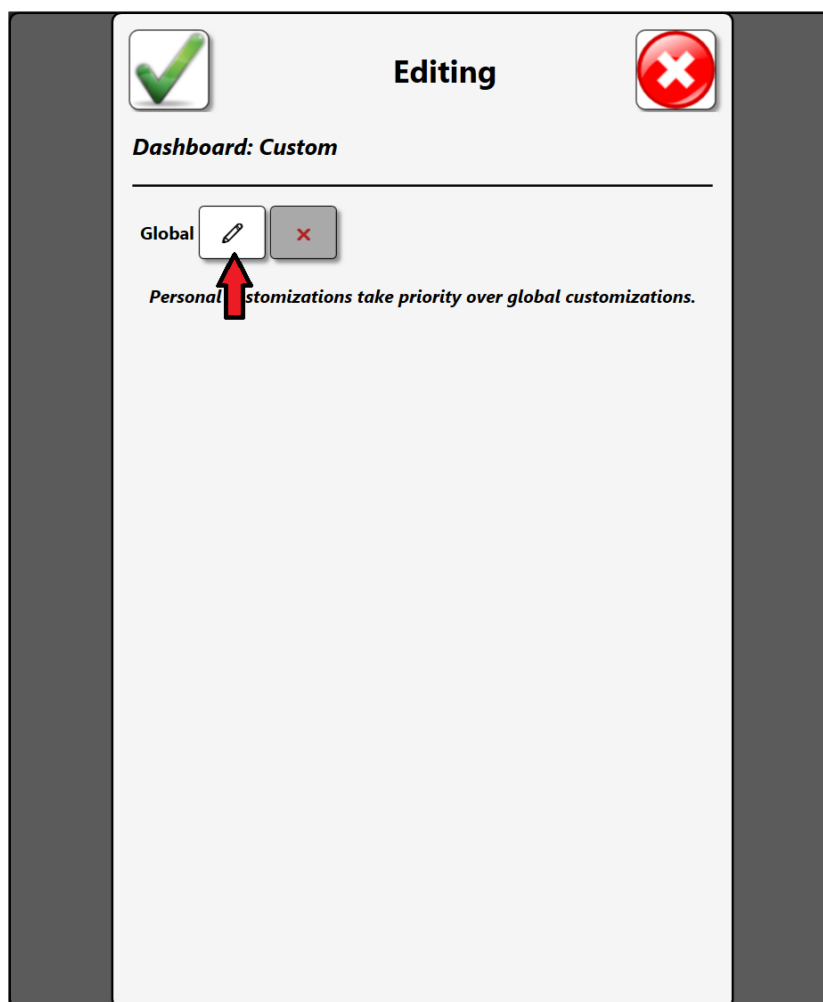




Please enter your username and password

User Name



Password


Now you will be prompted to select the type of custom dashboard you wish to create. There is only a global dashboard option, however, since the dashboard is only displayed when no user is logged into the portal. Click the **Change** button, which looks like a pencil.






 **Editing** 

Dashboard: Custom


Global  

Personal  *Customizations take priority over global customizations.*


You are now back to the editable dashboard, just as before on the admin and tool crib applications. You can customize and save the dashboard as you would like it to be displayed when no users are logged into the portal.


Editing: Global Custom



All Users





Me




Part Number


Details







Top Employees with Issued Tools





Recent Events

Time	Action	Part Number	Employee	Source	Destination
					





L5 Connect User Manual

Attachments

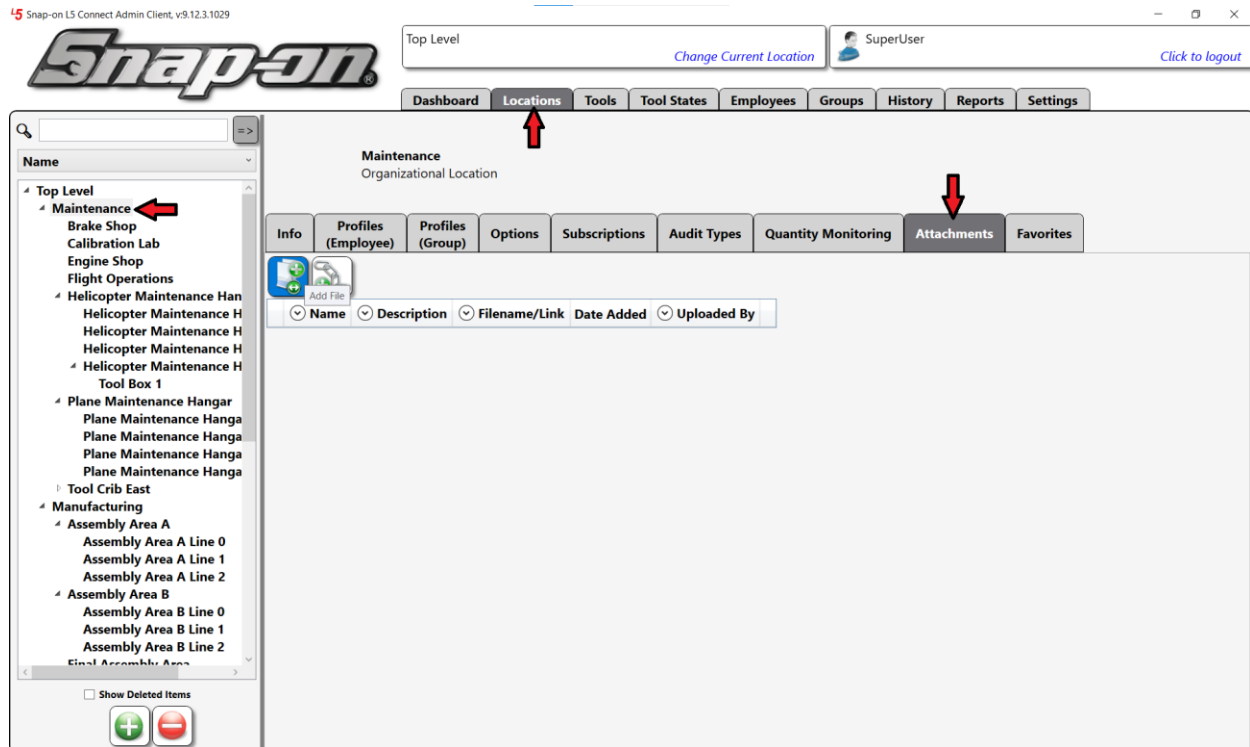
Sometimes you may have documents or links that it would be helpful to attach to a tool or employee in the L5 Connect™ system. For example, you might wish to attach an instruction manual document or a record of calibration to a specific tool. Or perhaps you would like to keep a record of a link to a course certification for employees to perform specialized maintenance. You can easily do this with the L5 Connect admin application.

When you save an attachment in the L5 Connect™ system, the attachment will be stored by the service in its defined file server location. Then, when someone wants to retrieve the attachment for viewing, it will be downloaded to whatever admin application instance they are running.

NOTE: The maximum file size of attachments is 4MB.

Adding an Attachment to a Location

In the admin application, go to the **Locations** tab and select the location to which you would like to add the attachment. Then select the **Attachments** sub-tab.



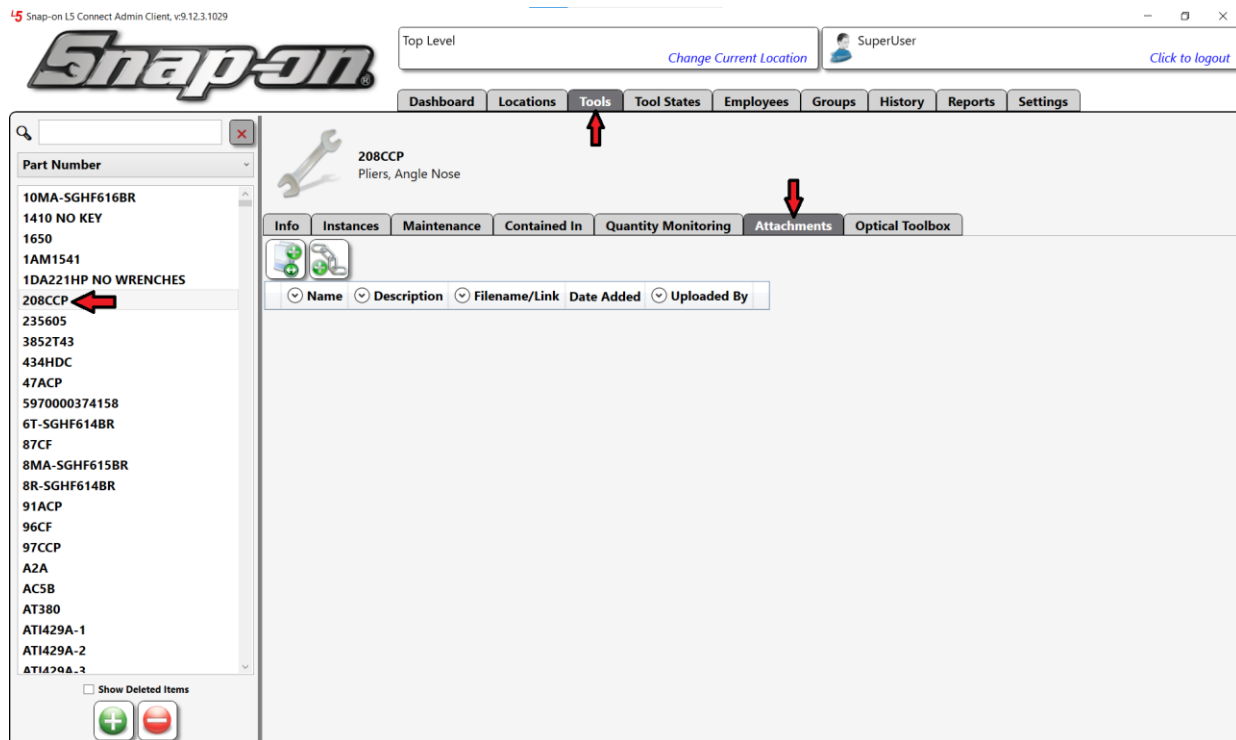
Skip to the Adding the Attachment section to continue.



L5 Connect User Manual

Adding an Attachment to a Master Tool

In the admin application, go to the **Tools** tab and select the master tool to which you would like to add the attachment. Then select the **Attachments** sub-tab.



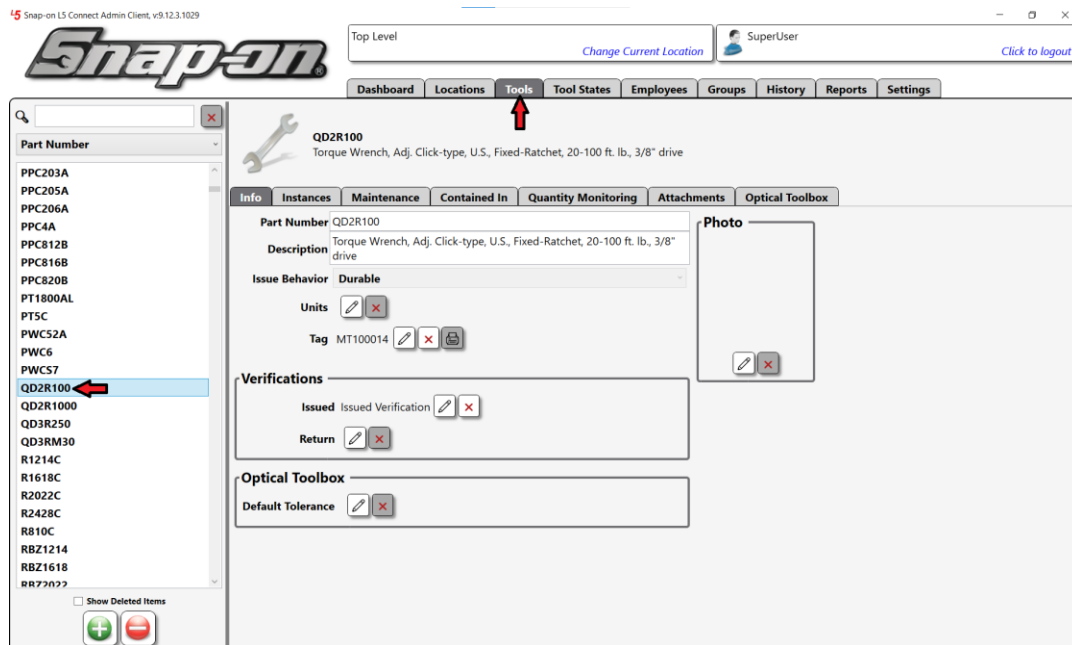
Skip to the Adding the Attachment section to continue.



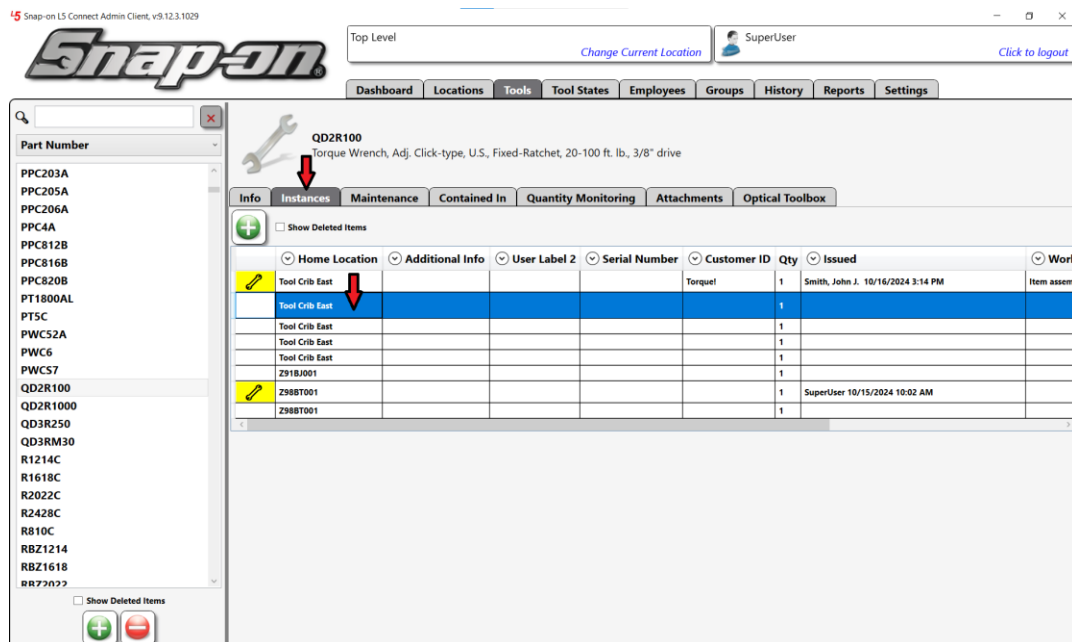
L5 Connect User Manual

Adding an Attachment to a Tool Instance

In the admin application, go to the **Tools** tab and select the master tool to which you would like to add the attachment.



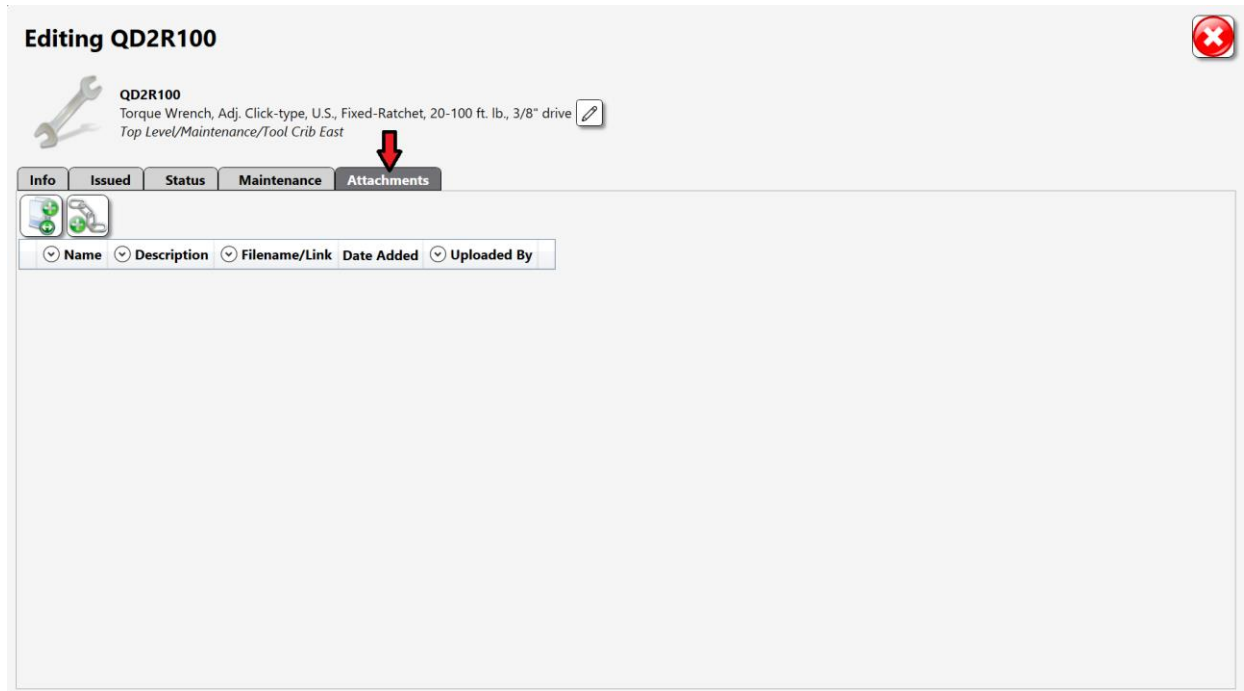
Select the **Instances** sub-tab. Then double click the tool instance to which you would like to add the attachment.





L5 Connect User Manual

This will bring up the tool details window. Select the **Attachments** sub-tab.



Skip to the Adding the Attachment section to continue.



L5 Connect User Manual

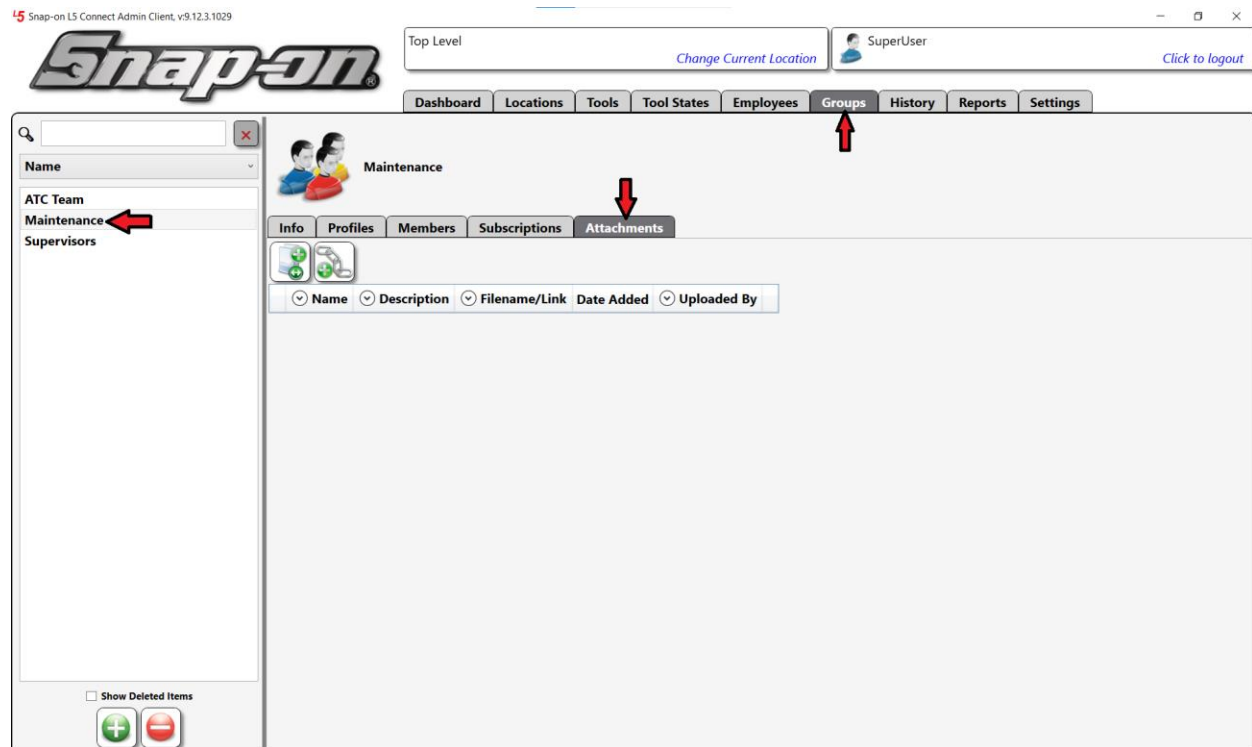
Adding an Attachment to an Employee

In the admin application, go to the **Employees** tab and select the employee to which you would like to add the attachment. Then select the **Attachments** sub-tab.

Skip to the Adding the Attachment section to continue.

Adding an Attachment to a Group

In the admin application, go to the **Groups** tab and select the group to which you would like to add the attachment. Then select the **Attachments** sub-tab.



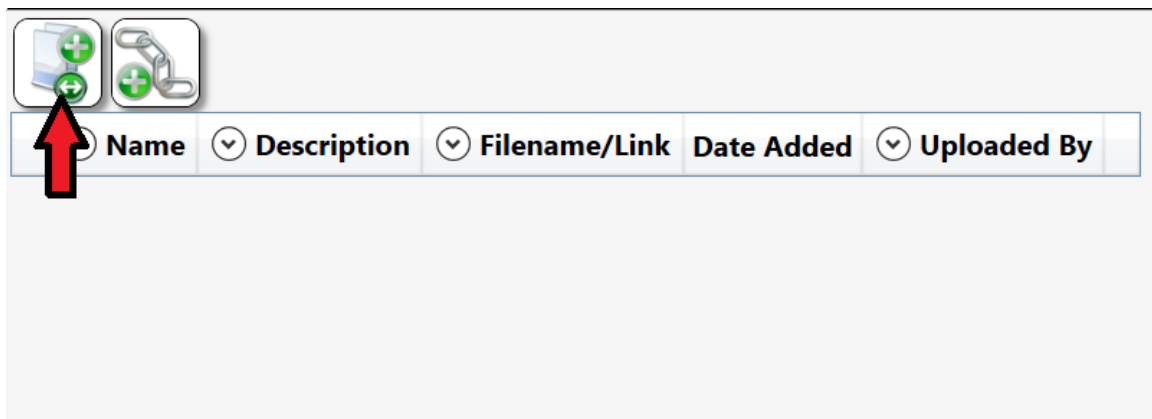
Skip to the Adding the Attachment section to continue.

Adding the Attachment

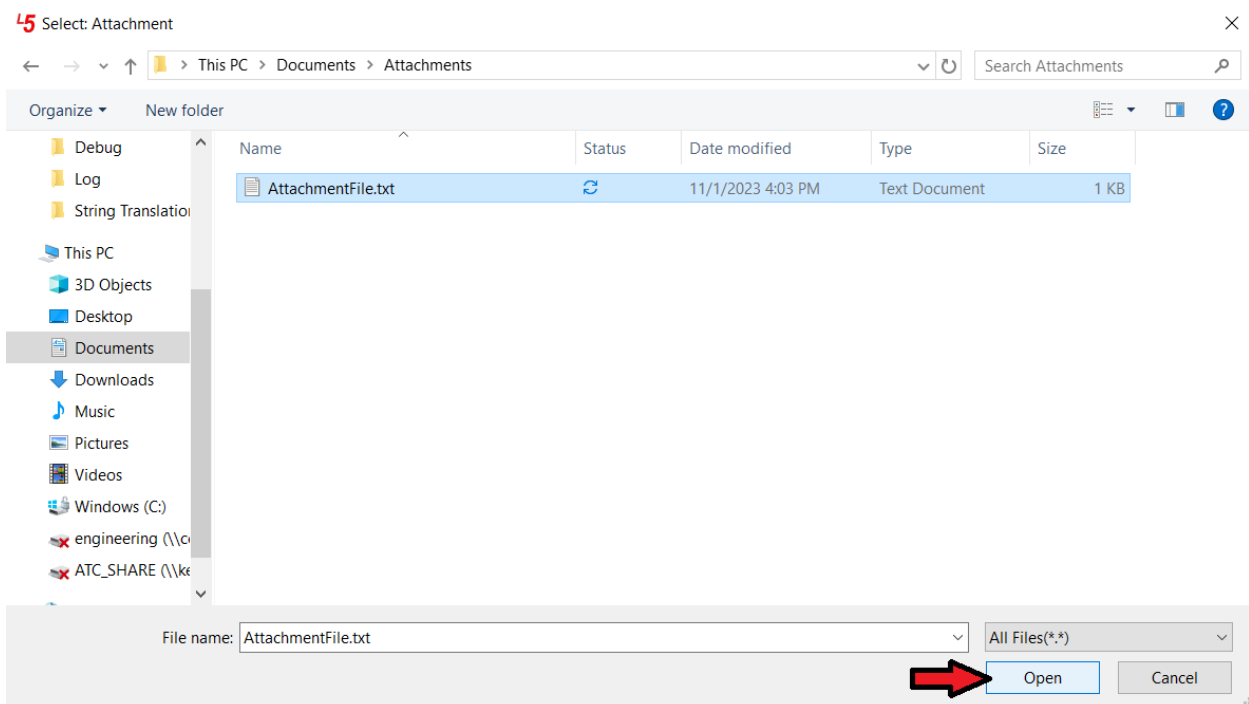
There are two types of attachments that can be added, files and hyperlinks.

Attaching a File

To attach a document, click the **Add File** button.



This will open a file dialog window asking you to select the file that you wish to attach. Navigate to the proper directory and select the file you wish to upload. Then click the **Open** button.



You will then have the opportunity to add a **Description** of the file. Add a short informative description and then click the green **OK** button.



Editing: Attachment

Name



AttachmentFile

Description

Maintenance Procedures

You have now created a file attachment.




	▼ Name	▼ Description	▼ Filename/Link	Date Added	▼ Uploaded By	
↓	AttachmentFile	Maintenance Procedures	AttachmentFile.txt	11/5/2024 11:09:47 AM	SuperUser	X

To view the attachment, you would click the **Save** button at the beginning of the attachment line. This will open a file dialog asking you to provide a location to save the file. Select the directory in which you wish to save the file, and then click the **Save** button to download it.

Attaching a Hyperlink

You can also attach a hyperlink with a valid URI format. Common examples are an https: based web page, a file: server and path file definition, or a mailto: electronic mail address.

To attach a hyperlink, click the **Add Link** button.

	▼ Name	▼ Description	▼ Filename/Link	Date Added	▼ Uploaded By	
↓	AttachmentFile	Maintenance Procedures	AttachmentFile.txt	11/5/2024 11:09:47 AM	SuperUser	X

You will now be prompted to provide a **Name**, **Description**, and **Link URL** value for the attachment. Add this information and then click the green **OK** button.

Editing: Attachment

Name



Sample Link

Description



Sample hyperlink




Link URL

https:\\www.google.com|

You have now created a hyperlink attachment.










	Name	Description	Filename/Link	Date Added	Uploaded By	
	Sample Link	Sample hyperlink	https://www.google.com/	11/5/2024 1:20:55 PM	SuperUser	
	AttachmentFile	Maintenance Procedures	AttachmentFile.txt	11/5/2024 11:28:02 AM	SuperUser	

You can open the hyperlink attachment by simply clicking the **Open** button at the beginning of the attachment line. This will open the link in your default web browser.

Deleting an Attachment

To delete an attachment, click the attachment to select it. Then click the **Delete** button at the end of the attachment line.

	Name	Description	Filename/Link	Date Added	Uploaded By	
	Sample Link	Sample hyperlink	https://www.google.com/	11/5/2024 1:20:55 PM	SuperUser	
	AttachmentFile	Maintenance Procedures	AttachmentFile.txt	11/5/2024 11:28:02 AM	SuperUser	 



L5 Connect User Manual

Importing Attachments

To make adding many attachments easier, the L5 Connect system supports the ability to import attachment links for master tools, tools (a.k.a. tool instances), and employees. You can import multiple of these types of attachments in the same import file if desired.

NOTE: The only attachment types supported for import are links. Attachment file imports are not currently supported.

Creating Your Import Spreadsheet

The first step is to create an Excel spreadsheet with your data in the proper format for import.

The easiest way to start creating your spreadsheet is by running a custom report to get the object ID (Tool ID, Master Tool ID, or Employee ID), and perhaps an identifier like part number or employee name and any other field that might be helpful in building your spreadsheet. Once you have your report created you will run that and then export it as a spreadsheet. Then you can edit that spreadsheet to add the other fields required by the importer. For more information on how to run a report see the L5 Connect™ Reports document

Once you have created your spreadsheet, you will need to add pertinent information about your attachments so that the import engine will be able to successfully import them. Here are the fields that the attachment importer will be looking for in your import spreadsheet.

Object ID - This is the unique identifier for the object to which the attachment will be added. For tools this would have to be Tool ID. For Master tools it would be the master tool ID. For employees it would be the employee ID.

Object Type - This tells the importer which of the three types available for attachments is being targeted. For tool instances this would be "Tool", for master tools it would be "MasterTool", and for employees it would be "Employee".

Name - This is the name for the attachment link.

Description - This is a description of what the attachment link is.

Link URL - This is the URL of the link.

NOTE: The Name and Description fields are optional.

NOTE: The Object Type field will default to match the import launch point if not included in the spreadsheet.



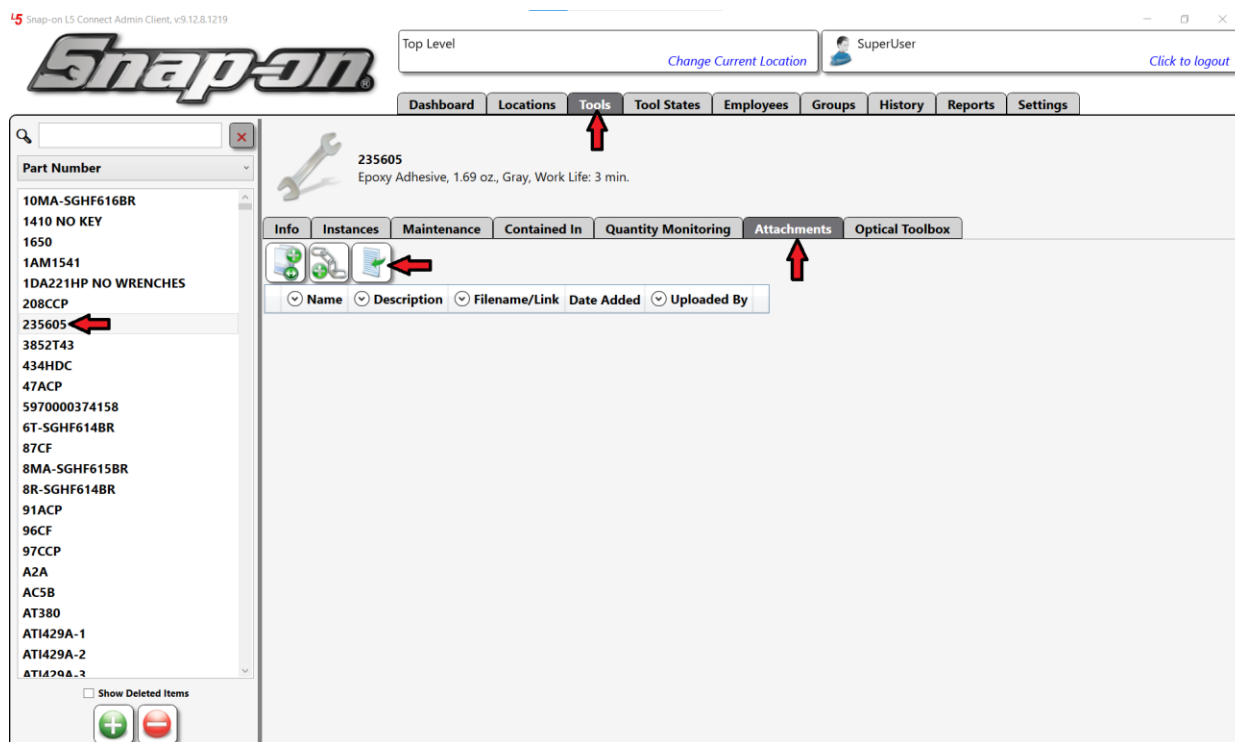
L5 Connect User Manual

Launching the Import Process

NOTE: Even though the Import process is launched from the selection of a single Master Tool, Tool Instance, or Employee, attachment links for many objects can be included in the same import spreadsheet.

Master Tool Attachments

To import master tool attachments, go to the tools tab, select any master tool, and then click the **Attachments** sub-tab. Finally, click the **Import** button to start the attachment import process.



Proceed to the Importing the Attachment Spreadsheet section to continue.



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Tool Instance Attachments

To import tool instance attachments, go to the **Tool States** tab, select the **Inventory** sub-tab, double click one of the tool instances.

Snap-on L5 Connect Admin Client, v9.13.1.0123

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools **Tool States** Employees Groups History Reports Settings

Status Issued **Inventory** Maintenance In Process

Show: Trained Drawers Page

Filtering

Custom Reports Total Quantity

Auto-Refresh Xlsx

Storage Location Name	Part Number	Description	Drawer	Tool ID	Total Quantity	Units
Tool Box 1	1410 NO KEY	Sioux 1410 Drill		102260	1	
Tool Box 1	1650	Prybar, 16"	7	102272	1	
Tool Box 1	14M1541	Sioux 45 Degree Angle Air Drill		102261	1	
Tool Box 1	1DA221HP NO WRENCHES	Sioux 1DA221HP Die Grinder		102259	1	
Tool Box 1	208CCP	Pliers, Angle Nose	7	102278	1	
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finish, Vinyl Grips, 7 1/2"		102168	1	
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finish, Vinyl Grips, 7 1/2"		102227	1	
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"		102187	1	
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"		102226	1	
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel, Industrial Finish, 9 1/4"		102187	1	
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel, Industrial Finish, 9 1/4"		102246	1	
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"		102166	1	
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"		102225	1	
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"		102165	1	
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"		102224	1	
Tool Box 1	A2A	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"	1	102412	1	
Tool Box 1	AC5B	Brush, Hand Scratch, Stainless Steel, 7 7/8"		102174	1	
Tool Box 1	AC5B	Brush, Hand Scratch, Stainless Steel, 7 7/8"		102233	1	
Tool Box 1	AT380	Impact Wrench, Air, Heavy Duty, 3/8" Drive (35-150 ft. lb.)		102258	1	
Tool Box 1	AW1015DHK	Set, Wrench, L-Shape, Hex (15 pcs. in BHK15 Metal Index) (.028" to 3/8")	7	102274	1	
Tool Box 1	AWM110DHK	Set, Metric, Wrench, L-Shape, Hex, Long (11 pcs. in BHK11 Metal Index) (2 to 12 mm)	7	102275	1	
Tool Box 1	B5HLP	Pliers, Linemans, Blue-Point, 8"		102148	1	
Tool Box 1	B5HLP	Pliers, Linemans, Blue-Point, 8"		102207	1	
Tool Box 1	BADJC10	Wrench, Adjustable, Composite Handle, Blue-Point®, 10"		102257	1	
Tool Box 1	BADJC6	Wrench, Adjustable, Composite Handle, Blue-Point®, 6"	5	102312	1	
Tool Box 1	BADJC6	Wrench, Adjustable, Composite Handle, Blue-Point®, 6"	5	102311	1	
Tool Box 1	BP16B	Hammer, Ball Peen, 16 oz.	7	102270	1	
Tool Box 1	BT10	Cleaner, Side Terminal	7	102276	1	
Tool Box 1	BT3A	Brush, Terminal	7	102279	1	
Tool Box 1	CSABC	Carbon Scraper, Rigid, Black, 7/8" Blade Width, 7 5/8"		102194	1	
Tool Box 1	CSABC	Carbon Scraper, Rigid, Black, 7/8" Blade Width, 7 5/8"		102253	1	

Then double click a tool instance in the list to open the tool details. Select the **Attachments** sub-tab and finally, click the **Import** button to begin the attachment import process.

Editing 235605

235605
Epoxy Adhesive, 1.69 oz., Gray, Work Life: 3 min.
Top Level/Maintenance/Tool Crib East

Info Issued Status **Attachments**

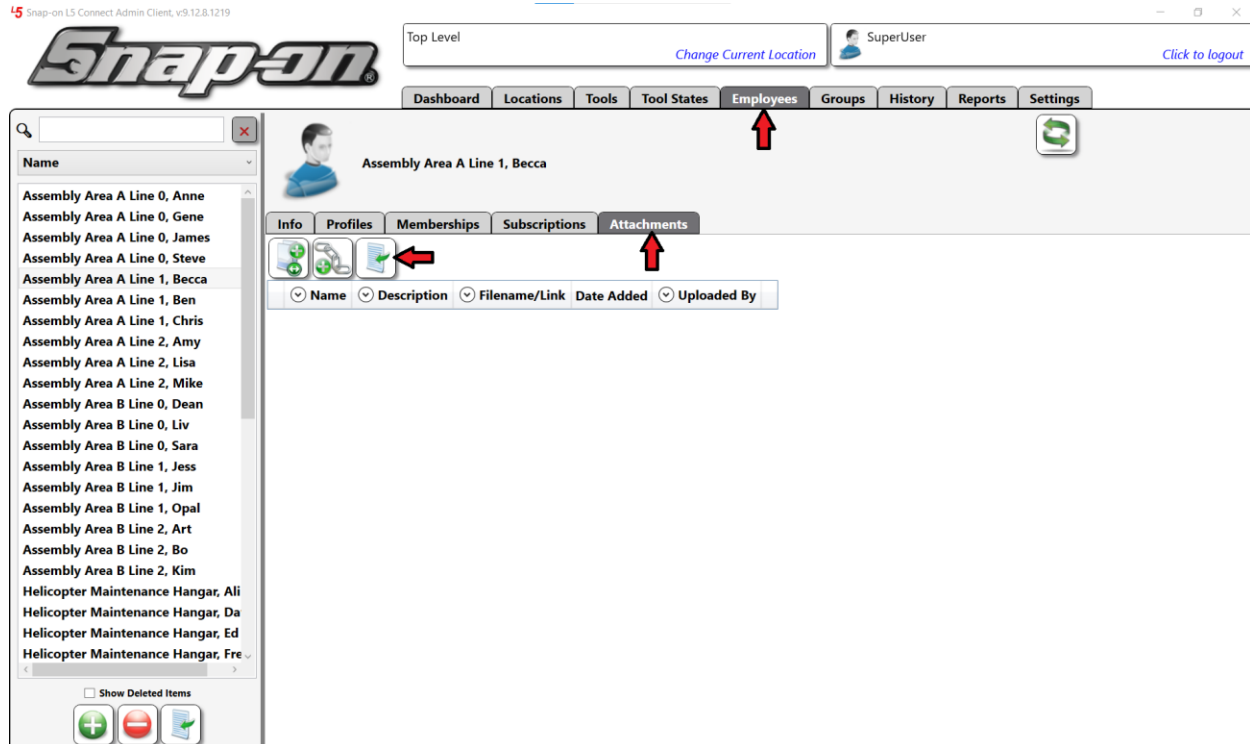
Import Attachments

Name Description Filename/Link Date Added Uploaded By

Proceed to the Importing The Attachment Spreadsheet section to continue.

Employee Attachments

To import employee attachments, go to the **Employees** tab, select any employee, click the **Attachments** sub-tab, and click the **Import** button to begin the import attachments process.



Proceed to the Importing the Attachment Spreadsheet section to continue.



L5 Connect User Manual

Importing The Attachment Spreadsheet

NOTE: The attachment spreadsheet import process will be the same for any of the different types of objects.

Once you have launched the import process (see appropriate section above), navigate to the spreadsheet file and click the **Open** button to initiate the import window. Here is an example of the import window with a spreadsheet for importing tool attachments loaded.

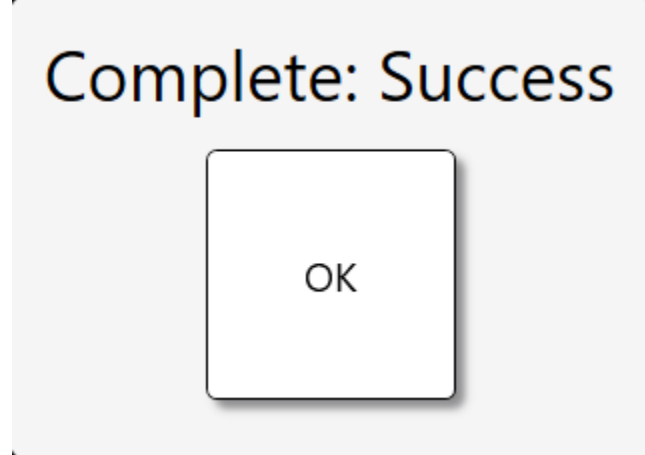
Select Header Row (Double-Click) Identify Column (Drop-Down Menu)						
Tool ID	Part Number	Type	Name	Description	Link	
Tool Inventory						
Filtered By: Location = Top Level						
Run Time: 14/01/2025 13:18 - Central Standard Time						
Requested By: Kent, Roy						
Tool ID	Part Number	Type	Name	Description	Link	
100001	LSA36xxx	Tool	LSA36xxx Files	LSA36xxx Description	file\\fileserver\\Snapon\\LSA36xxx	
100002	OEX20B	Tool	OEX20B Files	OEX20B Description	file\\fileserver\\Snapon\\OEX20B	
100003	OEX18B	Tool	OEX18B Files	OEX18B Description	file\\fileserver\\Snapon\\OEX18B	
100004	OEX16B	Tool	OEX16B Files	OEX16B Description	file\\fileserver\\Snapon\\OEX16B	
100005	OEX14B	Tool	OEX14B Files	OEX14B Description	file\\fileserver\\Snapon\\OEX14B	
100006	OEX12B	Tool	OEX12B Files	OEX12B Description	file\\fileserver\\Snapon\\OEX12B	
100007	OEXM100B	Tool	OEXM100B Files	OEXM100B Description	file\\fileserver\\Snapon\\OEXM100B	
100008	OEXM110B	Tool	OEXM110B Files	OEXM110B Description	file\\fileserver\\Snapon\\OEXM110B	
100009	OEXM120B	Tool	OEXM120B Files	OEXM120B Description	file\\fileserver\\Snapon\\OEXM120B	
100010	OEXM130B	Tool	OEXM130B Files	OEXM130B Description	file\\fileserver\\Snapon\\OEXM130B	
100011	OEXM140B	Tool	OEXM140B Files	OEXM140B Description	file\\fileserver\\Snapon\\OEXM140B	
100012	RXF52022B	Tool	RXF52022B Files	RXF52022B Description	file\\fileserver\\Snapon\\RXF52022B	
100013	RXF52426B	Tool	RXF52426B Files	RXF52426B Description	file\\fileserver\\Snapon\\RXF52426B	
100014	OEX24B	Tool	OEX24B Files	OEX24B Description	file\\fileserver\\Snapon\\OEX24B	
100015	OEX32B	Tool	OEX32B Files	OEX32B Description	file\\fileserver\\Snapon\\OEX32B	
100016	OEX30B	Tool	OEX30B Files	OEX30B Description	file\\fileserver\\Snapon\\OEX30B	
100017	OEX28B	Tool	OEX28B Files	OEX28B Description	file\\fileserver\\Snapon\\OEX28B	
100018	OEX26B	Tool	OEX26B Files	OEX26B Description	file\\fileserver\\Snapon\\OEX26B	
100019	OEXM190B	Tool	OEXM190B Files	OEXM190B Description	file\\fileserver\\Snapon\\OEXM190B	
100020	OEXM180B	Tool	OEXM180B Files	OEXM180B Description	file\\fileserver\\Snapon\\OEXM180B	
100021	OEXM170B	Tool	OEXM170B Files	OEXM170B Description	file\\fileserver\\Snapon\\OEXM170B	
100022	OEXM160B	Tool	OEXM160B Files	OEXM160B Description	file\\fileserver\\Snapon\\OEXM160B	
100023	OEXM150B	Tool	OEXM150B Files	OEXM150B Description	file\\fileserver\\Snapon\\OEXM150B	
100024	FADH12A	Tool	FADH12A Files	FADH12A Description	file\\fileserver\\Snapon\\FADH12A	
100025	RXF51618B	Tool	RXF51618B Files	RXF51618B Description	file\\fileserver\\Snapon\\RXF51618B	
100026	RXF51214B	Tool	RXF51214B Files	RXF51214B Description	file\\fileserver\\Snapon\\RXF51214B	
100027	RXF5810B	Tool	RXF5810B Files	RXF5810B Description	file\\fileserver\\Snapon\\RXF5810B	
100028	OEX26B	Tool	OEX26B Files	OEX26B Description	file\\fileserver\\Snapon\\OEX26B	
100029	SPBS80	Tool	SPBS80 Files	SPBS80 Description	file\\fileserver\\Snapon\\SPBS80	
100030	RAD3C10	Tool	RAD3C10 Files	RAD3C10 Description	file\\fileserver\\Snapon\\RAD3C10	

The next step is to map the columns in the spreadsheet to the fields the importer needs. **Tool ID** would be the **Object ID** so you would click the pulldown menu under **Tool ID** and select **Object ID**. The **Type** would be set to **Object Type**. **Name** and **Description** would be mapped to **Name** and **Description** and **Link** would be mapped to **Link URL**. The **Part Number** field was used to help create some of the other fields for this example and does not need to be mapped.

Select Header Row (Double-Click) Identify Column (Drop-Down Menu)						
Tool ID	Part Number	Type	Name	Description	Link	
Object ID		Object Type	Name	Description	Link URL	
Tool Inventory						
Filtered By: Location = Top Level						
Run Time: 14/01/2025 13:18 - Central Standard Time						
Requested By: Kent, Roy						
Tool ID	Part Number	Type	Name	Description	Link	
100001	LSA36xxx	Tool	LSA36xxx Files	LSA36xxx Description	file\\fileserver\\Snapon\\LSA36xxx	
100002	OEX20B	Tool	OEX20B Files	OEX20B Description	file\\fileserver\\Snapon\\OEX20B	
100003	OEX18B	Tool	OEX18B Files	OEX18B Description	file\\fileserver\\Snapon\\OEX18B	
100004	OEX16B	Tool	OEX16B Files	OEX16B Description	file\\fileserver\\Snapon\\OEX16B	
100005	OEX14B	Tool	OEX14B Files	OEX14B Description	file\\fileserver\\Snapon\\OEX14B	
100006	OEX12B	Tool	OEX12B Files	OEX12B Description	file\\fileserver\\Snapon\\OEX12B	
100007	OEXM100B	Tool	OEXM100B Files	OEXM100B Description	file\\fileserver\\Snapon\\OEXM100B	
100008	OEXM110B	Tool	OEXM110B Files	OEXM110B Description	file\\fileserver\\Snapon\\OEXM110B	
100009	OEXM120B	Tool	OEXM120B Files	OEXM120B Description	file\\fileserver\\Snapon\\OEXM120B	
100010	OEXM130B	Tool	OEXM130B Files	OEXM130B Description	file\\fileserver\\Snapon\\OEXM130B	
100011	OEXM140B	Tool	OEXM140B Files	OEXM140B Description	file\\fileserver\\Snapon\\OEXM140B	
100012	RXF52022B	Tool	RXF52022B Files	RXF52022B Description	file\\fileserver\\Snapon\\RXF52022B	
100013	RXF52426B	Tool	RXF52426B Files	RXF52426B Description	file\\fileserver\\Snapon\\RXF52426B	
100014	OEX24B	Tool	OEX24B Files	OEX24B Description	file\\fileserver\\Snapon\\OEX24B	
100015	OEX32B	Tool	OEX32B Files	OEX32B Description	file\\fileserver\\Snapon\\OEX32B	
100016	OEX30B	Tool	OEX30B Files	OEX30B Description	file\\fileserver\\Snapon\\OEX30B	
100017	OEX28B	Tool	OEX28B Files	OEX28B Description	file\\fileserver\\Snapon\\OEX28B	
100018	OEX26B	Tool	OEX26B Files	OEX26B Description	file\\fileserver\\Snapon\\OEX26B	
100019	OEXM190B	Tool	OEXM190B Files	OEXM190B Description	file\\fileserver\\Snapon\\OEXM190B	
100020	OEXM180B	Tool	OEXM180B Files	OEXM180B Description	file\\fileserver\\Snapon\\OEXM180B	
100021	OEXM170B	Tool	OEXM170B Files	OEXM170B Description	file\\fileserver\\Snapon\\OEXM170B	
100022	OEXM160B	Tool	OEXM160B Files	OEXM160B Description	file\\fileserver\\Snapon\\OEXM160B	
100023	OEXM150B	Tool	OEXM150B Files	OEXM150B Description	file\\fileserver\\Snapon\\OEXM150B	
100024	FADH12A	Tool	FADH12A Files	FADH12A Description	file\\fileserver\\Snapon\\FADH12A	
100025	RXF51618B	Tool	RXF51618B Files	RXF51618B Description	file\\fileserver\\Snapon\\RXF51618B	
100026	RXF51214B	Tool	RXF51214B Files	RXF51214B Description	file\\fileserver\\Snapon\\RXF51214B	
100027	RXF5810B	Tool	RXF5810B Files	RXF5810B Description	file\\fileserver\\Snapon\\RXF5810B	
100028	OEX26B	Tool	OEX26B Files	OEX26B Description	file\\fileserver\\Snapon\\OEX26B	
100029	SPBS80	Tool	SPBS80 Files	SPBS80 Description	file\\fileserver\\Snapon\\SPBS80	
100030	RAD3C10	Tool	RAD3C10 Files	RAD3C10 Description	file\\fileserver\\Snapon\\RAD3C10	

Once all the fields are mapped properly, you can click the **OK** button that looks like a green checkmark to start the actual importing of the attachments. This may take a while depending on how many attachments are being added.

A "Success" message will appear when the import process is complete.



Audits

This document will cover everything you need to know about audits in the L5 Connect system. Covering the setup of audits in the admin client, assigning an audit to a location, and performing an audit on a supported device. **Note: The audit feature is currently only supported on the ATC Toolbox, Locker, and FlexHub.**

Setup Audits within L5 Admin Client

Audits are customizable to meet each individual customers' requirements or audit policies. The process of creating and assigning is very straight forward, accomplished using the L5 Admin Client.

Access Point:

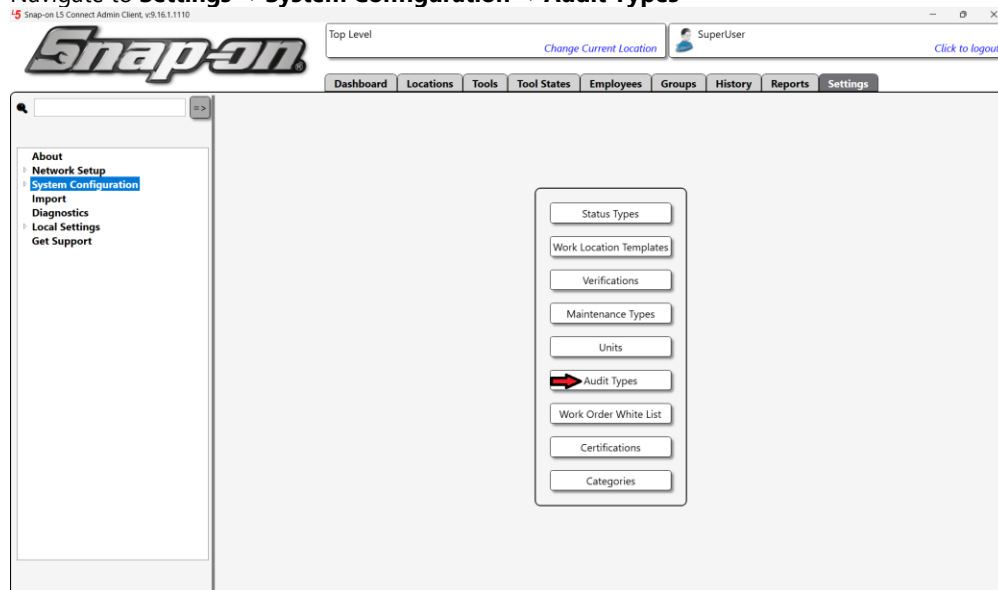
- L5 Connect Admin Client- **Admin Client Dashboard/Settings/Audit Types**

Required Permissions:

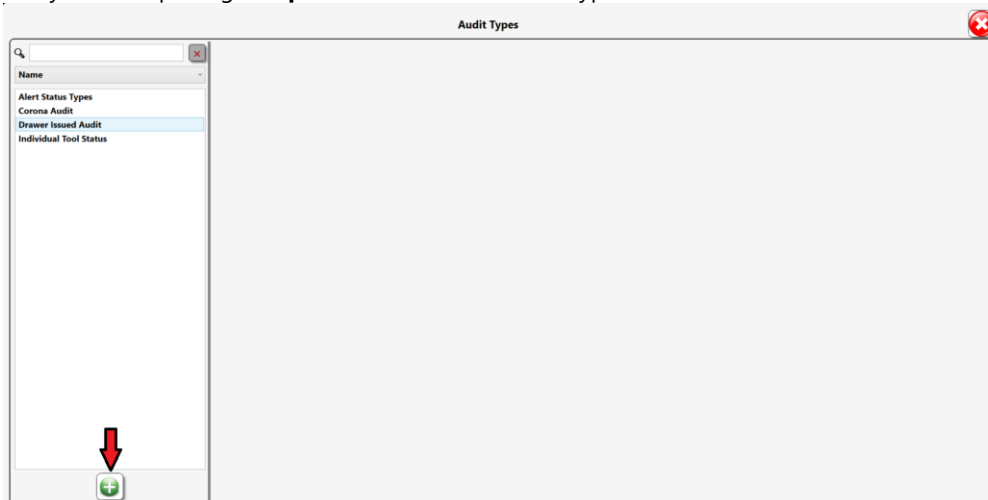
- Audit Types Edit

Creating Audits

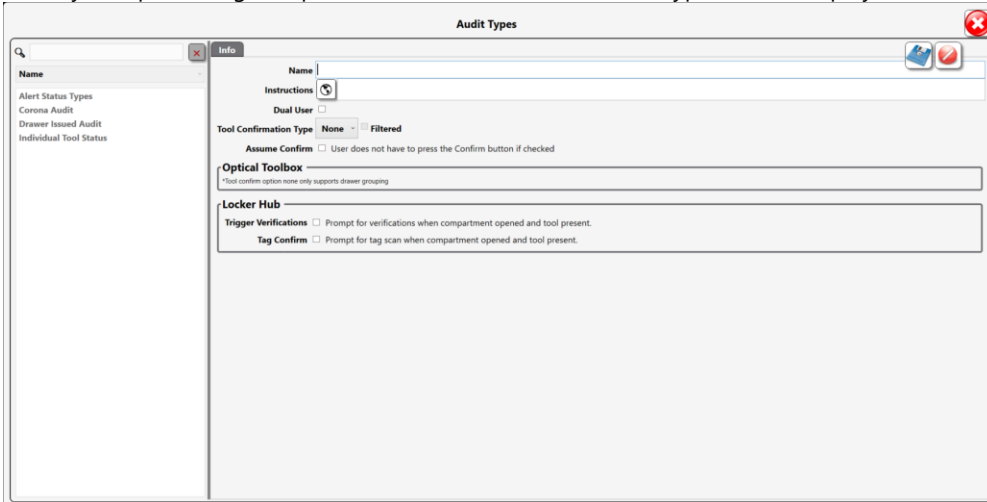
1. Open the L5 Connect Admin Client, and complete User login.
2. Navigate to **Settings=>System Configuration=>Audit Types**



- This will bring up the **Audit Types Screen**. You can use the search bar to filter the list for a specific audit, and you can tap the green **plus** to create a new audit type.



- When you tap on the green plus button, the create new Audit Type tab will display (shown below).



- Name:** This is the name of the audit. This will show up in the Audit Type List and on the ATC device when assigned.
- Instructions:** These are the instructions that are displayed to the user during the Audit on the Toolbox
- Dual User:** If you want to have a second auditor verify the Audit, you will check this box. When checked, the device will require two different users to start and end the Audit on the device.
- Tool Confirmation Type:** If you want to Audit only specific tools that are in a particular state (None, Issued, Stated, Alerted, and Maintained), you can set it here. **Note: currently kit children are NOT included when checking for applicable compartments**
 - None - All compartments, regardless of contents, will be included in the audit.
 - Issued - All inventory compartments will be included in the audit. This includes inventory compartments with no assigned tools. This includes issued tools. **Note: This excludes all "drop off" mode compartments.**
 - Alerted - All inventory compartments containing tools with an alerted state will be included. This DOES include issued tools. This excludes tools with "managed out" status types applied.



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- Stated - All inventory compartments containing tools with ANY applied status will be included. This DOES include issued tools. This DOES include managed out status types.
 - Maintained - All inventory compartments containing tools with ANY applied maintenance items will be included. This DOES include issued tools.
 - **Confirmation Type Options:** If a tool confirmation type is selected the user will also select the confirmation type options listed below. **Note: initial release does not support selection of mode for FlexHub, operation is confined to "Individual" confirmation type**
 - Individual - If any selected individual audit type applies to a compartment, that compartment will be opened and prompted for any applied confirmations. Applied compartments will be opened in order. ALL selected + applied individual confirmations will be executed prior to moving to the next compartment. Once all individual compartments have been confirmed, any applicable Grouped audit confirmations will be triggered. Reopening a previously audited compartment will re-prompt for all applied confirmations.
 - **Assume Confirm:** If assume confirm selected the user will not have to click the confirm button, and instead close the door/drawer and the device will assume confirmation.
 - **Imaging System:** The imaging system option is only supported on the ATC Toolbox, and can be applied to tools that have been filtered via the Tool Confirmation Type.
 - **Trigger Verifications:** If ANY selected audit has verification prompt option enabled, verification prompts will be triggered if a compartment is opened. It doesn't matter if the audit in question applies to that compartment or not.
 - Group confirm audit types will not force opening of a compartment, but if verification prompt is enabled it will trigger if the compartment is opened for another reason.
 - If a tool has a return and an issue verification, both verifications will be prompted. Special case: if a tool has the same verification for both issue & return, it will only prompt once
 - Verifications will be prompted EVERY time a compartment is opened. (Exception: during a single compartment audit, if the user closes the door but uses the diagnostics menu to request "Reopen Door" prior to completing confirmations, it will not re-prompt verifications.)
 - Verification options will be identical to normal use. If dual badge scan is required to verify, it will also be required if prompted during audit.
 - Declining verification during audit will set status on tool and create event log, but will not cancel an audit in progress.
 - A pending verification prompt will interrupt "auto confirm" behavior. If the user completes all verification prompts prior to closing the door, auto confirm will behave as normal. If the user closes the door prior to completing the verification prompts, auto confirm will be disabled and the user will have to manually select confirm/exception option.
 - **Tag Confirm:** Auditor will be required to scan the tag on the tool as part of the audit of each compartment, when the compartment is opened and the tool is present.
5. Click the save icon in the top right corner to save your new audit type.
-



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Assigning Audits to a Device

Once you have saved your new audit type, it will show up in the Audit Type List on the left side. You can now assign this audit type to a supported device. You can assign audit types directly on a device, or you can assign it to a location, and all devices in that location will have the Audit assigned.

1. To assign the Audit, you must go to the **locations** tab.

System Status

Filtered	Total
Devices Online : 0	0
Devices Offline : 8	8
Tools Issued : 24	24
Users with Tools Issued : 3	3
Devices with Tools Issued : 7	7
Tools Issued with Alerts : 1	1
Managed Tools Out : 0	0
Tools Managed : 1187	1187

Locations

Name	Alerts	Issued	Mngt Out
Z92BT001	0	1	0
Z99LS001	0	1	0
Z92BN006	0	1	0
Z97BB012	0	1	0
Z98B001	0	1	0
Z99BT002	0	1	0
Z99LS001	0	1	0

Tools

Name	Alerts	Issued	Mngt Out
Z92BN006	0	1	0
Z97BB012	0	1	0
Z98B001	0	1	0
Z99BT002	0	1	0
Z99LS001	0	1	0

Alerts

Alert	Device	Tool
Offline	Z92BN006	Simulator toolbox54
Wrong Tool	Z92BN006	AJA
Offline	Z98B001	LSAICPORTAL
Offline	Z99LS001	ToolKit
Info Conflict	Z99LS001	NYZ700MDKIT
Info Conflict	Z99LS001	424HDC
Info Conflict	Z99LS001	WIND100
Info Conflict	Z99LS001	WIND100
Info Conflict	Z99LS001	WIND100
Info Conflict	Z99LS001	WIND100
Info Conflict	Z99LS001	PT1800AL
Info Conflict	Z99LS001	PT1800AL
Info Conflict	Z99LS001	PT1800AL
Info Conflict	Z99LS001	WM0140170

Work Location Status

Name	Alerts	Issued	Issued Users	Issued Devices	Mngt Out	Alert	Device	Tool
------	--------	--------	--------------	----------------	----------	-------	--------	------

Recent Events

Time	Action	Part Number	Employee	Source	Destination
------	--------	-------------	----------	--------	-------------

2. Select the device or location where you want the audit to be available.
3. Go to the **Audit Types** Tab

Audit Types

Name: Z92BT001
Customer ID: Z92BT001
Notes:

Parent Location: Top Level

Responsible Employee: [X]

Serial Number (Device): Z92BT001
Current Version: 9.9.8.0216
Service Connection Online (3/18/2024 2:38:18 PM)
PC Info: Dell Inc. 0XRC2C
OS Version: Microsoft Windows NT 10.0.22621.0
Hardware Info: Toolbox Emulator
Default Tolerance: 0

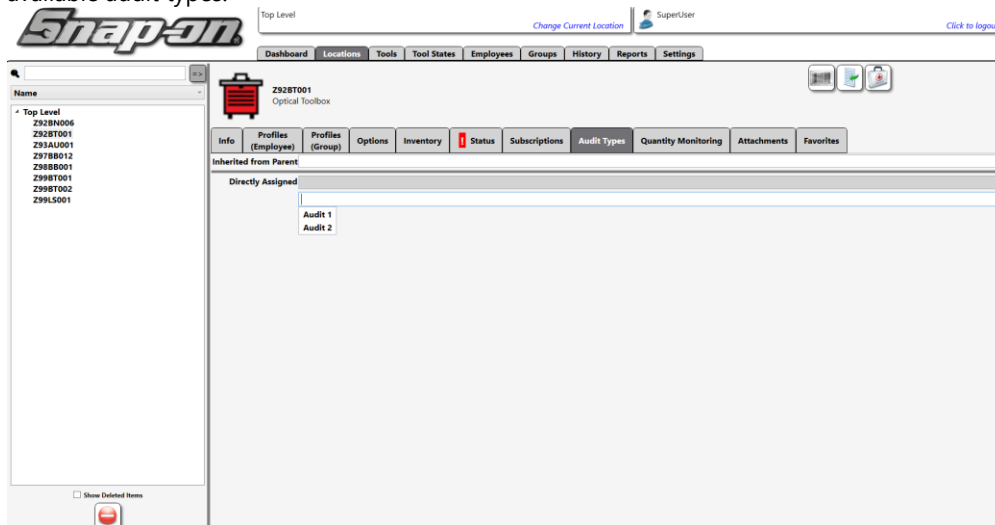
Device Info

Customer ID: [X]
Serial Number (Tool): [X]
Tag: [X]

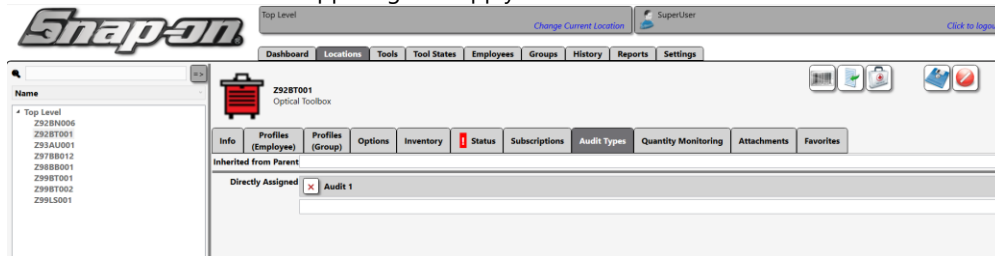


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4. Select the audit type you want to assign. You will need to mouse over the white box to display the list of available audit types.



5. Click the Save Button in the upper right to apply the audit to the box.





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Supported Device by Device Procedure

Required Permissions

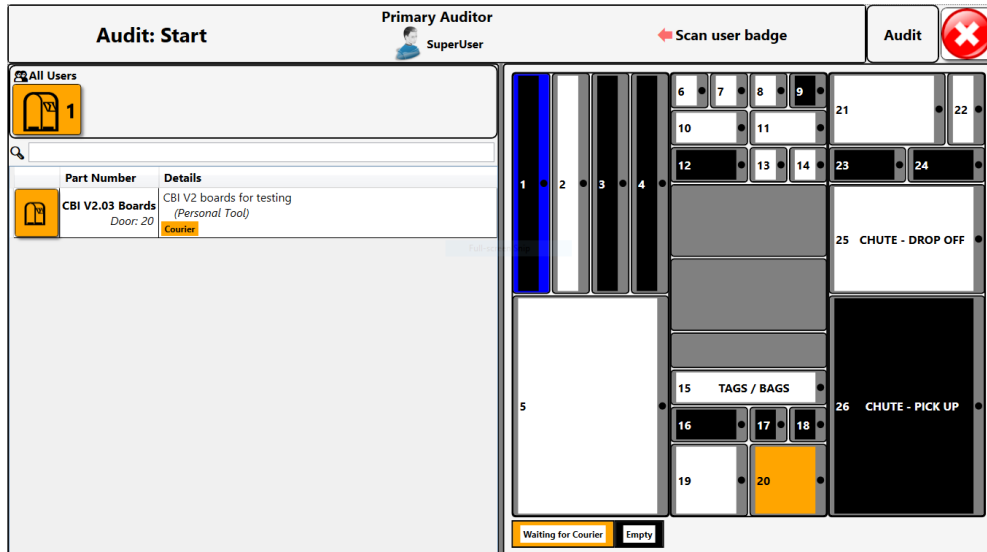
- Audit

ATC FlexHub

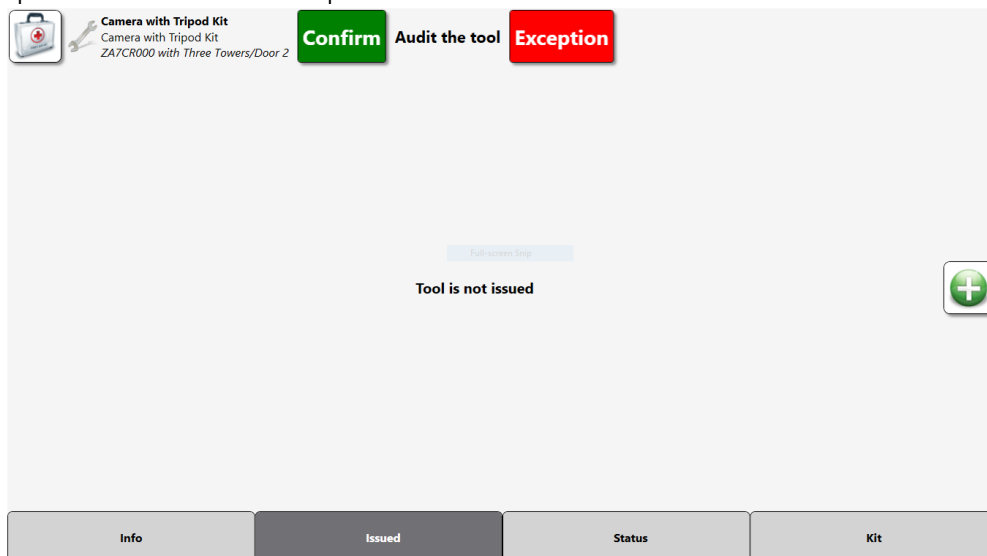
1. Login to the FlexHub and select the **Audit** button on the **Select Work flow** screen.

2. When you enter audit mode, you will see a list of available audits you can perform on the right side. Select the Audit, or Audits you want to perform and tap the green checkmark. Auditors will be shown a confirm/exception screen for each audit that applies for a specific compartment.


- The system will ask for the badge of the Primary auditor, which must be the currently logged in user. If Dual User is enabled on the Audit Type, a second user will also need to swipe their badge to begin.



- Perform the task or check that the instructions describe, scan the tag on the tool if prompted, tap either the Confirm or Exception button to mark if the task or check was completed successfully, then close the door. The next compartment door will not open until the previous door is closed. If the Assume Confirm option is enabled for the Audit type selected, the user does not have to click the Confirm button and can instead shut the compartment door. The system will assume confirm in that case, if an exception is required select the option and then close the compartment door.



The Auditor can make and save changes to tool issued state, tool statuses, and tool maintenance based on their edit permissions. Any changes must be saved or cancelled to advance the audit.




Confirm

Audit the tool

Exception

This compartment has no assigned inventory and is expected to be empty.



CTECH4R600A


600 ft. lb. torque wrench


Z97BB012/Door 16

Confirm

Text that will be Displayed

Exception






Socket, Sue

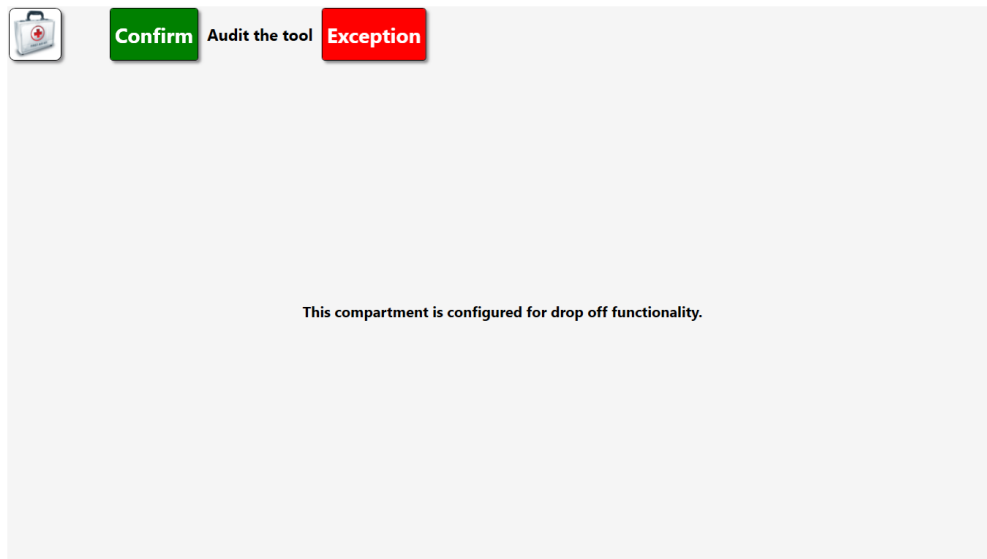
3/7/2024 2:13:07 PM (Qty:1)

Info

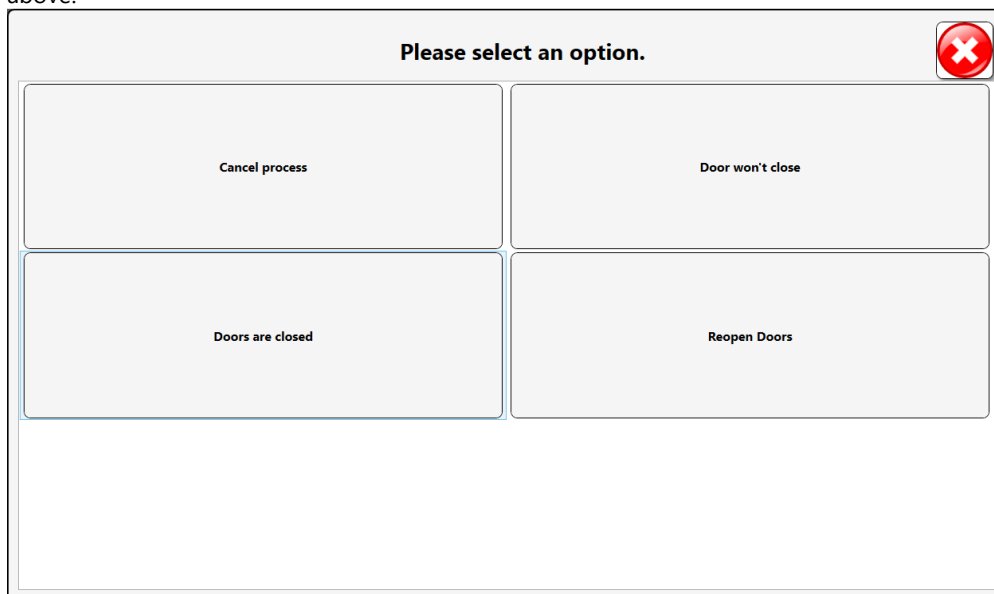


Issued

Status



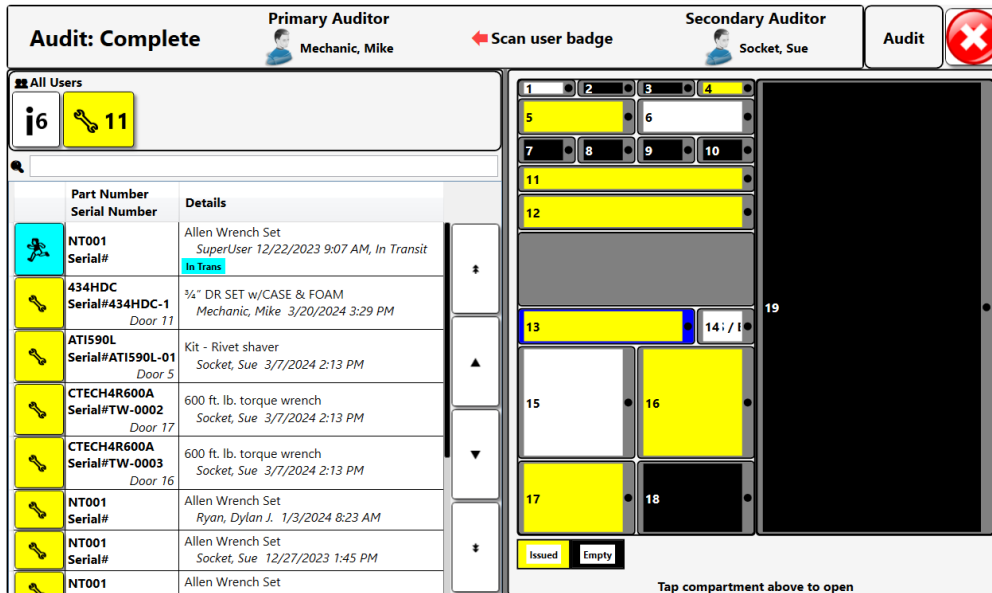
A message will be displayed onscreen for each compartment door opened; This informs the user of a compartments assigned inventory, compartments issued state, or compartments configuration like shown above.



If the user has any issue with the audit or wishes to cancel an audit in progress, click on the diagnostic button in the top left corner. This will give the user the following options to select: Cancel process, Door won't close, Doors are closed, Reopen Doors (shown above).

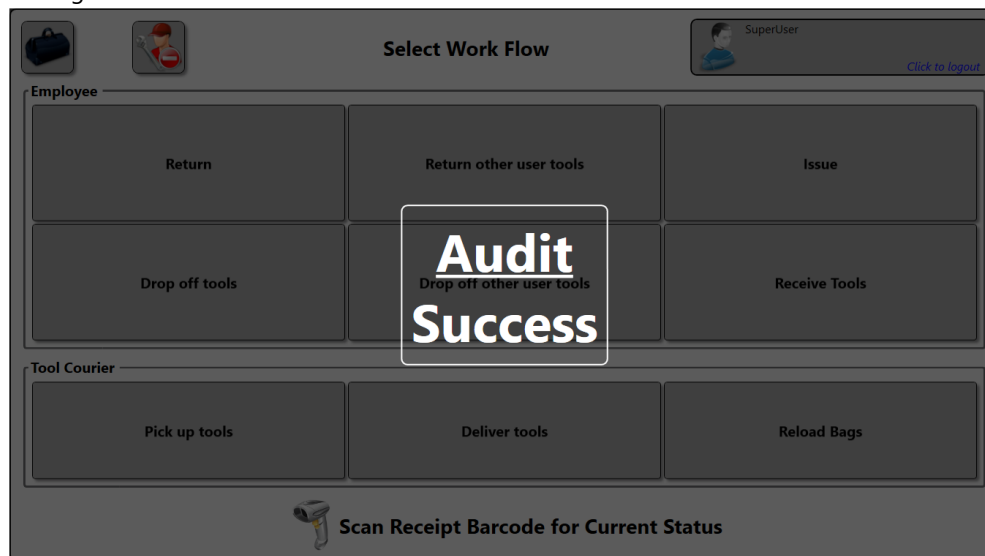
5. At any point during the audit the auditor can reopen any compartment by pressing the compartment display on the right side of the screen (shown below). Any confirmations/verifications will be repeated for any

compartment that is reopened.



Part Number	Serial Number	Details
NT001	Serial#	Allen Wrench Set SuperUser 12/22/2023 9:07 AM, In Transit In Transit
434HDC	Serial#434HDC-1	1/4" DR SET w/CASE & FOAM Mechanic, Mike 3/20/2024 3:29 PM Door 11
AT1590L	Serial#AT1590L-01	Kit - Rivet shaver Socket, Sue 3/7/2024 2:13 PM Door 5
CTECH4R600A	Serial#TW-0002	600 ft. lb. torque wrench Socket, Sue 3/7/2024 2:13 PM Door 17
CTECH4R600A	Serial#TW-0003	600 ft. lb. torque wrench Socket, Sue 3/7/2024 2:13 PM Door 16
NT001	Serial#	Allen Wrench Set Ryan, Dylan J. 1/3/2024 8:23 AM
NT001	Serial#	Allen Wrench Set Socket, Sue 12/27/2023 1:45 PM
NT001	Serial#	Allen Wrench Set

- When confirming the last tool, the system will then ask the auditor to swipe their badge to complete the Audit. Remember, if Dual User is enabled on the Audit Type, it will ask for a second user to swipe their badge to complete the Audit.
- Once the auditor has swiped their badge, the system will complete the Audit and preset the success message on the screen.



Select Work Flow

Employee

Return

Return other user tools

Issue

Drop off tools

Audit Success
Drop off other user tools

Receive Tools

Tool Courier

Pick up tools

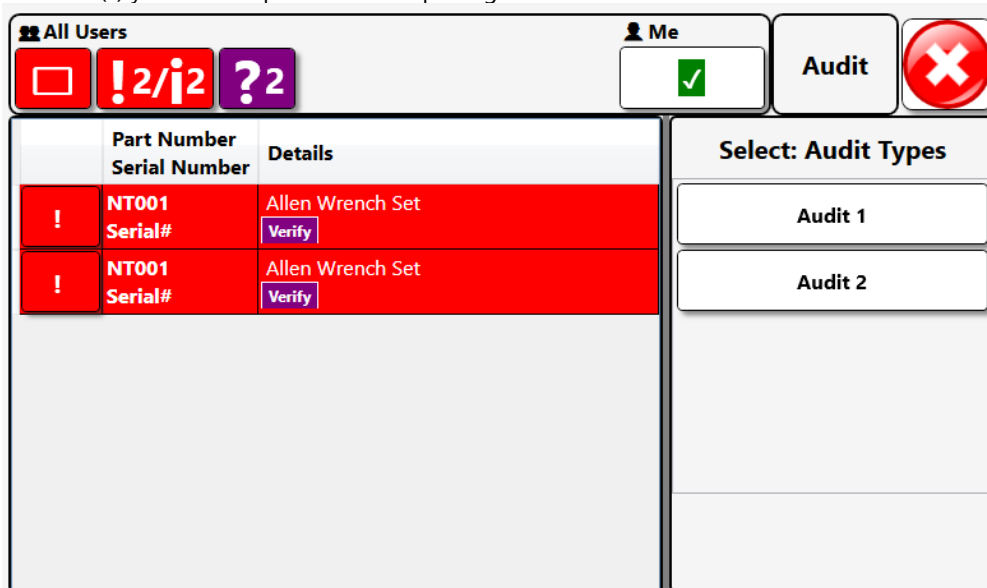
Deliver tools

Reload Bags

Scan Receipt Barcode for Current Status

ATC Locker

1. Navigate to **Settings=>Audit** and login to the Locker.
2. When you enter audit mode, you will see a list of available audits you can perform on the right side. Select the Audit(s) you want to perform and tap the green checkmark.



The screenshot shows the ATC Locker interface. At the top, there are buttons for 'All Users' (with a red square icon), 'Me' (with a green checkmark icon), and 'Audit' (with a red X icon). Below these buttons is a table with two columns: 'Part Number' and 'Details'. The table contains two rows, both with a red background and a red exclamation mark icon in the first column. The first row shows 'NT001' and 'Allen Wrench Set'. The second row also shows 'NT001' and 'Allen Wrench Set'. To the right of the table is a section titled 'Select: Audit Types' with two buttons: 'Audit 1' and 'Audit 2'.

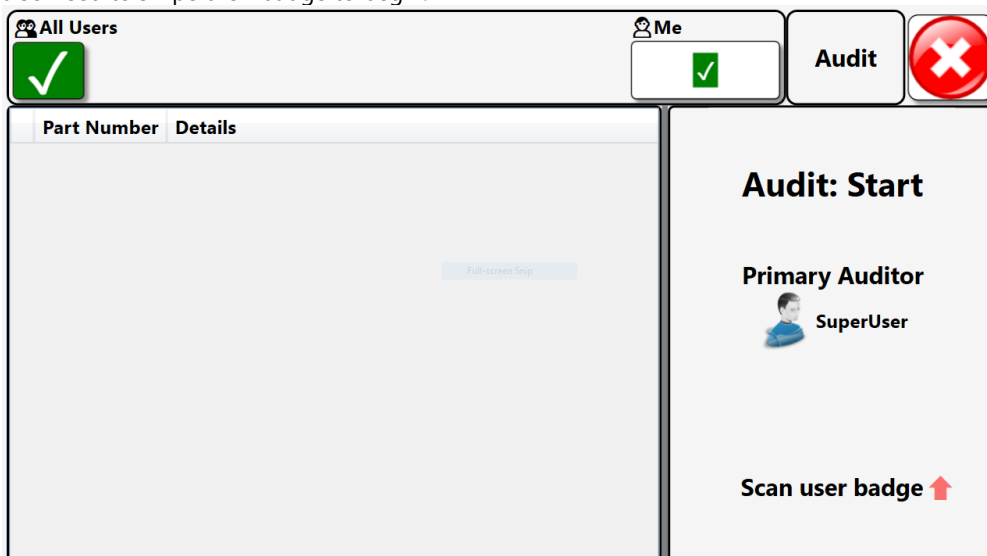
	Part Number	Serial Number	Details
!	NT001		Allen Wrench Set
!	NT001		Allen Wrench Set

Select: Audit Types

Audit 1

Audit 2

3. The system will ask for the badge of the auditor. If Dual User is enabled on the Audit Type, a second user will also need to swipe their badge to begin.




The screenshot shows the ATC Locker interface in 'Audit: Start' mode. At the top, there are buttons for 'All Users' (with a green checkmark icon), 'Me' (with a green checkmark icon), and 'Audit' (with a red X icon). Below these buttons is a table with two columns: 'Part Number' and 'Details'. The table is currently empty. To the right of the table is a section titled 'Audit: Start' with the following text: 'Primary Auditor', a user icon, 'SuperUser', and 'Scan user badge' with a red arrow pointing up.

Part Number	Details
-------------	---------

Audit: Start

Primary Auditor


 SuperUser

Scan user badge ↑

All Users
Me
Audit

Part Number Details

Audit: Start


Primary Auditor
 SuperUser

Scan user badge

Secondary Auditor

- The system will display a list of tools in inventory that fit whichever filters in the audit are selected. The Auditor can make and save changes to tool issued state, tool statuses, and tool maintenance based on their edit permissions.
- Perform the task or check that the instructions describe, tap either the Confirm or Exception button to mark if the task or check was completed successfully, then close the door.

Text that will be Displayed

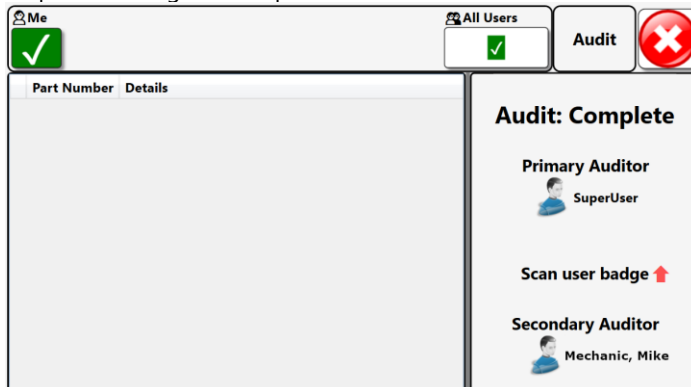
	Part Number Serial Number	Details	
	NT001 Serial# <i>Issued</i>	Allen Wrench Set <i>Mechanic, Mike 1/17/2024 2:50 PM</i>	↑
	WMH140175 Serial# <i>Present</i>	Pallet Jacks- 27x48	▲
	WMH140174 Serial# <i>Present</i>	Pallet Jacks - 27x42	▼
	WMH140174 Serial# <i>Present</i>	Pallet Jacks - 27x42	↓
	WMH140172		

Confirm

Exception

- After the closing the door to the locker, the system will then ask the auditor to swipe their badge to complete the Audit. Remember, if Dual User is enabled on the Audit Type, it will ask for a second user to

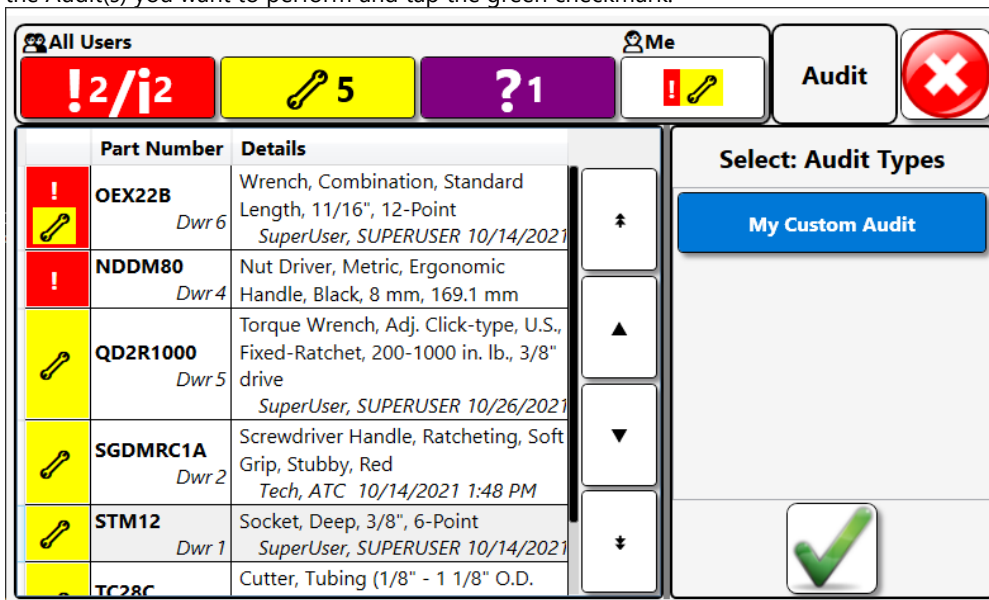
swipe their badge to complete the Audit.



- Once the auditor has swiped their badge, the system will complete the Audit and preset the success message on the screen.

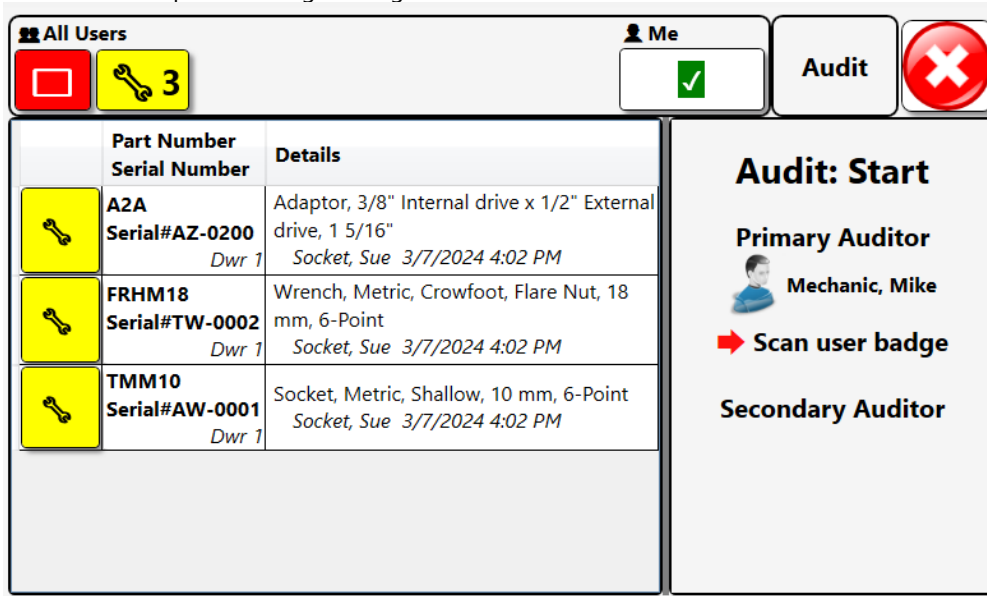
ATC Toolbox




- Navigate to **Settings=>Audit**
- When you enter audit mode, you will see a list of available audits you can perform on the right side. Select the Audit(s) you want to perform and tap the green checkmark.



The system will ask for the badge of the auditor. If Dual User is enabled on the Audit Type, a second user will


also need to swipe their badge to begin.




	Part Number	Serial Number	Details
	A2A	Serial#AZ-0200 <i>Dwr 1</i>	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" <i>Socket, Sue 3/7/2024 4:02 PM</i>
	FRHM18	Serial#TW-0002 <i>Dwr 1</i>	Wrench, Metric, Crowfoot, Flare Nut, 18 mm, 6-Point <i>Socket, Sue 3/7/2024 4:02 PM</i>
	TMM10	Serial#AW-0001 <i>Dwr 1</i>	Socket, Metric, Shallow, 10 mm, 6-Point <i>Socket, Sue 3/7/2024 4:02 PM</i>

Audit: Start

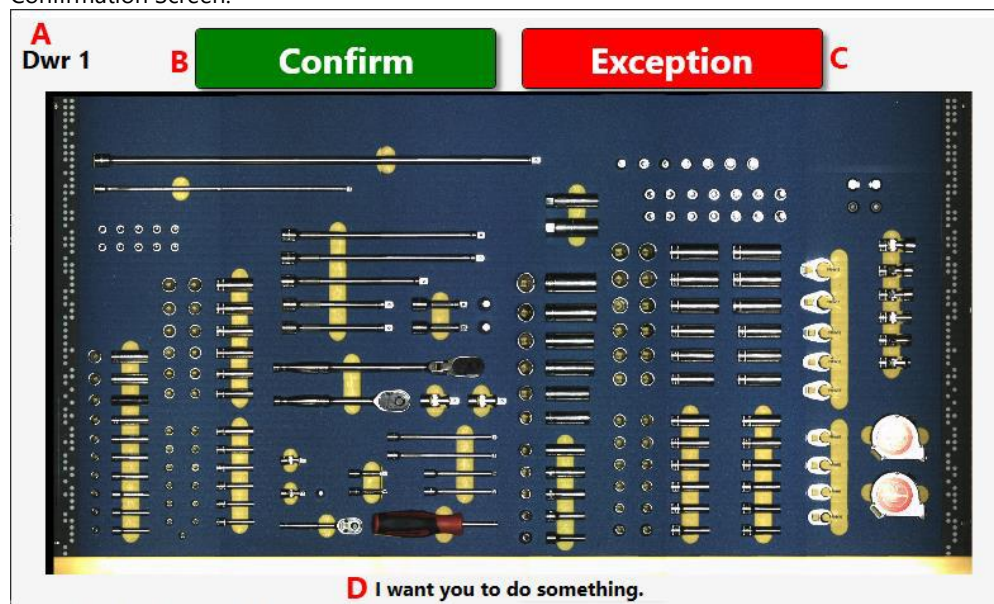
Primary Auditor

 **Mechanic, Mike**

 **Scan user badge**

Secondary Auditor

- The system will then display all the drawers with a RED and BLACK banner to indicate that the Audit has not been performed on the drawer. Open one of the drawers, and you will be presented with the Audit Confirmation Screen.



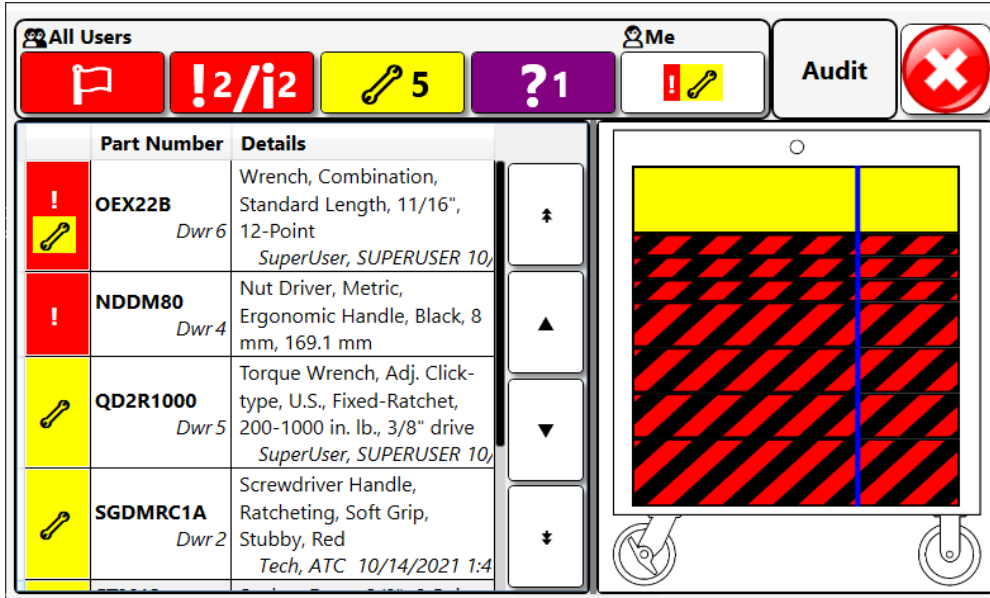
A Dwr 1





B **Confirm** **Exception** **C**

D I want you to do something.

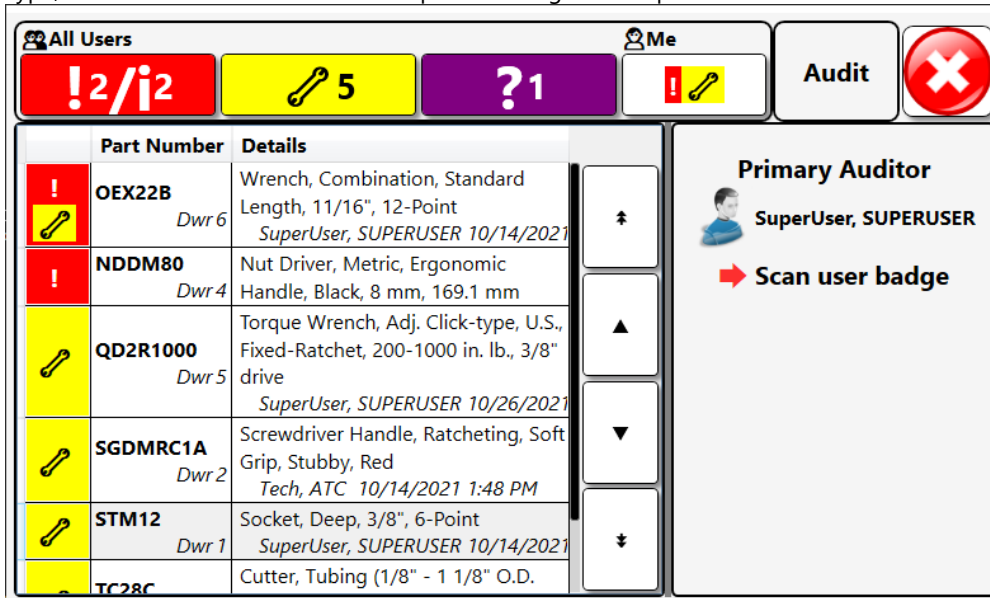
- **A.** Drawer ID – Current Drawer that is being Audited
- **B.** Confirm Button – Confirms Audit Pass or an action such as cleaning was performed, you would tap this button.
- **C.** Exception Button – If an item failed the Audit or the action such as cleaning was not performed for some reason, you would tap this button.
- **D.** Audit Instructions – Displays what the user needs to do or check.







- Perform the task or check that the instructions (D) describe, tap either the Confirm (B) or Exception (C) button to mark if the task or check was completed successfully, then close the drawer. The RED and Black bar is then removed from the drawer.




Part Number	Details
 OEX22B <i>Dwr 6</i>	Wrench, Combination, Standard Length, 11/16", 12-Point <i>SuperUser, SUPERUSER 10/14/2021 1:48 PM</i>
 NDDM80 <i>Dwr 4</i>	Nut Driver, Metric, Ergonomic Handle, Black, 8 mm, 169.1 mm
 QD2R1000 <i>Dwr 5</i>	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive <i>SuperUser, SUPERUSER 10/14/2021 1:48 PM</i>
 SGDMRC1A <i>Dwr 2</i>	Screwdriver Handle, Ratcheting, Soft Grip, Stubby, Red <i>Tech, ATC 10/14/2021 1:48 PM</i>

- Repeat this task until you have completed all drawers. When you close the last drawer, the system will then ask the auditor to swipe their badge to complete the Audit. Remember, if Dual User is enabled on the Audit Type, it will ask for a second user to swipe their badge to complete the Audit.



Part Number	Details
 OEX22B <i>Dwr 6</i>	Wrench, Combination, Standard Length, 11/16", 12-Point <i>SuperUser, SUPERUSER 10/14/2021 1:48 PM</i>
 NDDM80 <i>Dwr 4</i>	Nut Driver, Metric, Ergonomic Handle, Black, 8 mm, 169.1 mm
 QD2R1000 <i>Dwr 5</i>	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 in. lb., 3/8" drive <i>SuperUser, SUPERUSER 10/26/2021 1:48 PM</i>
 SGDMRC1A <i>Dwr 2</i>	Screwdriver Handle, Ratcheting, Soft Grip, Stubby, Red <i>Tech, ATC 10/14/2021 1:48 PM</i>
 STM12 <i>Dwr 1</i>	Socket, Deep, 3/8", 6-Point <i>SuperUser, SUPERUSER 10/14/2021 1:48 PM</i>
 TC28C	Cutter, Tubing (1/8" - 1 1/8" O.D.)

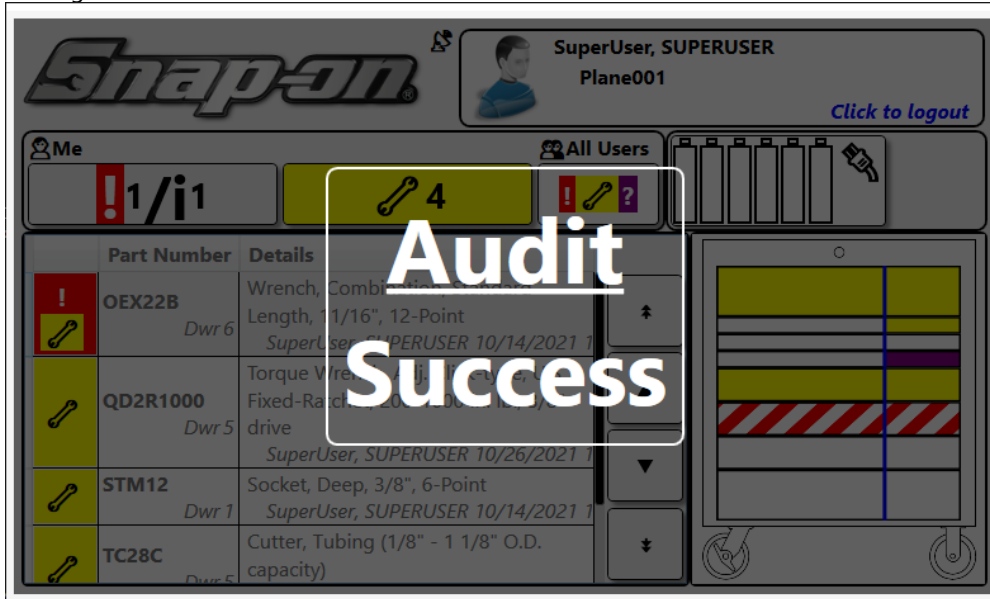
Primary Auditor

 **SuperUser, SUPERUSER**

➔ Scan user badge

Once the auditor has swiped their badge, the system will complete the Audit and preset the success

message on the screen.





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Event Log

After you have completed the Audit on the device, you can view the results of the Audit in the L5 Connect™ Admin Client History tab.

1. Log into the L5 Connect™ Admin Client and go to the History Tab

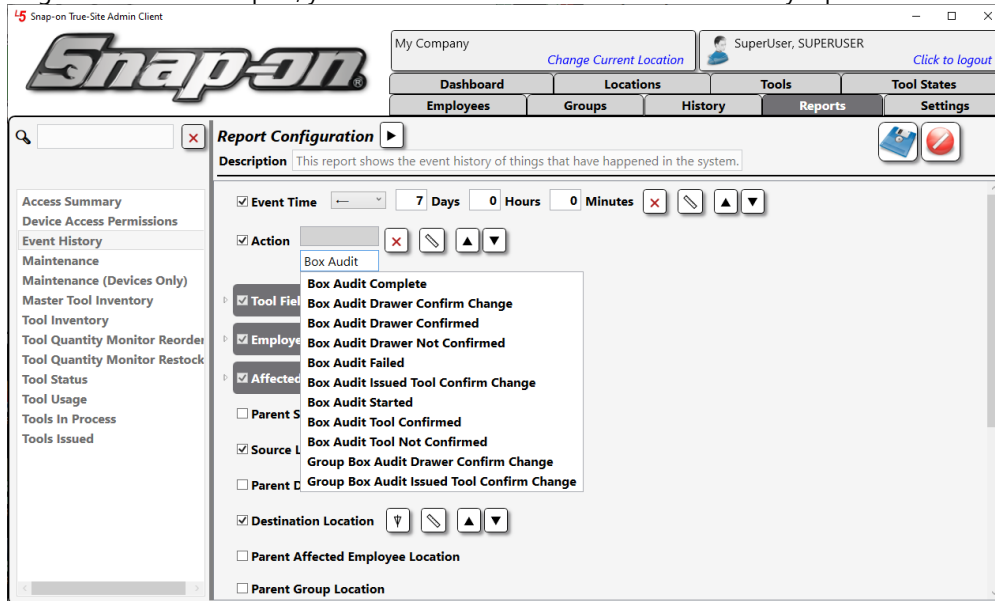
The screenshot shows the Snap-on L5 Connect Admin Client interface. The 'History' tab is selected, displaying a table of device status and alerts. A red arrow points to the 'History' tab. The interface includes a sidebar with system status, a main table with columns for Name, Alerts, Issued, Issued Users, and Mgmt Out, and a bottom section with various reports and a recent events log.

2. Filter the Action Column to Audit

Date	Action	Dev	Part Number	Employee	Affected Employee	Source Location	Destination Location	Group	Info	Data
3/19/2024 2:17:05 PM	Secondary Audit Badge Scan			SuperUser	Mechanic, Mike	Z64DN007 Red				
3/19/2024 2:16:54 PM	Box Audit Started			SuperUser		Z64DN007 Red				
3/19/2024 1:46:51 PM	Box Audit Complete			SuperUser		Z64DN007 Red				
3/19/2024 1:45:57 PM	Box Audit Drawer Confirmed			SuperUser		Z64DN007 Red				
3/19/2024 1:45:20 PM	Secondary Audit Badge Scan			SuperUser	Mechanic, Mike	Z64DN007 Red				Audit Type: New Audit
3/19/2024 1:45:00 PM	Box Audit Started			SuperUser		Z64DN007 Red				
3/19/2024 1:44:57 PM	Box Audit Failed			SuperUser		Z64DN007 Red				Audit Cancelled
3/19/2024 1:43:25 PM	Box Audit Started			SuperUser		Z64DN007 Red				

- The Action Box Audit Start is the beginning of an Audit on a device, and Box Audit Complete is the end of the Audit.
- Each drawer result will be listed between the Start and Complete actions.
- The Name of the Audit that was being performed will be listed in the Data column.

- To generate an audit report, you will need to create a custom Event History report.



Report Configuration

Description This report shows the event history of things that have happened in the system.

☒ **Event Time** 7 Days 0 Hours 0 Minutes

☒ **Action** Box Audit

☒ **Tool Field** Box Audit Complete

☒ **Employee** Box Audit Drawer Confirm Change

☒ **Affected** Box Audit Drawer Confirmed

☒ **Source** Box Audit Drawer Not Confirmed

☒ **Destination Location** Box Audit Failed

☒ **Parent S** Box Audit Issued Tool Confirm Change

☒ **Parent Affected Employee Location** Box Audit Started

☒ **Parent Group Location** Box Audit Tool Confirmed



L5 Connect User Manual

Certifications

Certifications allow you to mark certain tools so they can only be issued to employees who have been certified to use them. This document will cover how to set up certifications for your L5 Connect system. It will walk through setting up the certifications with the Admin application and then the process of issuing tools with certifications from a device.

NOTE: Certifications are currently only supported by the FlexHub device.

Creating Certifications

The first step in setting up certifications in your L5 Connect system is to create a certification. This is done with Admin application.

Basic Certification

Start the Admin app, log in, and go to the **Settings** tab.

Snap-on L5 Connect Admin Client, v9.14.1.0418

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard Locations Tools Tool States Employees Groups History Reports **Settings**

System Status

	Filtered	Total
Devices Online :	0	0
Devices Offline :	12	12
Tools Issued :	16	16
Users with Tools Issued :	5	5
Devices with Tools Issued :	2	2
Tools Issued with Alerts :	0	0
Managed Tools Out :	0	0
Tools Managed :	1632	1632

Device Status 112 3 ☐ Hide OK Items

Name	Alerts	Issued	Issued Users	Mngd Out	Alert	Location
Tool Box 1	5	0	0	0	Maintenance Overdue	Tool Crib East
Z918J001	2	0	0	0	Maintenance Overdue	Tool Crib East
ZABBT001	2	0	0	0	Maintenance Overdue	Tool Crib East
Tool Crib East	6	15	4	0	Maintenance Overdue	Tool Crib East
Z98AT001	6	0	0	0	Maintenance Overdue	Tool Crib East
Z99LS001	2	1	1	0	Offline	Maintenance Overdue FAM11E (Tool Crib East)
Z948J001	1	4	1	0	Offline	@ 5/10/2025 12:00:00 AM
Tool Crib West	1	0	0	0	Bad Drawer/Door State	Tool Box 1
Z93GS001	1	0	0	0	In Transit	Tool Box 1
Z97AT001	1	0	0	0	Maintenance Overdue	Tool Box 1
Z93AU001	1	0	0	0	Maintenance Overdue	Tool Box 1
Z98BT001	1	0	0	0	Maintenance Overdue	Z918J001

Work Location Status 1 ☐ Hide OK Items

Name	Alerts	Issued	Issued Users	Issued Devices	Mngd Out	Alert	Location	Tool
Work Loc2	0	1	1	1	0			
Work Location 1	0	0	0	0	0			
Work Location one	0	0	0	0	0			
Work Location 3	0	0	0	0	0			
Work Location 4	0	0	0	0	0			
Work Location 5	0	0	0	0	0			
Work Location 6	0	0	0	0	0			
Work Location 7	0	0	0	0	0			
Work Location 8	0	0	0	0	0			
Work Location 10	0	0	0	0	0			
Work Location 13	0	0	0	0	0			
Work Location 14	0	0	0	0	0			

Alerts:

Alert	Location	Tool
-------	----------	------

Top Employees with Issued Tools

Employee	Count
Plane Maintenance Hangar, Harry	9
Plane Maintenance Hangar, Preston	4
SuperUser	1
Runner, Rhode	1
Smith, John J.	1

Top Work Locations with Issued Tools

Location	Count
False Org	2
Item assembly 9000	1
Work Loc2	1

Top Devices with Issued Tools

Device	Count
Tool Crib East	15
Z948J001	4
Z99LS001	1

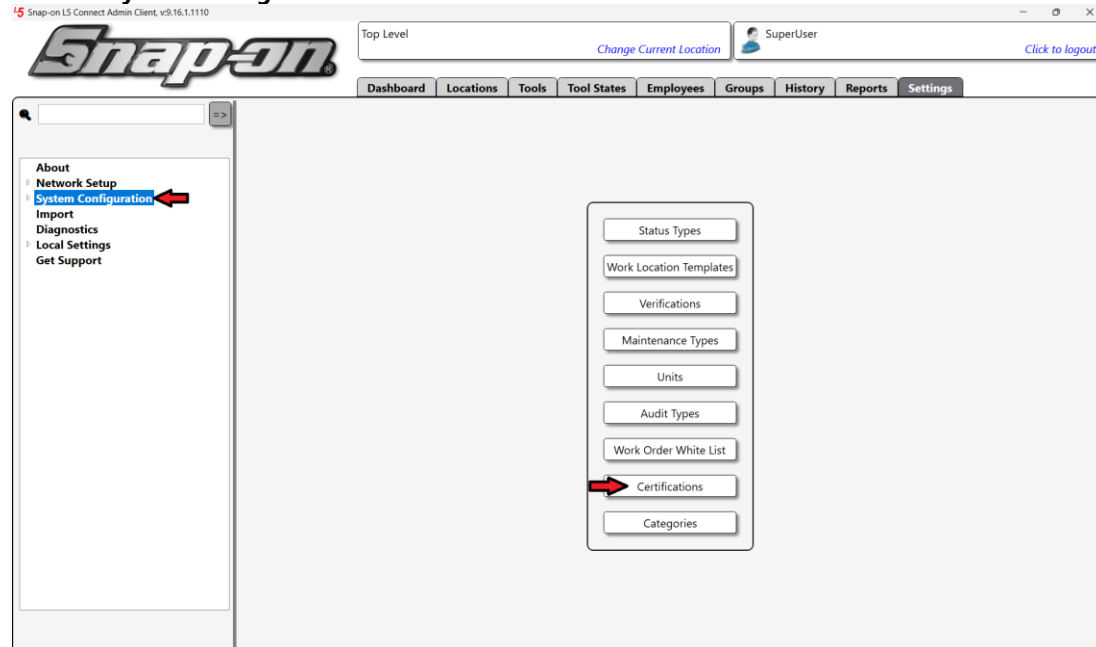
Inventory with Serial Number

Storage Location Name	Part Number	Description
Tool Box 1	1410 NO KEY	Sioux 1410 Drill
Tool Box 1	1650	Pylobat, 16"
Tool Box 1	1AM1541	Sioux 45 Degree Angle Air Drill
Tool Box 1	1DA221HP NO WRENCHES	Sioux 1DA221HP Die Grinder
Tool Box 1	208CCP	Pliers, Angle Nose
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finist
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finist
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel,
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel,
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"
Tool Box 1	AZA	Adaptor, 3/8" Internal drive x 1/2" External dr

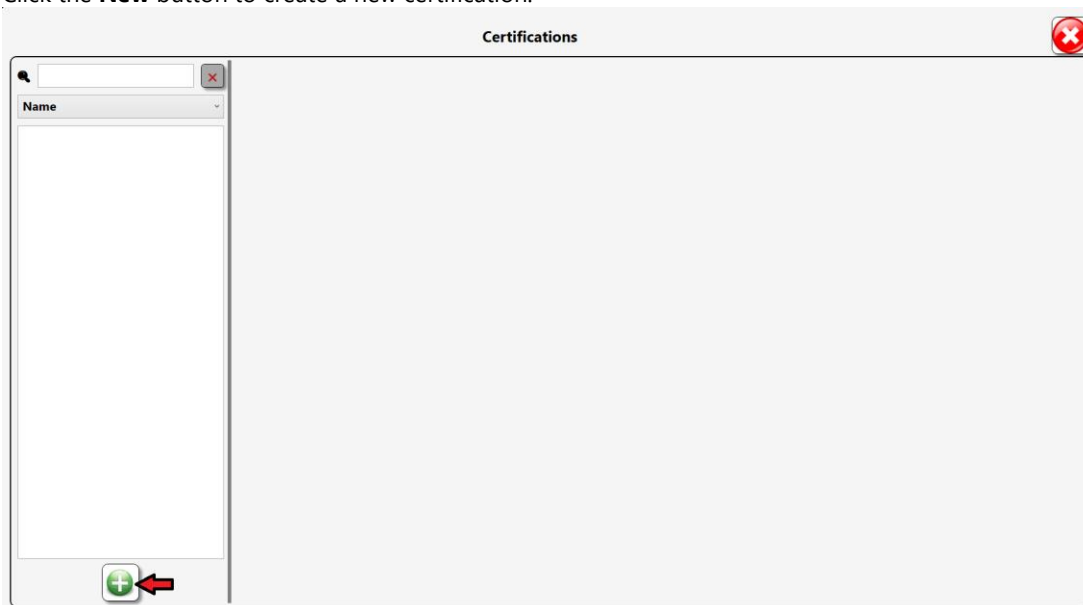


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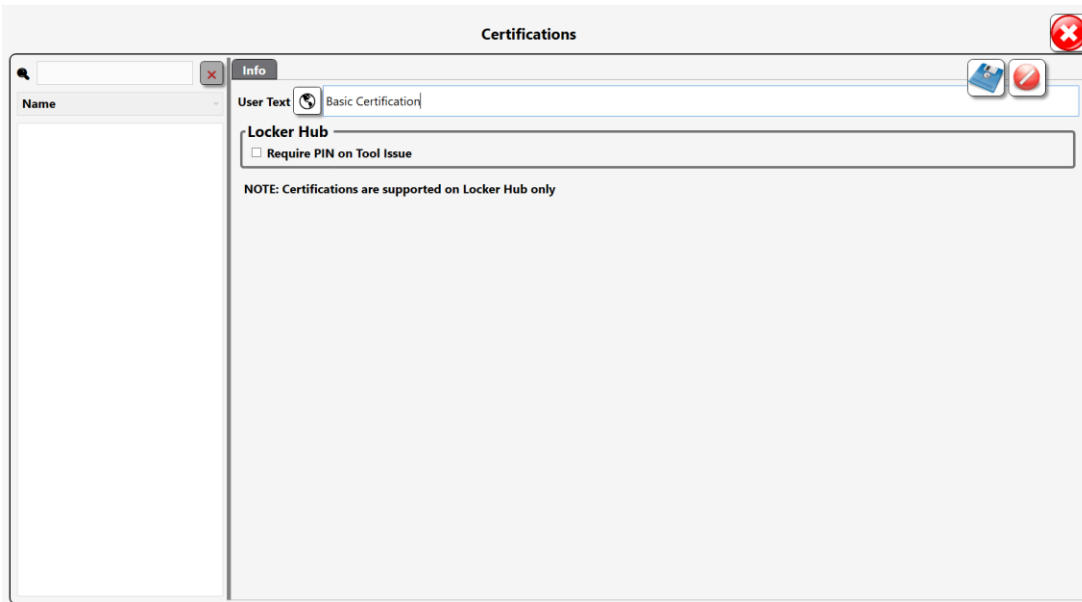
Click the **System Configuration** item in the list of items on the left-hand side. Then click the **Certifications** button.



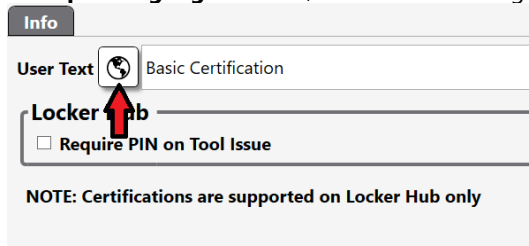
Click the **New** button to create a new certification.



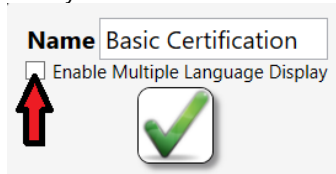
To give your certification a name, type it into the **User Text** field. For this case we will create a certification called **Basic Certification**.



Note that you can provide translation into other languages supported by the L5 Connect system by clicking the **Edit Multiple Languages** button, which looks like a globe.



Then you will check the **Enable Multiple Language Display** checkbox.





Provide translations of your certification name for any required languages and then click the **OK** button that looks like a green checkmark.

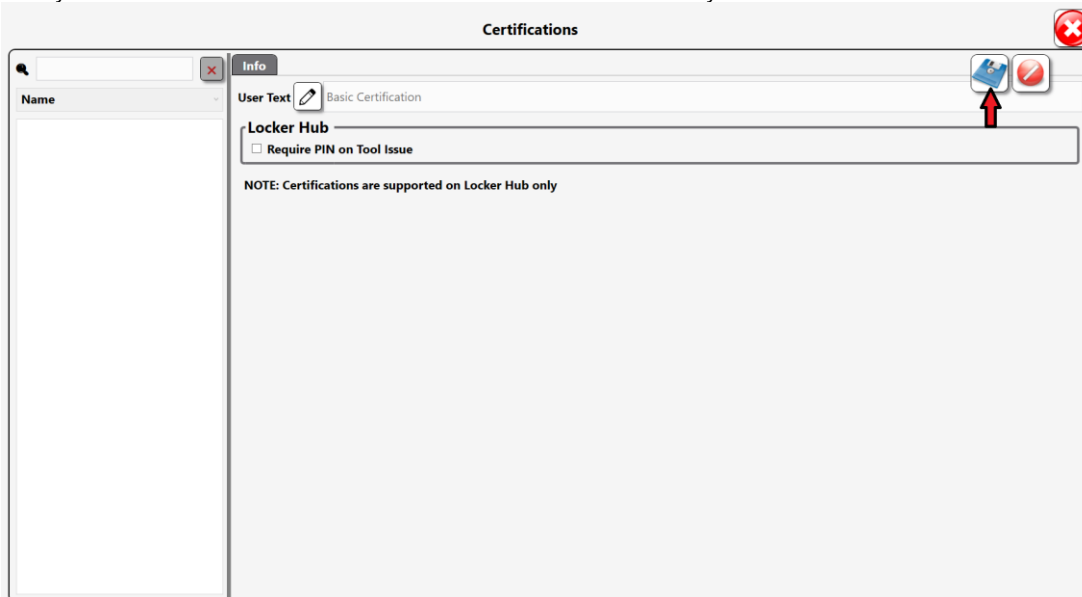
Name

☒ Enable Multiple Language Display

English	Basic Certification
Spanish	Certificación básica
German	Basic Certification
French	Basic Certification
Italian	Basic Certification
Japanese	Basic Certification
Korean	Basic Certification
Portuguese	Basic Certification
Chinese	Basic Certification

Finally, click the **Save** button that looks like a blue diskette to save your new certification.



Certification Requiring a PIN on Tool Issue

The L5 Connect system also provides the ability to require a PIN to be input to allow the issue of a tool with a certification.



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To create a certification requiring a PIN, you would click the **New** button on the certification page to start a new certification. Then provide a name in the **User Text** field and check the **Require PIN on Tool Issue** checkbox.

The screenshot shows the 'Certifications' window with the 'Info' tab selected. The 'User Text' field is labeled 'Certification with PIN'. Below it, the 'Locker Hub' section contains a checkbox labeled 'Require PIN on Tool Issue' which is checked. A red arrow points to this checkbox. A note below the checkbox states: 'NOTE: Certifications are supported on Locker Hub only'. The left sidebar shows a list of certifications: 'Basic Certification' and 'Certification with PIN'.

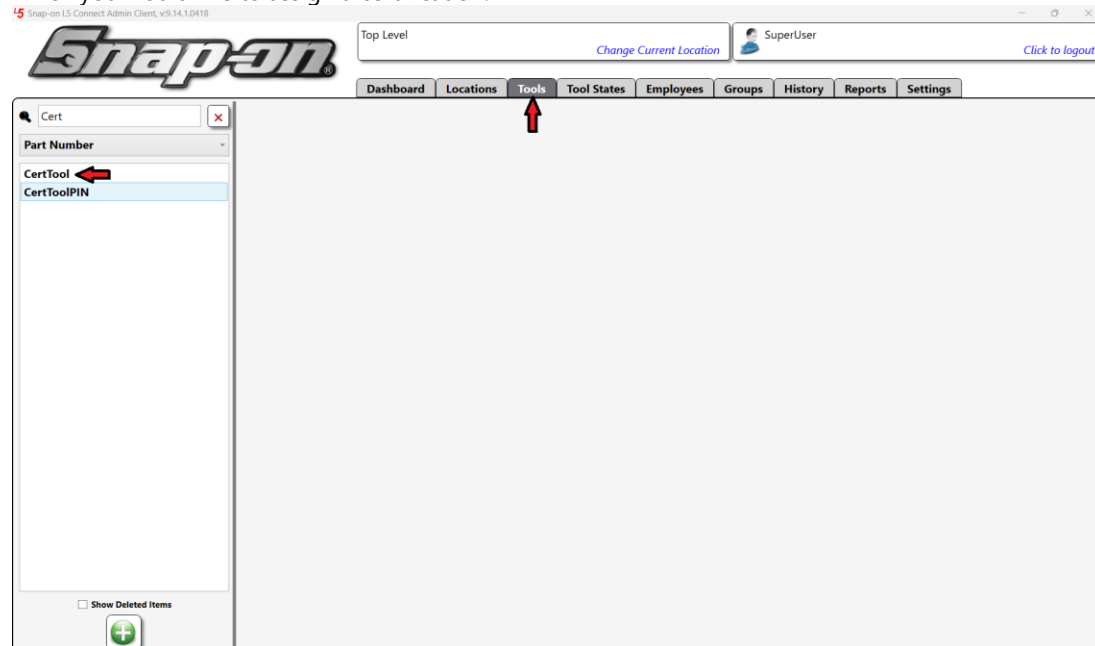
After clicking the **Save** button that looks like a blue diskette you will have created two new certifications to use, with one requiring an additional PIN.

This screenshot shows the 'Certifications' window after saving. The 'Info' tab is still selected, and the 'User Text' field remains 'Certification with PIN'. The 'Require PIN on Tool Issue' checkbox is still checked. The left sidebar now shows two certifications: 'Basic Certification' and 'Certification with PIN'. At the bottom left of the window, there are two buttons: a green plus sign and a red minus sign.

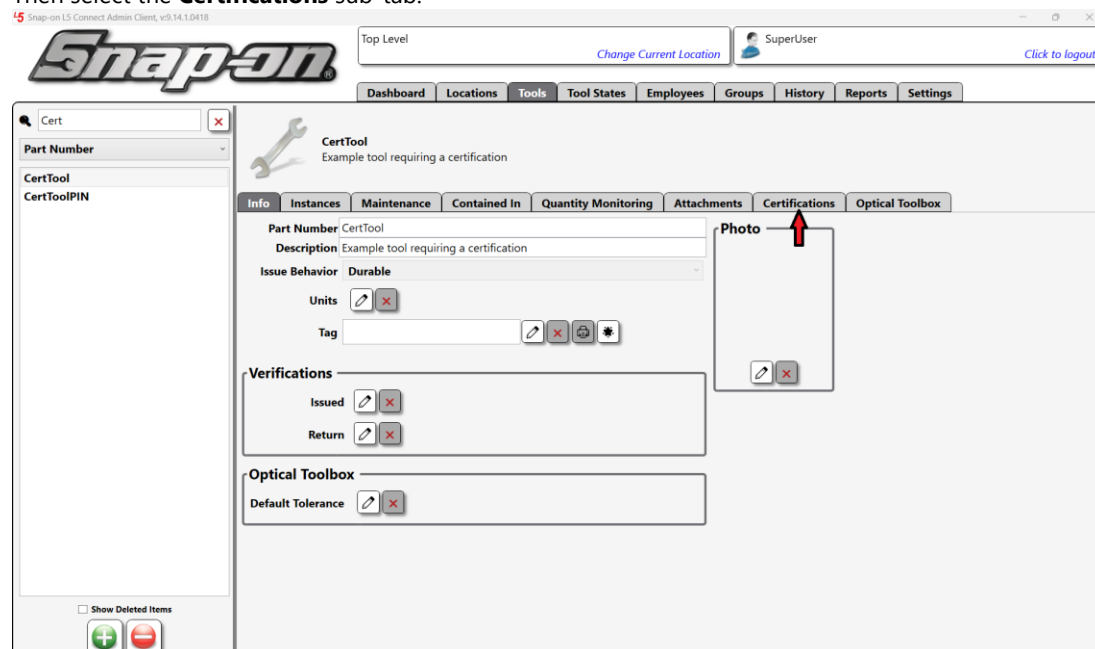
Assigning Certifications

To Tools

Once you have created some certifications you need to assign those certifications to tools that should only be issued if the employee has been certified to use them. Go to the **Tools** tab of the Admin application and select the tool to which you would like to assign a certification.



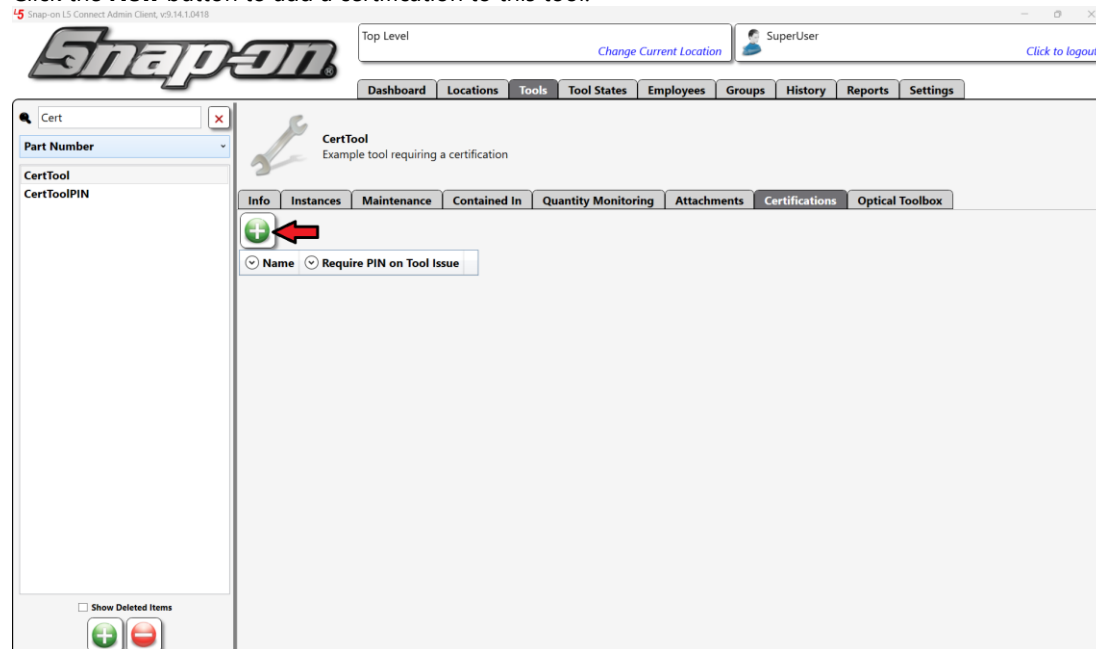
Then select the **Certifications** sub-tab.



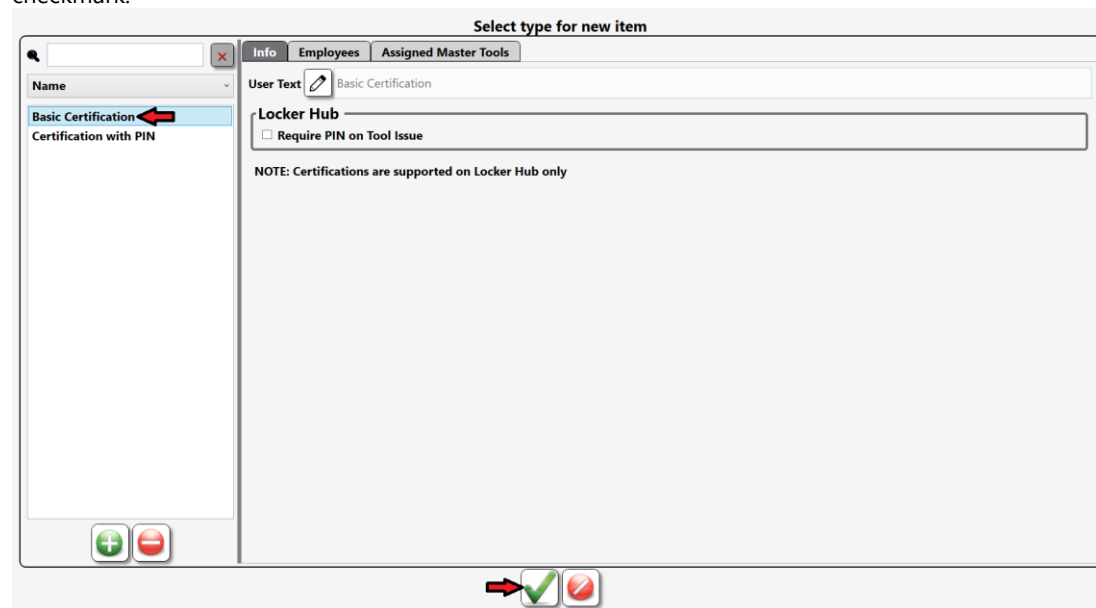


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Click the **New** button to add a certification to this tool.



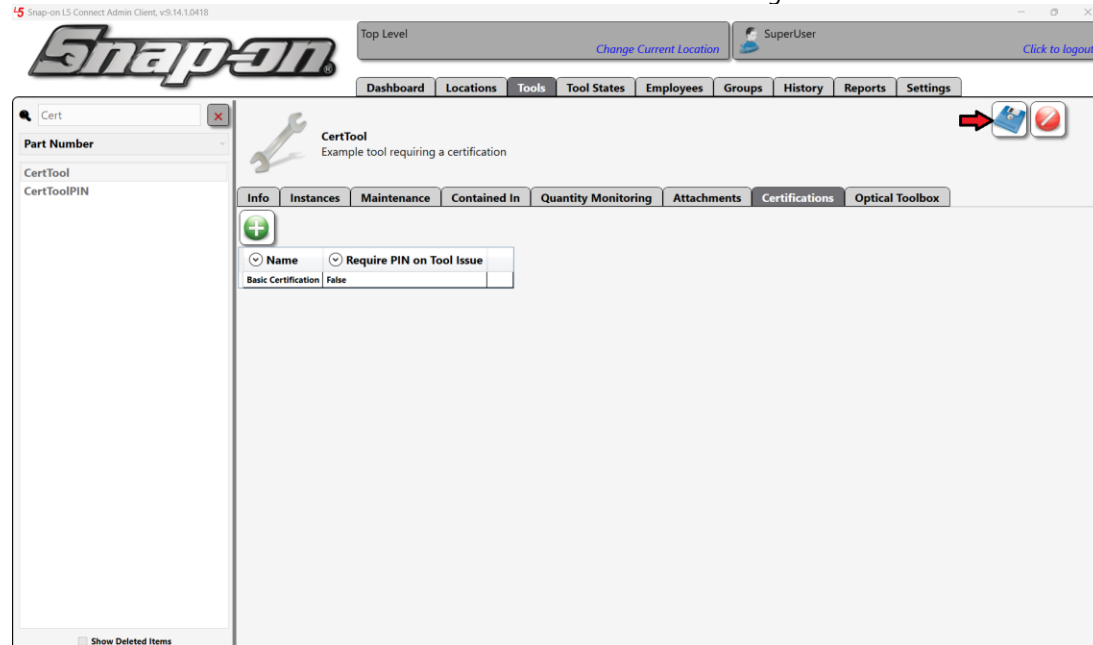
Now select the certification you wish to add to the tool and then click the **OK** button that looks like a green checkmark.





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Then click the **Save** button that looks like a blue diskette to finish adding the certification to the tool.



We will then repeat this process to add the certification requiring a PIN to the **CertToolPIN** tool for illustrating the issuing tools with certifications section.

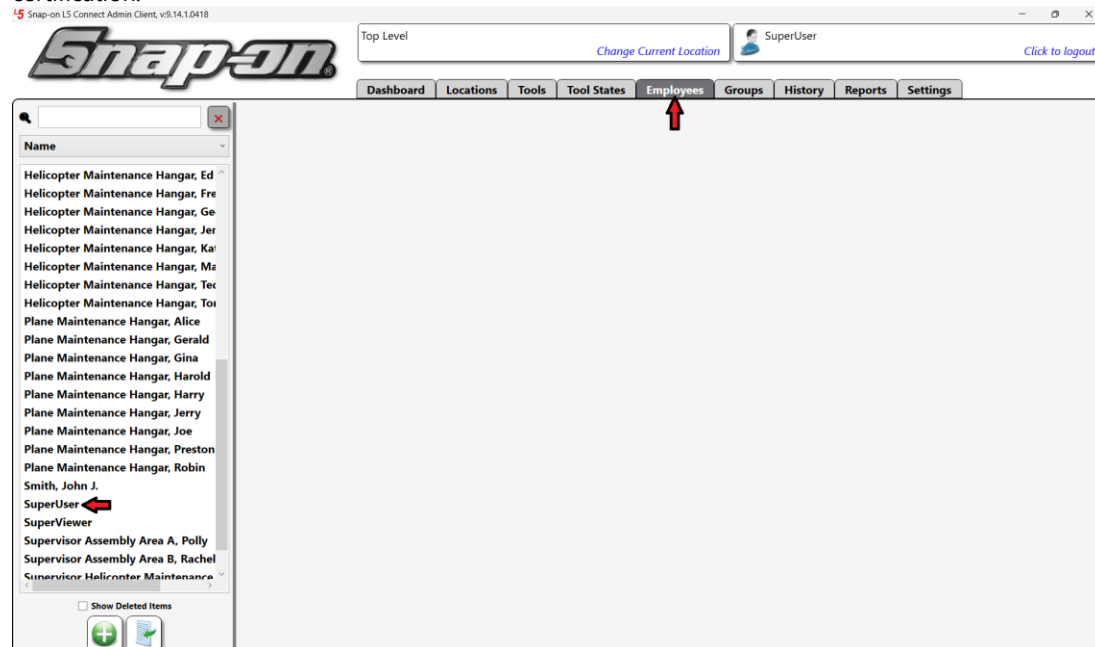
To Employees

To issue a tool with a certification, an employee will need to have that certification assigned to them. To do this you will need to go to the **Employees** tab of the admin and select the employee to whom you wish to assign a

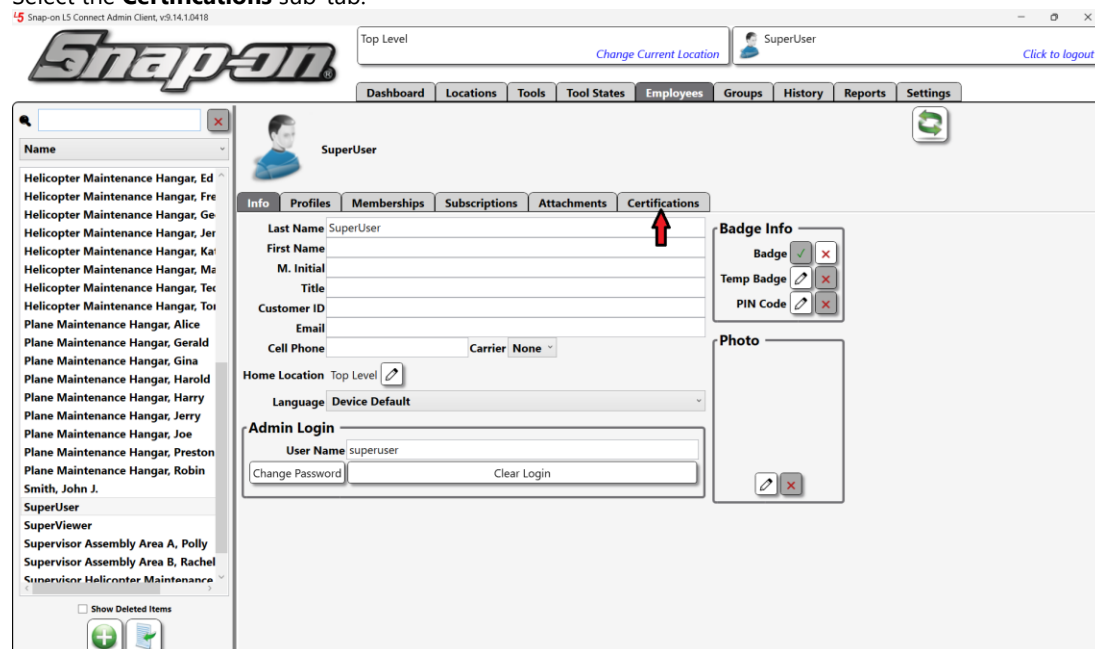


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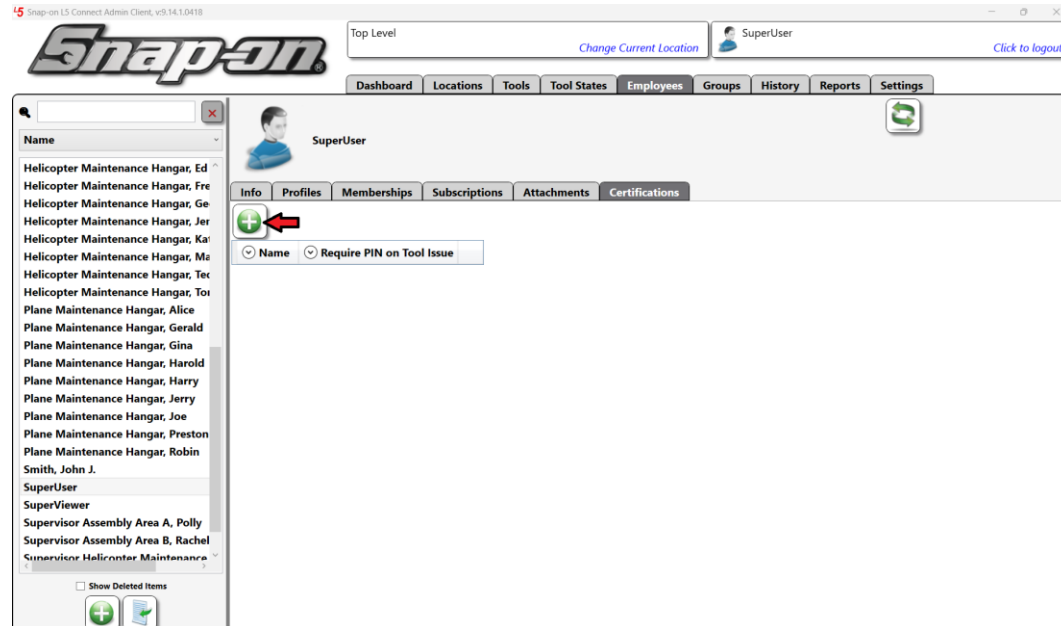
certification.



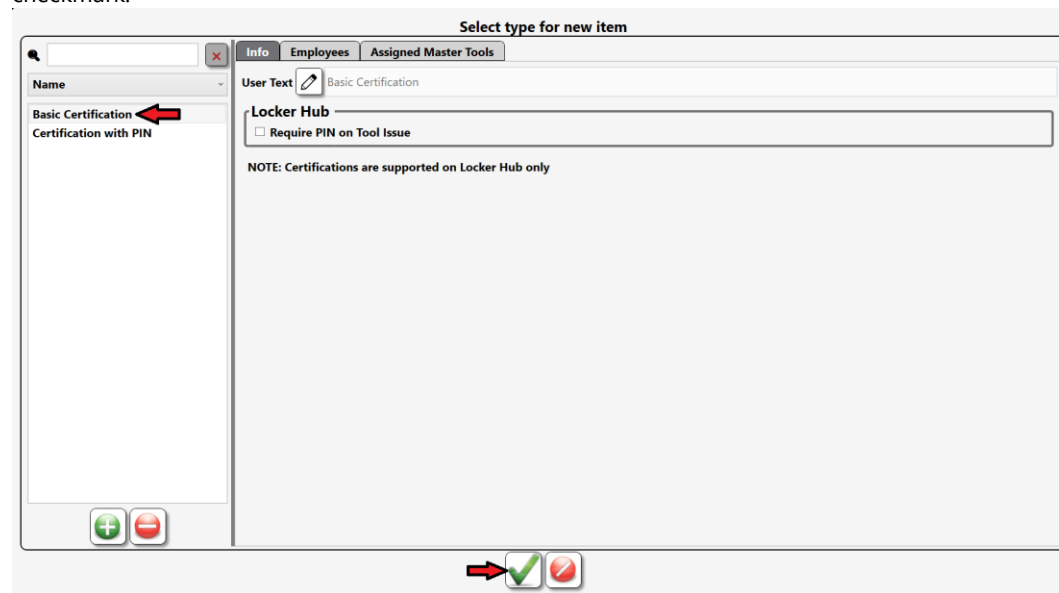
Select the **Certifications** sub-tab.



Click the **New** button.



Select the certification you would like assigned to the employee and click the **OK** button that looks like a green checkmark.



Then we will repeat this process to add the **Certification with PIN** certification to the **Superuser** employee as well.

Now, because one of the certifications requires a PIN code, we need to assign a PIN code to the employee as well. For more information on how to assign a PIN code, review the PIN code section of the Employee Badges document.

At this point you have set up everything you need to restrict the issue of tools to those who have been certified to use them.



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Issuing Tools with Certifications

If an employee who has the proper certification attempts to issue the tool it will be issued just as it normally would after the system verified that the employee had the proper certification. The employee will be prompted to enter his PIN code if required by the certification.

☒

Enter Pin Code (CertToolPIN/An example tool that requires a certificate and a PIN)

☐

Show

7	8	9
4	5	6
1	2	3
<input checked="" type="checkbox"/>	0	CLR

After successfully inputting their PIN code, the employee will be issued the tool just as he normally would.

Part Number	Details
CertTool Door 3	Example tool requiring a certification Smith, John J. 5/13/2025 3:41 PM
CertToolPIN Door 2	An example tool that requires a certificate and a PIN SuperUser 5/13/2025 3:58 PM

1	2
3	4
5	6
7	8
9	10
11	12 TAGS / BAGS

Issued

Empty

When an employee who doesn't have all of the certifications required attempts to issue a tool, he will receive the following pop-up window and not be issued the tool. The pop-up window shows information (part number,



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description, etc.) for the tool that cannot be issued.

Employee Missing Required Certification
CertTool/Example tool requiring a certification

OK



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L5 Connect API

The L5 Connect™ system is built on top of a carefully designed relational database to provide data integrity, flexibility, and extendibility. The API reflects this design in the layout of the objects it provides for reading and updating. This document will help to explain the design philosophy behind the layout of the API and the typical use case for how customers manage data through the API.

Detailed information about how to use the L5 Connect API can be found at <https://l5connectapi.com/api/>.



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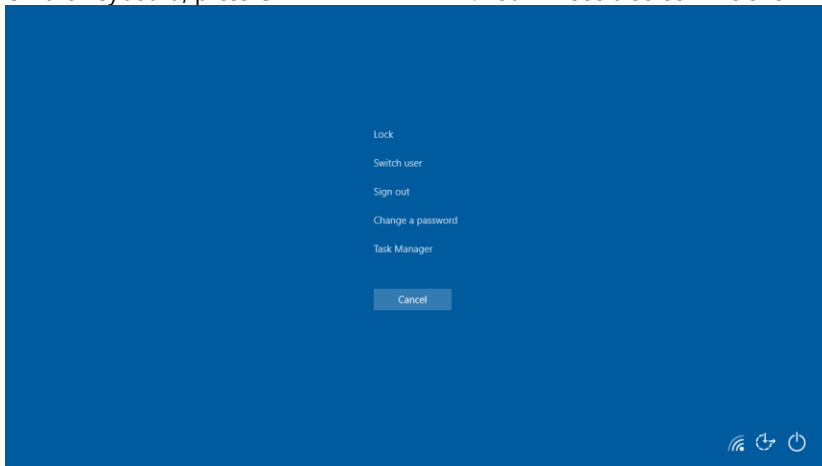
Device Setup and Operation

Wireless Network Connection Process for ATC Devices

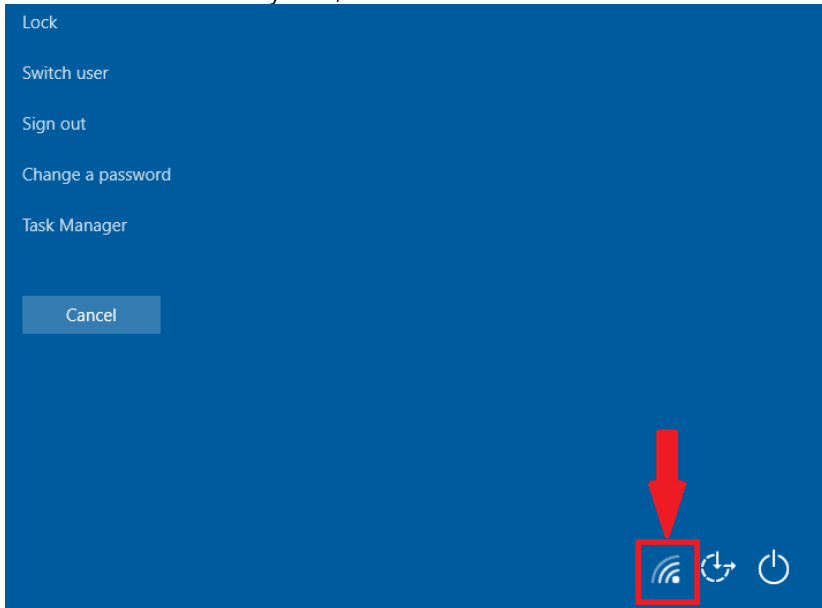
This document will cover the recommended method of connecting your ATC device to a wireless network. **NOTE: You will need a keyboard and mouse for this procedure.**

Procedure

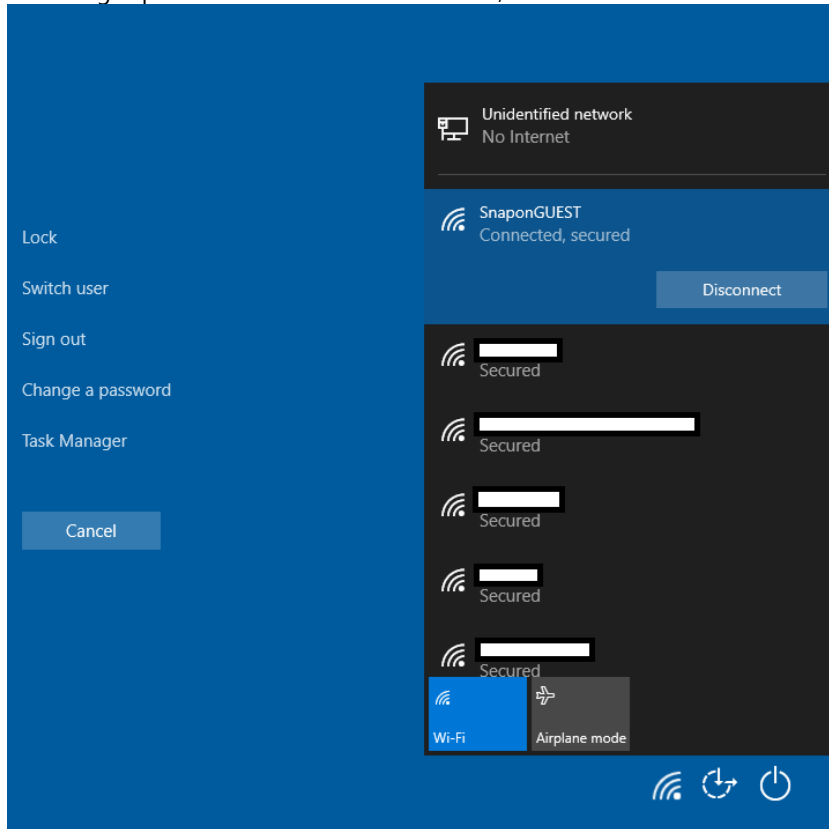
1. Plug in a keyboard and mouse into an open USB Port(s) on the ATC Device.
2. On the keyboard, press **CTRL+ALT+DELETE**. You will see a screen like shown below.



3. Click on the connection symbol, shown below.

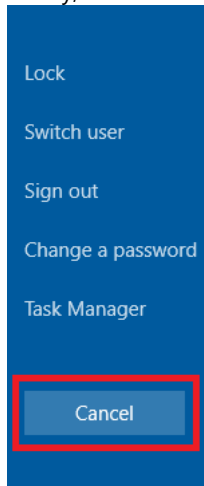


4. This brings up the Network Connections menu, shown below.



5. Select the Network to which you wish to connect the ATC Device. Enter the Network password and click on the **Connect** button.

6. Finally, click **Cancel**



Device Inventory List with Condition Info

The purpose of this document is to detail the functionality of the main screen inventory condition controls and the inventory screens of L5 Connect system devices. Each device has a portion of the main screen devoted to the display of any tools with conditions that might be of interest, such as tools with alerts or issued tools. There is also a tool inventory screen that uses a similar grid to display all the tool inventory for the device. This document will explain the features of these screens and how to find inventory related information.

Inventory Screen



The basics of the inventory screen are very similar for all the devices with just a couple of differences. The inventory screen can be accessed by clicking the **Menu** button that looks like a gear and then clicking the **Inventory** button. This will show the list of tools in the device, sorted to show tools with a condition at the top of the list. The tool inventory screen can also be accessed by clicking the buttons on the condition control on the main screen. This will present a filtered view of the inventory.







Inventory			
	Part Number	Details	
!	AW1015DHK Dwr 7	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue	⬆
🔧	A2A Dwr 1	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" Plane Maintenance Hangar, Preston 1/24/2025 4:15 PM	⬆
🔧	OEX12B Dwr 2	Wrench, Combination, Standard Length, 3/8", 12-Point SuperUser 1/29/2025 4:19 PM	⬆
@	FAM10E Dwr 1	Socket Driver, Metric, Hex, Standard, 10 mm SuperUser 1/29/2025 4:15 PM Out for Repl/Rep	⬆
	10MA-SGHF616BR Dwr 5	10MA-SGHF616BR	⬆
	235605	Epoxy Adhesive, 1.69 oz., Gray, Work Life: 3 min.	⬆











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To help you find a specific tool, this screen provides the ability to add filters to the tool list. Click the **Filter** button that looks like a list and a funnel in the top left corner.







**Inventory**




	Part Number	Details	
	AW1015DHK <i>Dwr 7</i>	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue	
	A2A <i>Dwr 1</i>	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" Plane Maintenance Hangar, Preston 1/24/2025 4:15 PM	
	OEX12B <i>Dwr 2</i>	Wrench, Combination, Standard Length, 3/8", 12-Point SuperUser 1/29/2025 4:19 PM	
	FAM10E <i>Dwr 1</i>	Socket Driver, Metric, Hex, Standard, 10 mm SuperUser 1/29/2025 4:15 PM Out for Rep/Rep	
	10MA-SGHF616BR	10MA-SGHF616BR	


You will now see a row of buttons that will allow you to add different types of filtering to the list. The **Alerts** button will filter the list to show only tools with alerts. Notice how there is now a button next to the filtering button that can be used to cancel this alerts filter.







**Inventory**





	Part Number	Details
	AW1015DHK <i>Dwr 7</i>	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue


If you click that button and cancel the alerts filter the list will return to the full list of tools. If you then click the **Issued** button, the list will show only issued tools and a new button next to the filtering button will allow you to cancel this filter.


Inventory


 Alerts
  Issued
  Employee
  Mngd Out
  Status
  Drawer

	Part Number	Details
	A2A <i>Dwr 1</i>	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" <i>Plane Maintenance Hangar, Preston 1/24/2025 4:15 PM</i>
	OEX12B <i>Dwr 2</i>	Wrench, Combination, Standard Length, 3/8", 12-Point <i>SuperUser 1/29/2025 4:19 PM</i>
	FAM10E <i>Dwr 1</i>	Socket Driver, Metric, Hex, Standard, 10 mm <i>SuperUser 1/29/2025 4:15 PM</i> Out for Repl/Rep

If you want to see the list of issued tools for a specific user or set of users, you can click the **Employee** button. This will then open a new window that allows you to select the employees for whom you would like to see their issued tools. The list of employees it shows is restricted to only showing employees who actually have tools issued from the device. There are also buttons to allow you to select all the employees or clear all selected employees.


Filter by: Issued Users




Plane Maintenance Hangar, Preston







SuperUser



Select All

Clear All




Once you have selected the appropriate employees, click the green checkmark button and the list will be filtered to show only tools issued to these employees and there will be a new button to allow that filter to be canceled.









Inventory



 Alerts
  Issued
  Employee
  Mngd Out
  Status
  Drawer

	Part Number	Details
	OEX12B Dwr 2	Wrench, Combination, Standard Length, 3/8", 12-Point SuperUser 1/29/2025 4:19 PM
	FAM10E Dwr 1	Socket Driver, Metric, Hex, Standard, 10 mm SuperUser 1/29/2025 4:15 PM Out for Repl/Rep


The **Mngd Out** filter button will filter the list of tools to only show tools that have been marked with a status that is defined to be a managed out of box status. That is configured through the Admin application. See the Tool Statuses document for additional details.



Inventory


 Alerts
  Issued
  Employee
  Mngd Out
  Status
  Drawer

	Part Number	Details
	FAM10E Dwr 1	Socket Driver, Metric, Hex, Standard, 10 mm SuperUser 1/29/2025 4:15 PM Out for Repl/Rep

The **Status** filter button will present you with a screen listing all the statuses currently applied to the device or any of its tools. You can select the statuses in which you are interested.



Filter by: Status

Bad Drawer/Door State

Maintenance Overdue


Maintenance Pending


Out for Replace or Repair

Select All


Clear All


Then click the green checkmark and the list will be filtered to show only the tools with the statuses you selected.






Inventory







Alerts




Issued




Employee




Mngd Out



Status




Drawer

Part Number	Details
	AW1015DHK <i>Dwr 7</i>
	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue





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 5 December 2025


For optical toolboxes, there will also be a **Drawer** button. Clicking this **Drawer** filter button will show a new screen with a list of all the drawer numbers in the toolbox. You can then select the drawers for which you would like to see the tools.

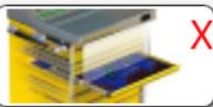


Filter by: Drawer


1	2	3	   
4	5	6	
7	8	9	
10	11	12	
Select All		Clear All	


Then click the green checkmark button and the list will be filtered to only show tools in the selected drawers.








Inventory






Alerts















Issued


Employee


Mngd Out


Status



Drawer


	Part Number	Details	
	A2A <small>Dwr 1</small>	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" Plane Maintenance Hangar, Preston 1/24/2025 4:15 PM	   
	FAM10E <small>Dwr 1</small>	Socket Driver, Metric, Hex, Standard, 10 mm SuperUser 1/29/2025 4:15 PM Out for Repl/Rep	  
	F80 <small>Dwr 1</small>	Ratchet, Sealed Head, Dual 80 Technology, Standard Handle, 3/8" drive, 7 11/32"	 
	FAM11E <small>Dwr 1</small>	Socket Driver, Metric, Hex, Standard, 11 mm	
	FAM12E <small>Dwr 1</small>	Socket Driver, Metric, Hex, Standard, 12 mm	





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Devices that come equipped with a large monitor and keyboard will have a text-based search bar on this screen as well as the other filtering options. This search bar will filter any tools that don't contain the string in the part number, description, storage sub-location, or issued to information.

 **Inventory**



  ctech

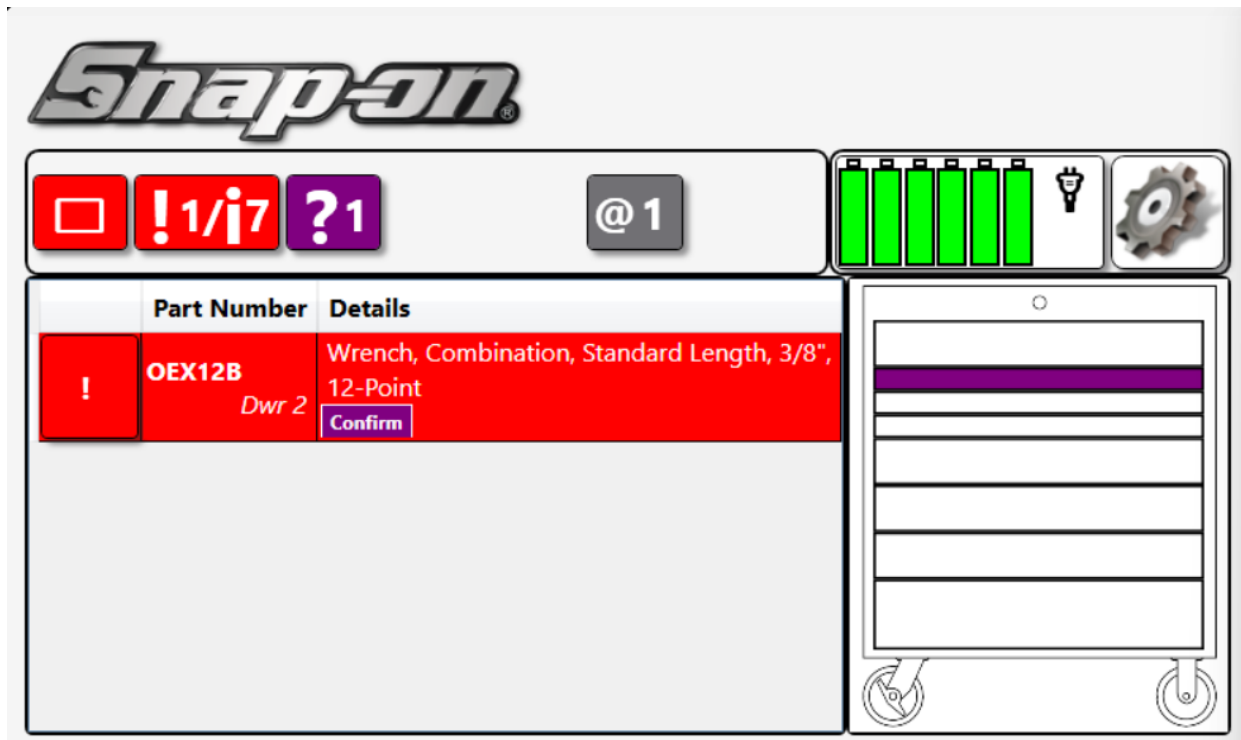
	Part Number	Details
!	CTECH3FR250A	1/2" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(12.5–250 ft - lb) <small>Maint Overdue</small>
!	CTEHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1–20 ft - lb) <small>Maint Overdue</small>
!	CTEHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1–20 ft - lb) <small>Maint Overdue</small>
!	CTEHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1–20 ft - lb) <small>Maint Overdue</small>
!	CTEHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1–20 ft - lb) <small>Maint Overdue</small>
!	CTEHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1–20 ft - lb) <small>Maint Overdue</small>

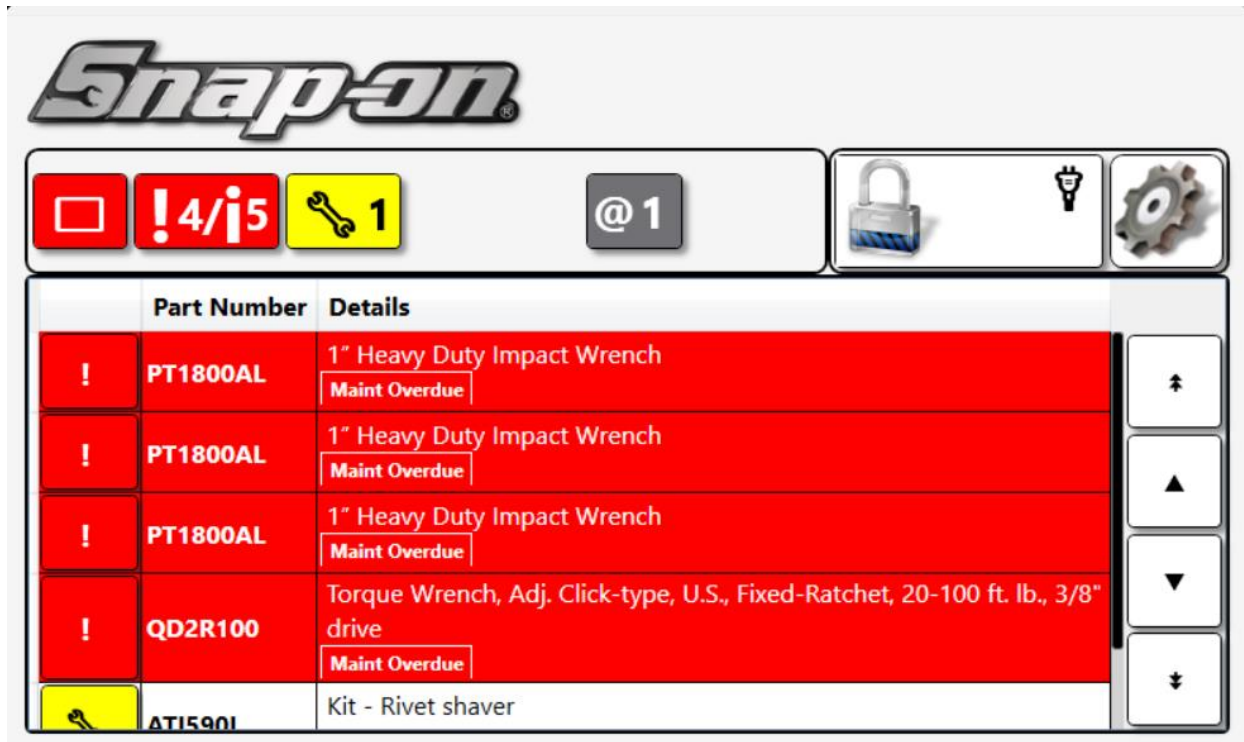
Main Screen Condition Control

The other location you can find a form of the device inventory list with condition info is on the main screen of the devices. The layout of the screen formatting may be slightly different due to some displays being larger or smaller and portrait vs. landscape, however, they will all have the same basic functionality with some exceptions.

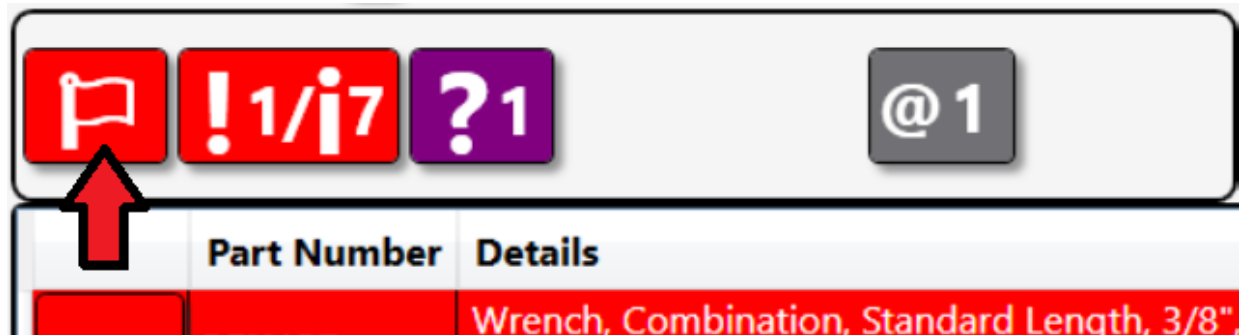
NOTE: The tool crib uses a main screen dashboard similar to the admin application and does not have a logged-out inventory list. The session based logged-in tool list will be discussed in its own separate section below.

Here are the front screens for the toolbox and the locker. Notice that they both have an area that displays a list of tools with a bar of symbol buttons, above that toggle what is shown in the list.

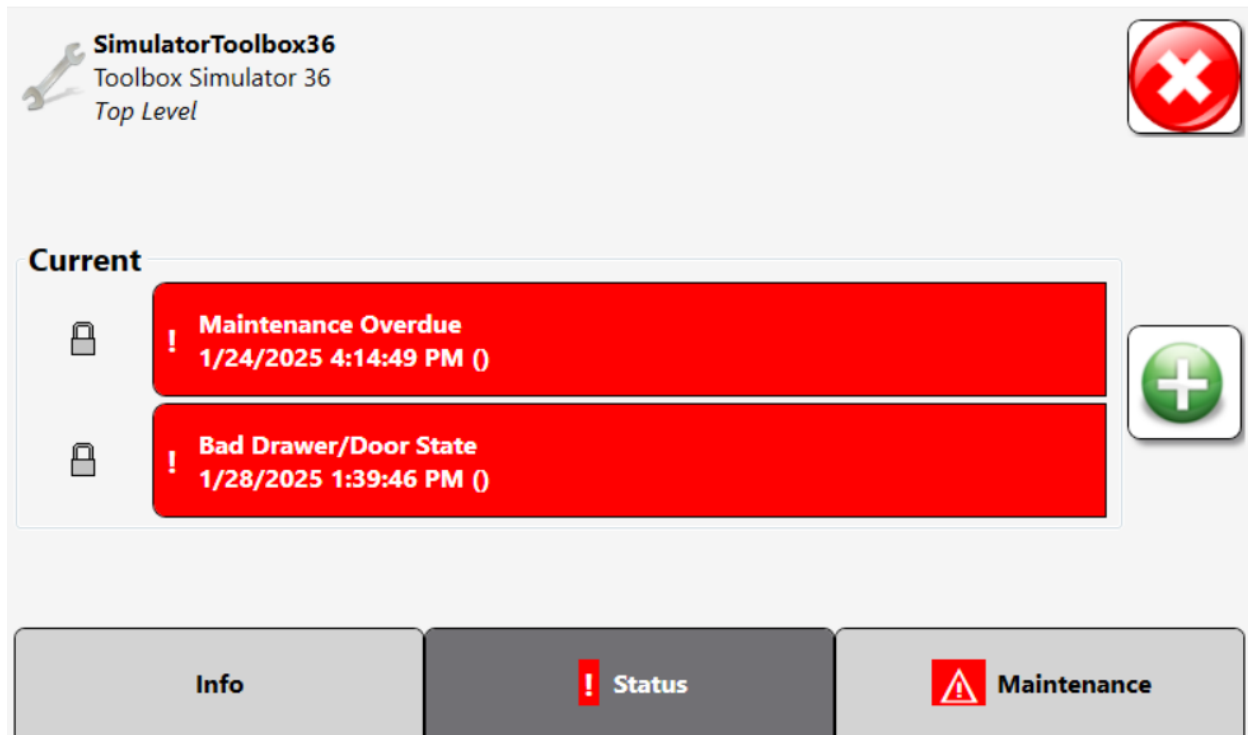




Notice the flag button on the condition summary bar of the screen.

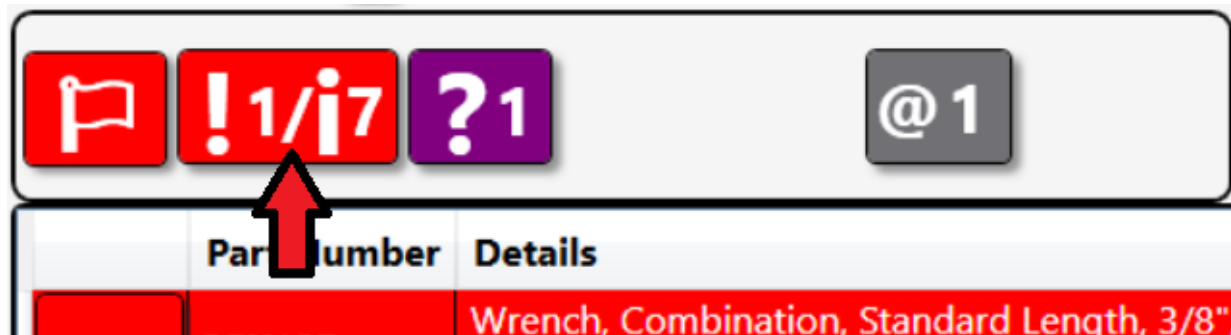


This button alerts you that there is an issue with the device. Clicking this button will take you to the status screen for the device. The device can have statuses attached to it just like any other tool in the system.



We can see that the device has an overdue maintenance and a bad drawer state status as well. This is one of the ways the system alerts you that there are issues that need to be addressed.





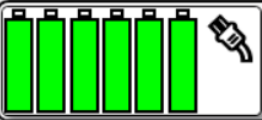


Back on the main screen, the red exclamation button on the condition summary area shows the tools with statuses assigned to them. The number on left side of the slash is the number of tools with alert statuses and the number on the right side of the slash is the total number of tools with any status (not just alert statuses).



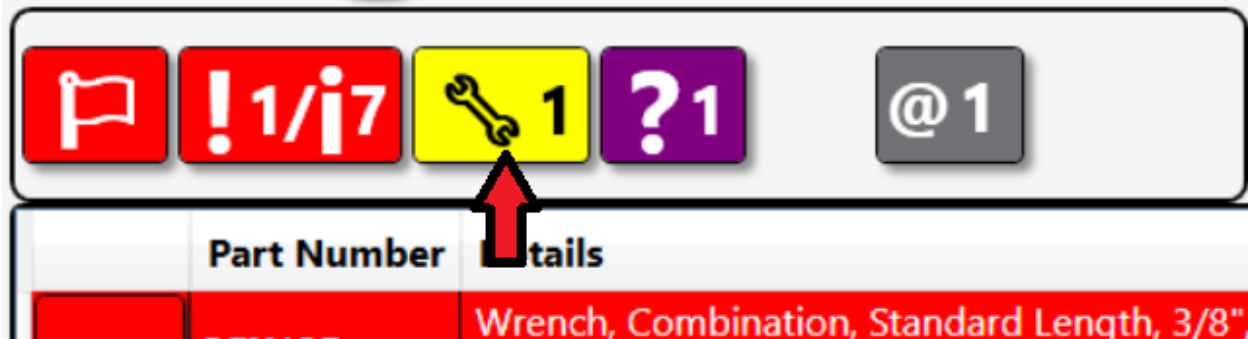
Clicking this button will take you to the tool inventory screen with the list of tools filtered to show all tools with statuses, sorted so that alerts at the top.

Inventory			
	Part Number	Details	
!	AW1015DHK <i>Dwr 7</i>	Set, Wrench, L-Shape, Hex (15 pcs. In BHK15 Metal Index) (.028" to 3/8") Maint Overdue	↑
@	FAM10E <i>Dwr 1</i>	Socket Driver, Metric, Hex, Standard, 10 mm <i>SuperUser 1/29/2025 4:15 PM</i> Out for Repl/Rep	▲
	CTECHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1-20 ft - lb) Maint Pending	▼
	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive Maint Pending	
	QD3R250 <i>Dwr 8</i>	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 50-250 ft. lb., 1/2" drive Maint Pending	↓




A white button will show the count of tools that have informational or warning level statuses. This button will only appear if the alerts button is not currently showing.

Snap-on			
   			 
	Part Number	Details	
	A2A <i>Dwr 1</i>	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" <i>Plane Maintenance Hangar, Preston 1/</i>	
@	FAM10E <i>Dwr 1</i>	Socket Driver, Metric, Hex, Standard, 10 mm <i>SuperUser 1/29/2025 4:15 PM</i> Out for Repl/Rep	

Also from the main screen condition summary, we can click the yellow tools issued button. This button has a wrench icon on it and a number which is the number of tools issued to the currently selected user. In this case it is the number of issued tools for all users.



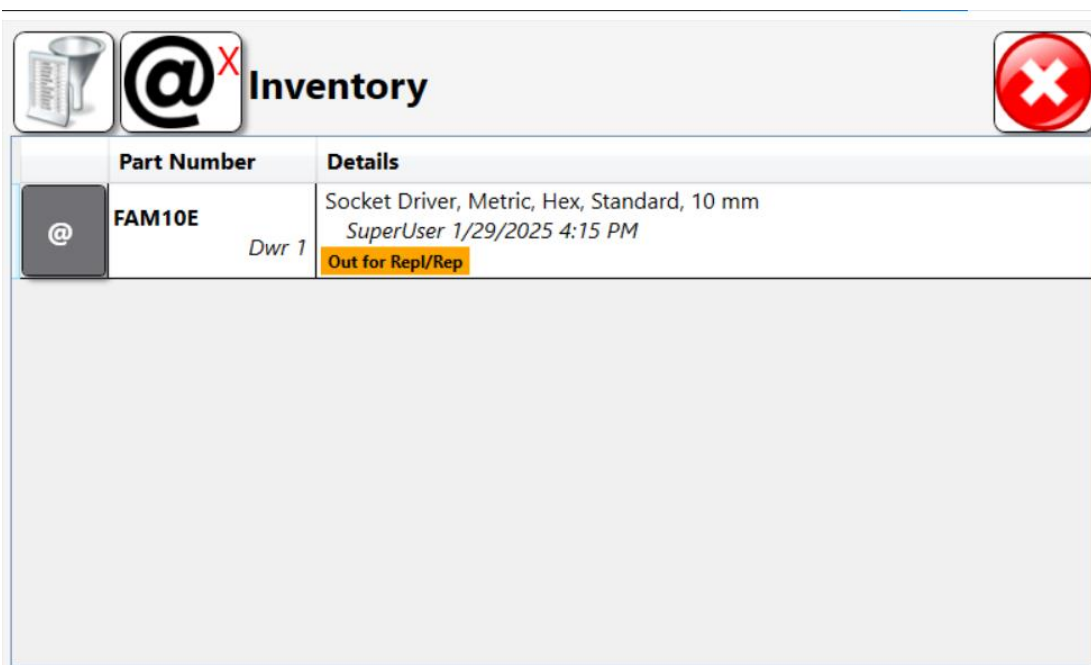
Clicking this button will take you to the tool inventory screen with the list of tools filtered to show issued tools.

Inventory		
	Part Number	Details
	A2A <i>Dwr 1</i>	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" <i>Plane Maintenance Hangar, Preston 1/24/2025 4:15 PM</i>
	OEX12B <i>Dwr 2</i>	Wrench, Combination, Standard Length, 3/8", 12-Point <i>SuperUser 1/29/2025 4:19 PM</i>
	FAM10E <i>Dwr 1</i>	Socket Driver, Metric, Hex, Standard, 10 mm <i>SuperUser 1/29/2025 4:15 PM</i> Out for Repl/Rep

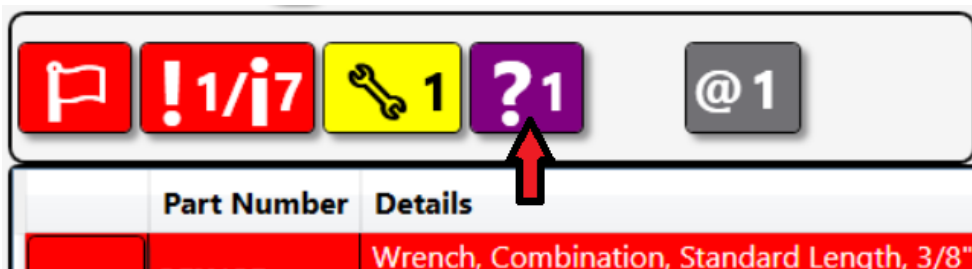
On the condition summary bar of the main screen there can also be a grey button with an ampersand symbol and a number. This shows when there are tools that are currently being managed out of the box, for example, a tool sent to the calibration lab. Even though these tools are issued, they aren't counted as issued tools on the issued tool button because they are accounted for in the system.



Clicking this button will take you to the tool inventory screen with the list of tools filtered to show only tools managed out of the box.




There is also a purple button that can show up because a user did not confirm a verification when requested. Alternatively, the system can be configured so that a user must confirm that they are returning another user's issued tool. If they do not confirm this tool return, the tool will be marked with a confirm declined status and the purple button will appear. More information about verifications can be found in the Verifications document.









L5 Connect User Manual


Devices that come equipped with a large monitor and keyboard will have a text-based search bar on the Main Screen Condition Control. This search bar will filter any tools that don't contain the string in the part number, description, storage sub-location, or issued to information.







**Z98BT001**
Portal



**! 1/i 1****3**



	Part Number	Details
	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive Maint Overdue
	CTECH4R600A <i>Row1</i>	600 ft. lb. torque wrench <i>SuperUser 1/31/2025 4:12 PM</i>
	PT1800AL	1" Heavy Duty Impact Wrench <i>SuperUser 1/31/2025 4:12 PM</i>
	WIND100	Shop Fan <i>SuperUser 1/31/2025 4:12 PM</i>

Top Employees with Issued Tools

SuperUser	3
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Recent Events

Time	Action
2/3/2025 10:46:44 AM	Session completed
2/3/2025 10:46:32 AM	Unauthorized User
2/3/2025 10:46:32 AM	Unauthorized User
2/3/2025 10:45:20 AM	Session started
2/3/2025 10:45:20 AM	Security Camera Image

When a user begins a session by logging into a device, the Main Screen Condition Control will be replaced by device specific workflow or modified to show the status of the current session. The sections below will describe the modified session display/behavior for the relevant devices.

ATC Toolbox/Locker Session

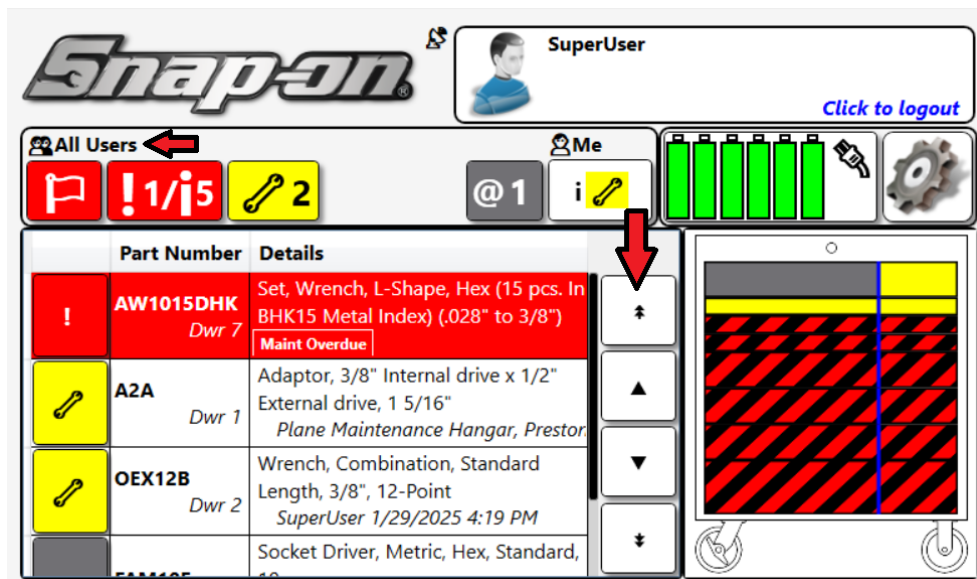
When a user is logged into an ATC Toolbox/Locker, the system will filter the information to show only his tool data. This is shown by the **Me** icon.



The system provides the ability for that user to toggle between this view and the view for all users' information. To do this, click the **All Users** button.



This will switch the display to show all user tool conditions. Notice that the icon showing the current display filter shows **All Users**. To switch back the user could click the **Me** button. You can also see that there are more tools in the tool list than before. For instance, there is a tool issued to a different user than the logged in user. You can see that if the list takes up more than the whole screen, the system will automatically add scroll buttons to move up and down the list of tools to the right side of the tool list.





L5 Connect User Manual

Tool Crib Session Inventory Control

The tool crib uses a main screen dashboard like the Admin application and does not have a logged-out inventory list. To get to the tool condition control, a user has to begin a session by scanning their badge with an attendant logged in or the crib configured for non-attendant mode.

At the beginning of the session the main screen will show the tool condition list with the same condition summary bar above it as was explained for the toolbox. There are a couple of additional features, however. Sandwiched between the condition summary bar and the tool condition list is a search bar with a field selector.

L5 Snap-on True-Crib, v9.13.2.0128, Tool Crib East

TRUE-CRIB

Current Employee
SuperUser
[CLICK TO COMPLETE SESSION](#)

Attendant
SuperUser

Summary: SuperUser

Part Number

	Part Number	Details
	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive
	SGD4BR	Screwdriver, Flat, Instinct™ Soft Handle, Red, .040"

☒ SHOW CONDITIONS AND CHANGES ONLY ☒ SHOW EMPLOYEE SUMMARY

Return Mode

You can select the tool field on which you would like the search to be based, and then as you start typing, the list will be filtered based on the text compared to the field you selected. **NOTE: The characters are not case sensitive.**



L5 Connect User Manual

L5 Snap-on True-Crib, v9.13.2.0128, Tool Crib East

TRUE-CRIB

Current Employee
SuperUser
[CLICK TO COMPLETE SESSION](#)

Attendant
SuperUser

Summary: SuperUser

Part Number

	Part Number	Details
	QD2R100	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 20-100 ft. lb., 3/8" drive

☒ SHOW CONDITIONS AND CHANGES ONLY ☒ SHOW EMPLOYEE SUMMARY

Return Mode

At the bottom of the list there are two checkboxes. The **SHOW CONDITIONS AND CHANGES ONLY** checkbox will toggle between showing only the tools with a condition such as a status or a change, such as a tool being issued. If you toggle this checkbox, all tools in the device will be listed, sorted by tools with conditions and changes at the top.

L5 Snap-on True-Crib, v9.13.2.0128, Tool Crib East

TRUE-CRIB

Current Employee
SuperUser
[CLICK TO COMPLETE SESSION](#)

Attendant
SuperUser

Summary: SuperUser

Part Number

	Part Number	Details
	AT380	Impact Wrench, Air, Heavy Duty, 3/8" Drive (35-150 ft. lb.)
	CTECH3FR250A	1/2" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(12.5-250 ft - lb)
	CTECHL1R240A	1/4" Drive Fixed - Head Aluminum Body ControlTech™ Industrial Torque Wrench(1-20 ft - lb)
	DBTBM10	10 mm ThunderBit® Metric High Speed Steel 135° Split Point Drill Bit
	FAM11E	Socket Driver, Metric, Hex, Standard, 11 mm
	QD2R1000	Torque Wrench, Adj. Click-type, U.S., Fixed-Ratchet, 200-1000 ft. lb., 3/8" drive

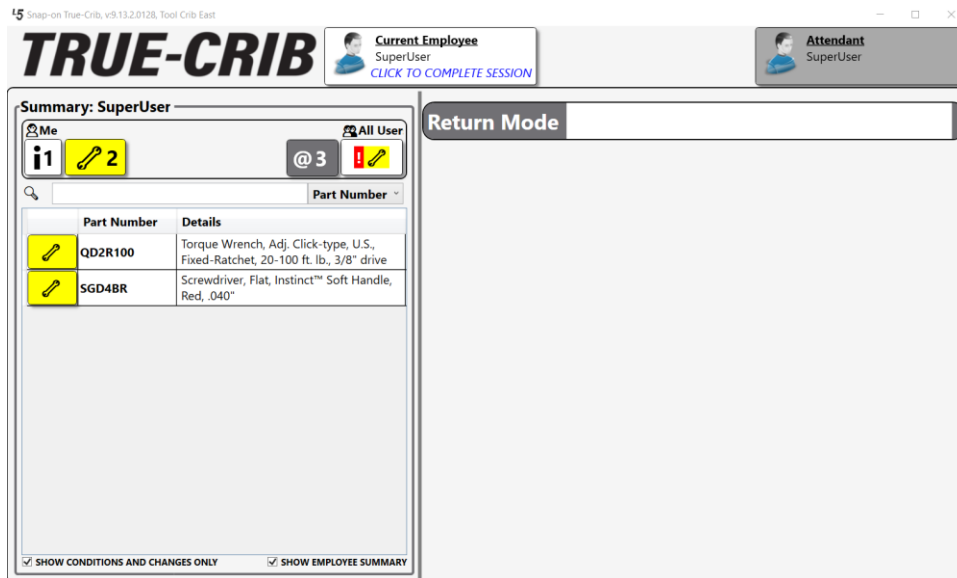
☐ SHOW CONDITIONS AND CHANGES ONLY

Return Mode

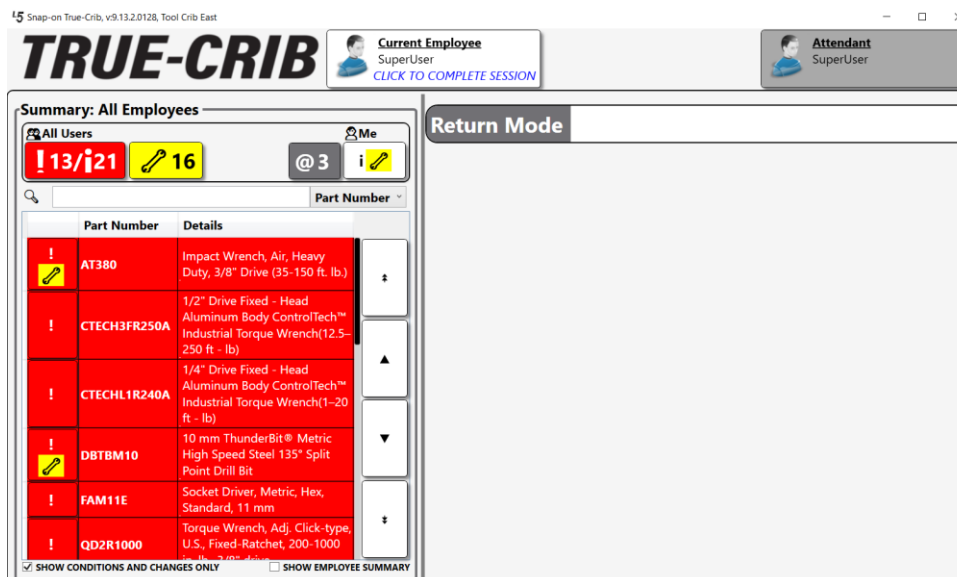


L5 Connect User Manual

Notice that even though the list was filtered for the session user, the complete list of tools in the device is shown. If we re-check the **SHOW CONDITIONS AND CHANGES ONLY** checkbox, the system returns to showing only the tools with conditions or changes filtered to the session employee.



Now if we uncheck the **SHOW EMPLOYEE SUMMARY** checkbox, this has the same effect as if you clicked the button on the condition summary to toggle between all users and the current session user. The complete tool list will be shown sorted with the tools with condition or changes at the top.



Notice that the condition summary changed to show **All Users** instead of **Me**. If you either recheck the **SHOW EMPLOYEE SUMMARY** checkbox or click the **Me** button, it will toggle back to showing just the tools for the session employee.



L5 Connect User Manual

Batteries

Some of the devices in the L5 Connect™ system use batteries. This document will provide a central location for all information related to managing these batteries for your L5 Connect™ system.

Battery Info and Safety Information

Information and safety data for the smart batteries used in the toolboxes and RFID cabinets can be found in the [Battery Information](#) document.

Devices with Batteries

L5 Connect toolboxes and lockers contain internal smart batteries for their UPS and some of the boxes also come with a 6 bay battery pack of smart batteries. These systems are designed to warn you when the system is low on power and eventually shut the system down in a controlled fashion if remaining power gets to a critical point.

Optical Toolbox

The toolboxes have two battery configurations. All toolboxes Gen3 or higher have an internal UPS battery to ensure data is not lost if power is lost to the box. Some models of toolboxes also have six external swappable batteries so that the toolbox can be used in a cordless environment for up to 16 hours.

RFID Cabinets

RFID cabinets contain an internal UPS battery to ensure data is not lost if power is lost to the cabinet.

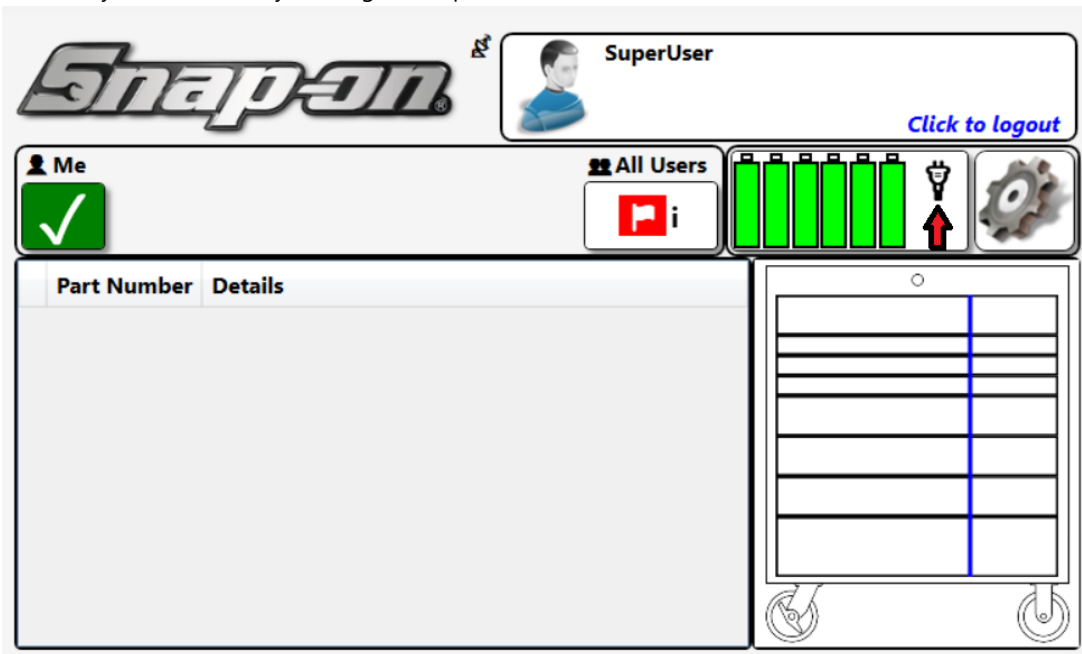
Domestic Portals and FlexHubs

These devices contain an internal UPS. However, the software does not display any status information related to the UPS on these devices.

On Screen Battery Indicators

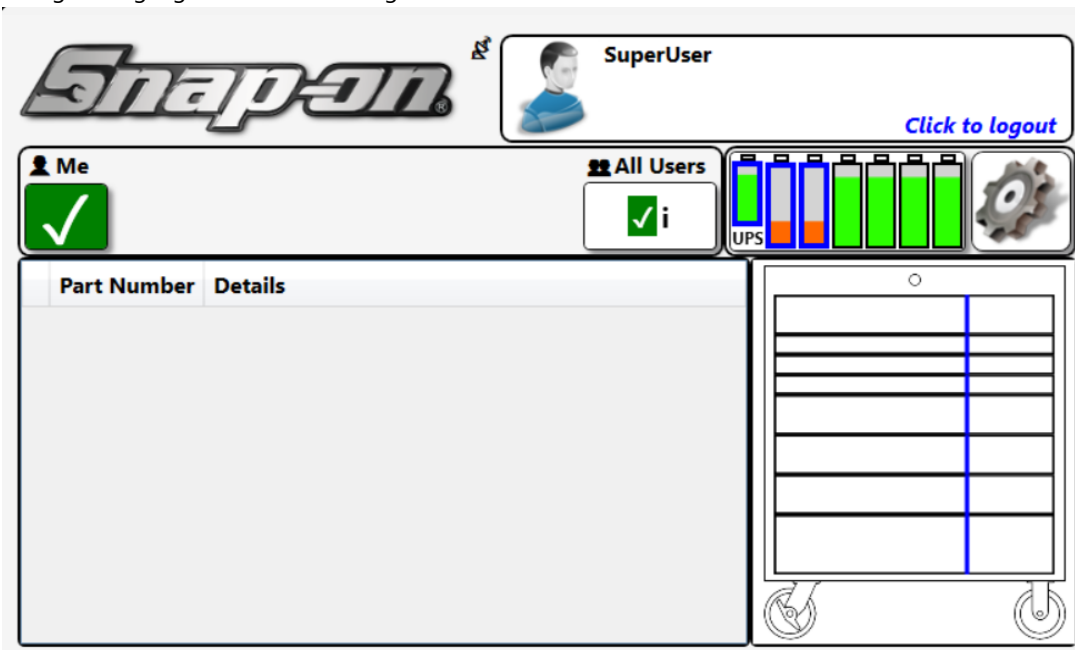
Optical Toolbox

The main screen of the toolbox will show the basic status of the batteries. Here is an example of a toolbox that is currently plugged into an AC power outlet with the batteries fully charged. The Green color of the batteries and the lack of a lightning bolt shows that they are fully charged. The power plug symbol to the right of the batteries signifies that the system is currently running on AC power.

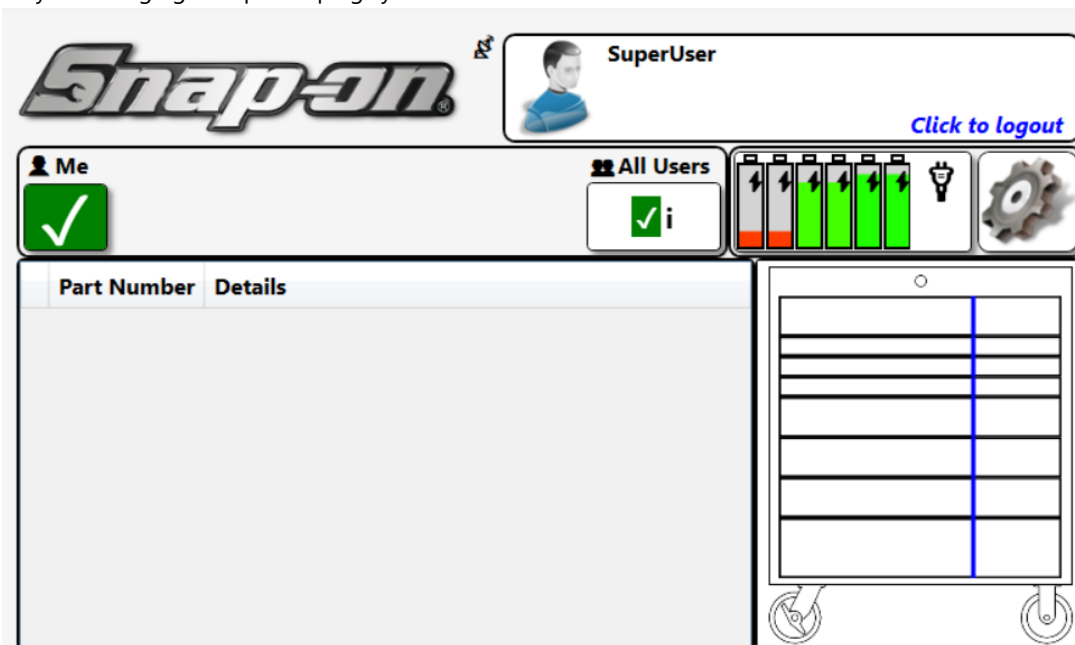


Once the system is removed from AC power it will begin to discharge the batteries, starting with the UPS battery. It will discharge the UPS battery to 85% and then switch to discharging the other batteries to 85%. Once this happens it will switch to discharging the regular batteries two at a time until they are discharged. This discharge pattern is designed to help prevent batteries from losing the ability to properly discharge and recharge after being connected to AC power for a long period of time. As the batteries get lower on power the color of the battery displays will

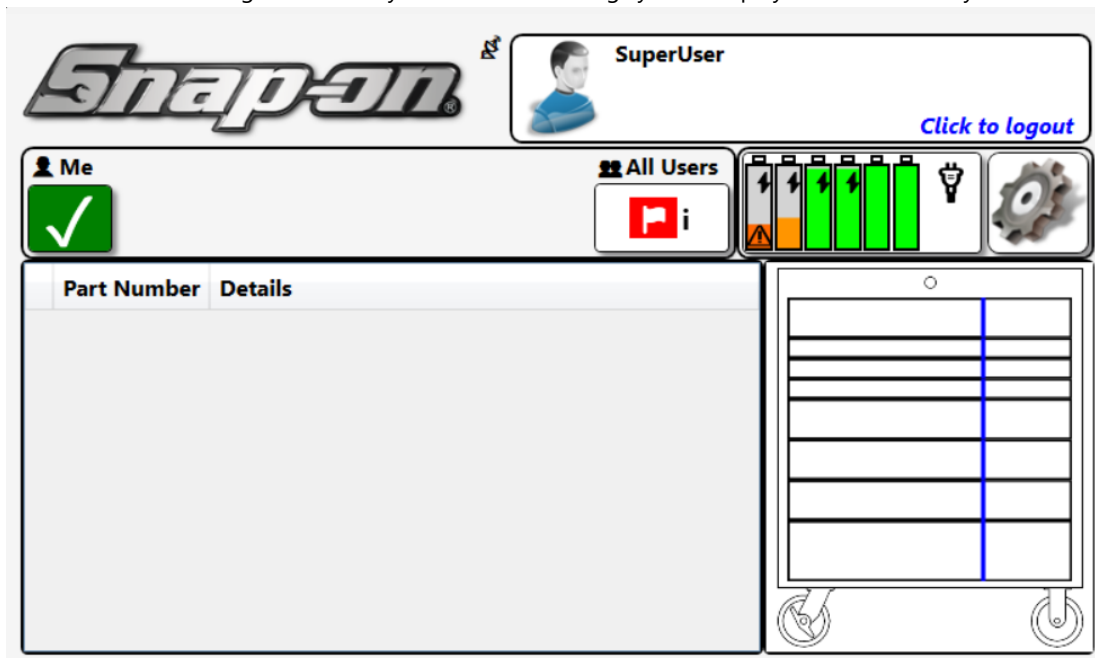
change to highlight the level of charge in them.



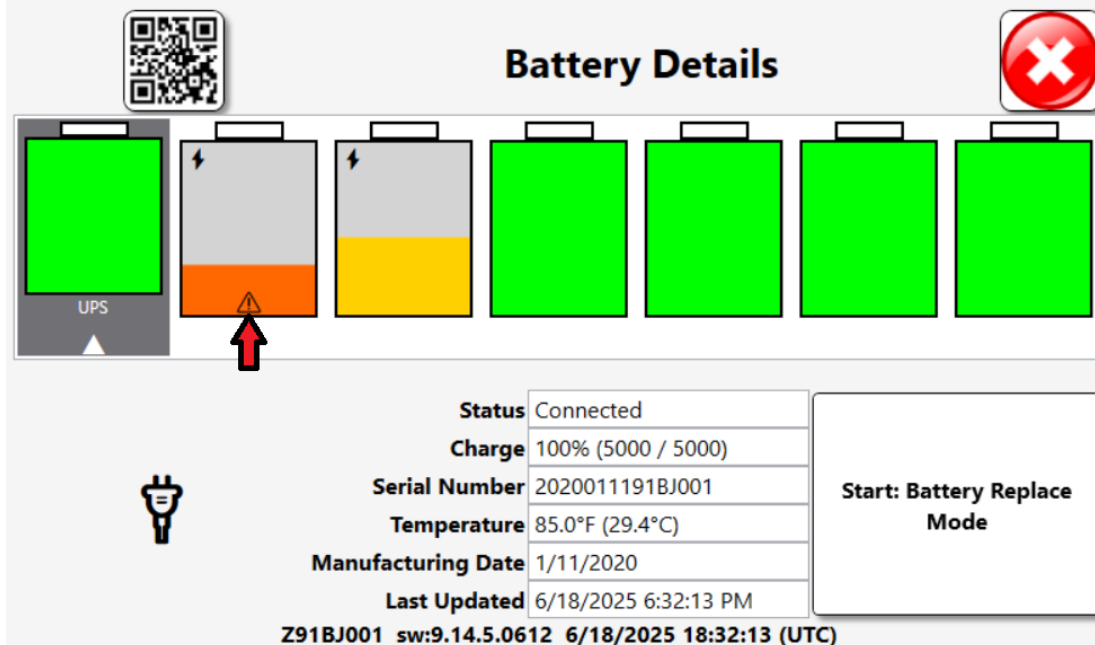
Once the toolbox is plugged into a power outlet you will see the charging symbol on the batteries to let you know they are charging. The power plug symbol also returns.



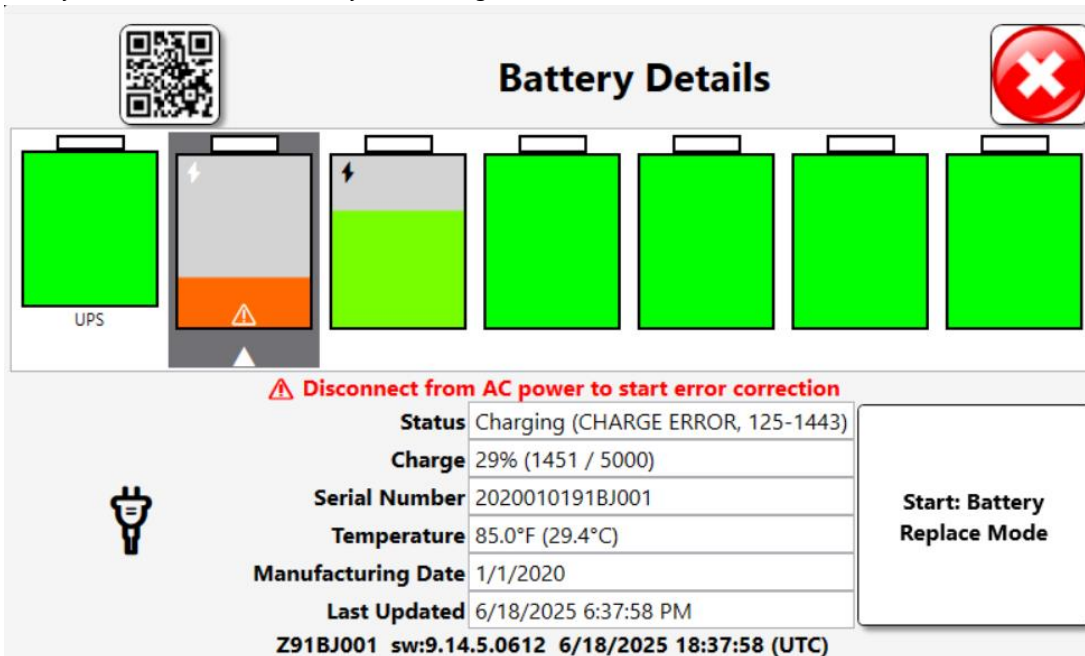
If one of the batteries gets an error, you will see a warning symbol displayed on that battery.



To get more information about that error you can click on the battery display portion of the screen. This will bring up the **Battery Details** screen. You can then click on the battery with the issue to see more details about that battery.



Then you can see that this battery has a charge error and how to correct this error.



Battery Details

UPS

⚠️ **Disconnect from AC power to start error correction**

Status Charging (CHARGE ERROR, 125-1443)

Charge 29% (1451 / 5000)

Serial Number 2020010191BJ001

Temperature 85.0°F (29.4°C)

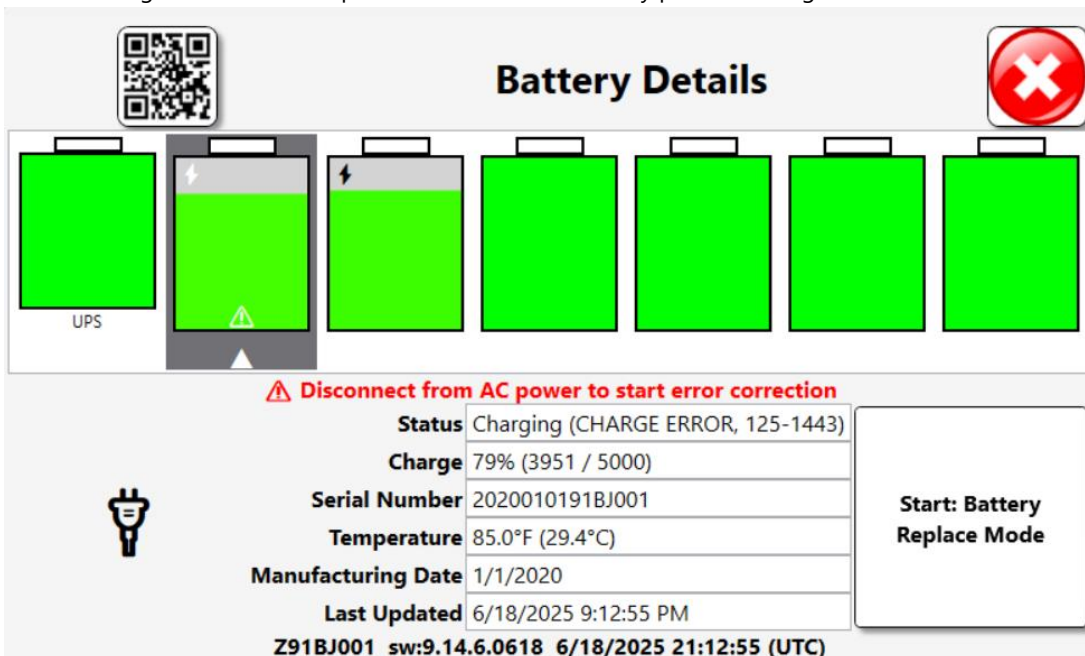
Manufacturing Date 1/1/2020

Last Updated 6/18/2025 6:37:58 PM

Z91BJ001 sw:9.14.5.0612 6/18/2025 18:37:58 (UTC)

Start: Battery Replace Mode

Disconnecting the box from AC power will cause the recovery process to begin.



Battery Details

UPS

⚠️ **Disconnect from AC power to start error correction**

Status Charging (CHARGE ERROR, 125-1443)

Charge 79% (3951 / 5000)

Serial Number 2020010191BJ001

Temperature 85.0°F (29.4°C)

Manufacturing Date 1/1/2020

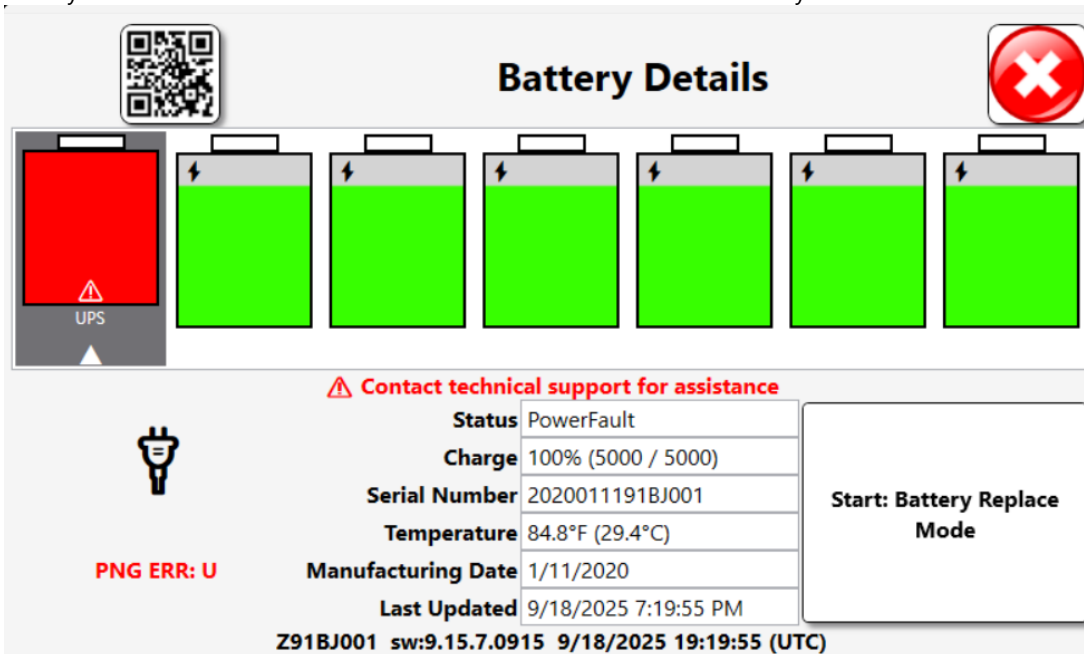
Last Updated 6/18/2025 9:12:55 PM

Z91BJ001 sw:9.14.6.0618 6/18/2025 21:12:55 (UTC)

Start: Battery Replace Mode

This will drain the batteries down and should clear the charge error. The system can then be restored to AC power.

You may also see a power fault on one or more of your batteries. This can happen even if the box is an AC unit or a battery box with the batteries removed because there is still the UPS battery in either case.



Battery Details

QR Code: [QR Code]

UPS Battery: [Red Battery Icon with Warning Triangle]

Other Batteries: [Six Green Battery Icons]

⚠ Contact technical support for assistance

⚡

PNG ERR: U

Status	PowerFault
Charge	100% (5000 / 5000)
Serial Number	2020011191BJ001
Temperature	84.8°F (29.4°C)
Manufacturing Date	1/11/2020
Last Updated	9/18/2025 7:19:55 PM

Start: Battery Replace Mode

Z91BJ001 sw:9.15.7.0915 9/18/2025 19:19:55 (UTC)

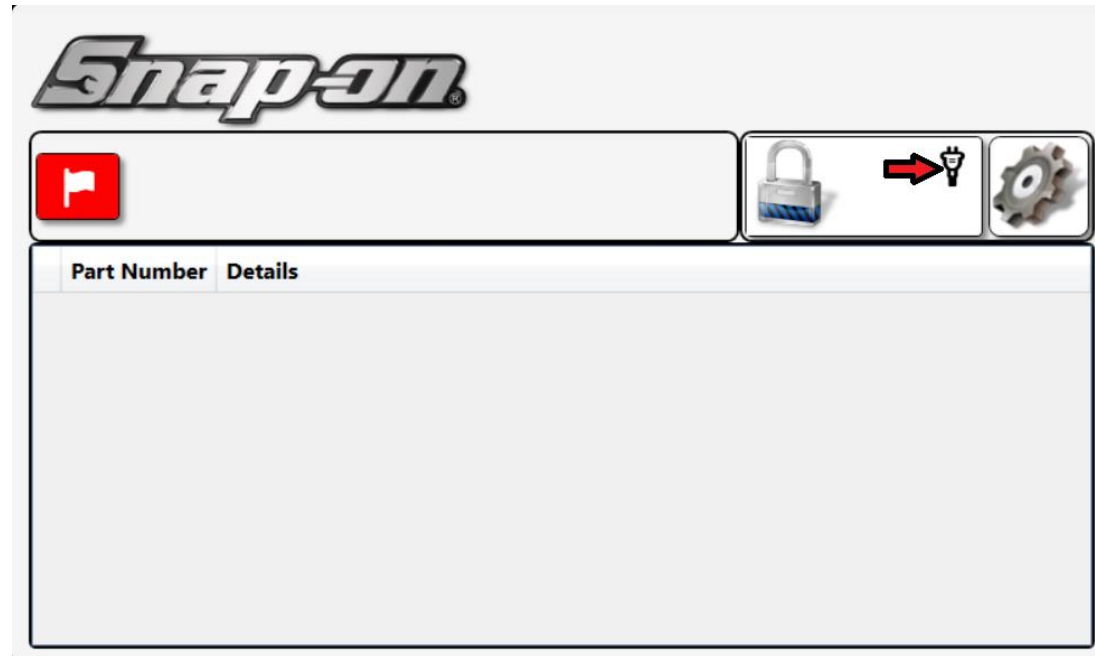
You can see under the AC power cord symbol a PNG(Power Not Good) error. The code corresponds to the following options.

- U - UPS battery
- 1 - First pair of batteries
- 2 - Second pair of batteries
- 3 - Third pair of batteries

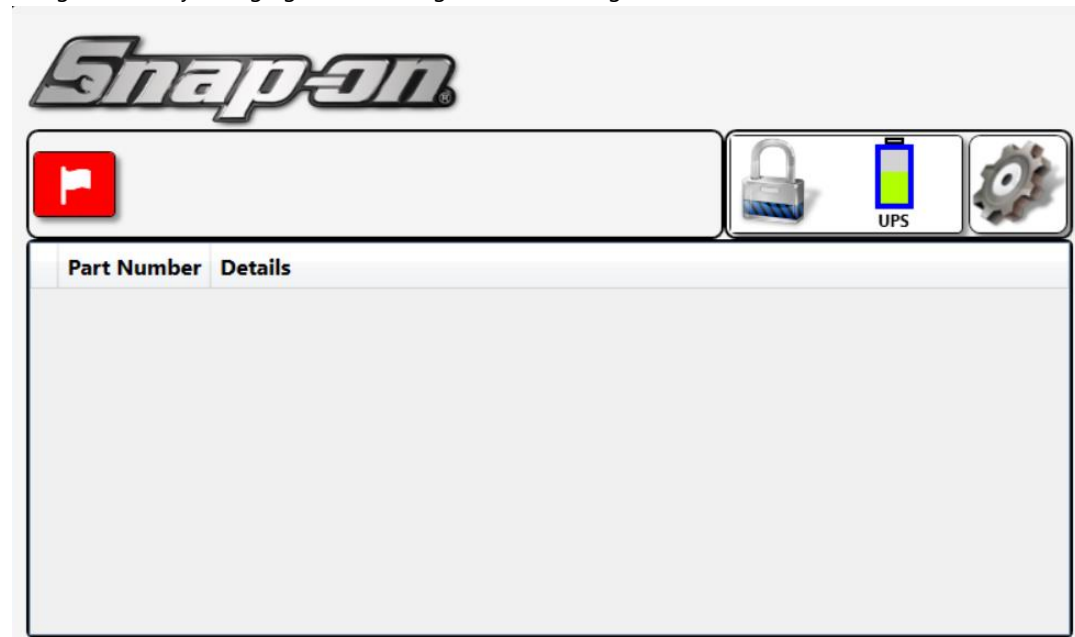
****NOTE:** When you see this error you should contact Pro Services for assistance.

RFID Cabinet


The tool locker devices only have an internal UPS battery. The Main screen shows the power plug symbol when the system is plugged into AC power.




Unplugging the device from AC power will cause the main screen to show an image of the UPS battery with the color filling the battery changing and shrinking as it loses charge.

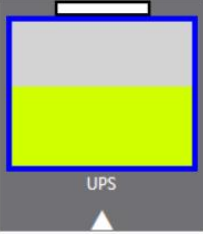



At any time, you can tap the area of the screen where the plug or battery are shown to see the battery details.





Battery Details





Status	Discharging
Charge	55% (2751 / 5000)
Serial Number	2020011193GS001
Temperature	85.0°F (29.4°C)
Manufacturing Date	1/11/2020
Last Updated	6/19/2025 6:39:15 PM

Start: Battery Replace Mode

Z93GS001 sw:9.14.6.0618 6/19/2025 18:39:15 (UTC)



L5 Connect User Manual

Battery Report

The L5 Connect system provides built-in reports that will help you to monitor the status of your devices that rely on batteries. There is a device report which can tell you if any of your devices have battery errors. When you run the device report make sure that you have included the **Device Statuses** column. If this column isn't checked in the default report, you can find more information on how to customize reports in the following the following link.

[L5 Connect Reports](#)

Including device statuses in this report will show you any of your devices that currently have a **Battery Error** status.

Device Serial Number	Device Name	Device Customer ID	Device Statuses
Z41BJ001	Tool Box 1	Toolbox1	Red Drawer/Door State Offline
2918J001	2918J001	2918J001	Battery Error
293AJ001	293AJ001	293AJ001	Offline
293GS001	293GS001	293GS001	Offline
297AT001	297AT001	297AT001	Offline
297BJ001	297BJ001	297BJ001	Offline
298AT001	298AT001	298AT001	Offline
298BT001	298BT001	298BT001	Offline
299AN001	Tool Crib East	EastBuildingCrib	Offline
299HR001	Tool Crib West	WestBuildingCrib	Offline
299LS001	299LS001	299LS001	Offline
2A8BT001	2A8BT001	2A8BT001	Hardware Error Offline

Once you have identified that there are battery errors, you can get more information about these errors by running the **Battery** report. This report includes a great deal of information about the batteries in your devices, including a **Battery Error** column that tells you what kind of error the battery has.

Battery Serial Number	Battery Slot	Charge %	Battery State	Battery Error	Last Updated Time	Manufacturing Date	Temperature (F)	Device Serial Number	Dev
20130228x00064	UPS 1	1	Disconnected		6/2/2025 4:31:00 PM	2/28/2013	83.39	2918J001	2918J001
2020010918J001	1	100	Connected	CHARGE ERROR	6/18/2025 9:33:28 PM	1/1/2020	85	2918J001	2918J001
2020010918J001	2	100	Connected		6/18/2025 9:33:28 PM	1/2/2020	85	2918J001	2918J001
2020010918J001	3	100	Connected		6/18/2025 9:33:28 PM	1/3/2020	85	2918J001	2918J001
2020010918J001	4	100	Connected		6/18/2025 9:33:28 PM	1/4/2020	85	2918J001	2918J001
2020010918J001	5	100	Connected		6/18/2025 9:33:28 PM	1/5/2020	85	2918J001	2918J001
2020010918J001	6	100	Connected		6/18/2025 9:33:28 PM	1/6/2020	85	2918J001	2918J001
20200111918J001	UPS 1	100	Connected		6/18/2025 9:33:28 PM	1/11/2020	85	2918J001	2918J001

The types of errors you could potentially have for a battery are **CHARGE ERROR**, **POWER FAULT**, or **BATTERY FAILED**. If you want to filter the report to only show batteries with an error, just click the **Filter** pull down button and enter "!" into the text box.

Battery Serial Number	Battery Slot	Charge %	Battery State	Battery Error	Last Updated Time	Manufacturing Date	Temperature (F)	Device Serial Number	Dev
2020010918J001	1	100	Connected	CHARGE ERROR	6/18/2025 9:33:28 PM	1/1/2020	85	2918J001	2918J001



L5 Connect User Manual

Battery Subscriptions

The L5 Connect system provides ways for you to regularly monitor the state of your batteries by using subscriptions. We recommend monitoring your batteries closely to maintain their health and functionality.

Status Notifications

You can configure the L5 Connect system to alert you with a text message or email when a **Battery Error** status occurs. To make that work, you would need the contact information configured in your employee profile, your L5 Connect system configured to support an SMTP mail server (for email delivery), and then the notification itself configured. Notification set up information can be found in the [Notifications](#) document.

Scheduled reports

You can also configure the L5 Connect system to schedule the previously mentioned device and battery reports to be run and sent to you on a periodic basis. Then all you have to do is check your email to see a report of the current state of your devices and their batteries. Scheduled report setup information can be found in the [Scheduled Reports](#) document.

Best Practices for Battery Maintenance

The [Battery Maintenance Best Practices](#) document contains the best practices for keeping your batteries performing at peak performance.



L5 Connect User Manual

Error Codes

124-1443 (DATA ERROR)

- Battery is unable to communicate
- Caused by poor connection to battery OR a **BATTERY FAILED** that was never removed from the device
- Poor connection can be addressed mechanically.
 - Eject the battery and verify the contacts are clean and undamaged.
 - Reinsert the battery.
 - Verify the securing tab is seated in the slot on top of the battery bay
 - If the error persists, contact Snap-on Technical Support for additional information.
 - Please provide the following information.
 - Toolbox serial number
 - Battery serial number
 - A description of when the error started and how often it occurs

125-1443 (CHARGE ERROR)

- Battery is unable to charge
- Caused by not being discharged for long periods of time (common in devices always connected to AC Power)
- An audio message will play regularly when a CHARGE ERROR has been detected
- Recovery Process
 - Disconnect from AC power
 - Wait until all CHARGE ERRORS have been cleared
 - Continue to wait until all batteries have been discharged to a level of 85% or below
 - Reconnect AC power

126-1443 (BATTERY FAILED)

- Battery is unable to discharge or charge
- Caused by an uncorrected CHARGE ERROR (see above)
- Battery is most likely not recoverable and will need to be replaced.

134-1443 (NEEDS CHARGE)

- Battery charge level is extremely low.
- Caused by long shelf storage durations.
- Battery should recover through normal charging process.

POWER FAULT

- Battery is unable to discharge
- Caused by charger safety shutoff (most likely due to current spike)
- Contact Snap-on Technical Support for additional information.



L5 Connect User Manual

- Please provide the following information.
 - Toolbox serial number
 - Battery serial number
 - A description of when the error started and how often it occurs

DEVICE WILL NOT POWER ON

- No lights or sounds visible
- Possibly caused by POWER FAULT on all battery circuits
- Contact Snap-on Technical Support for additional information.
 - Please provide the following information.
 - Toolbox serial number
 - Battery serial number
 - A description of when the error started and how often it occurs

BATTERY DISPLAY BLANK

- No battery information visible on front or battery details screen



- Contact Snap-on Technical Support for additional information.
 - Please provide the following information.
 - Toolbox serial number
 - Battery serial number
 - A description of when the error started and how often it occurs



L5 Connect User Manual

ATC Toolbox



L5 Connect User Manual

ATC OP Guide



L5 Connect User Manual

SAFETY INFORMATION

For your safety, read this manual thoroughly before the installation of the equipment.

Installation is intended to be performed by properly trained technicians. The safety messages presented here are reminders to the installer to exercise extreme caution during installation and training on the system.

There are many variations in procedures, techniques, tools, and parts for installation due to varied shop configurations.

Because of the vast versatility of installation, the manufacturer cannot possibly anticipate or provide advice or safety messages to cover every situation. It is the technician's responsibility to be knowledgeable of the equipment to be installed. It is essential to use proper service methods and perform installation in an appropriate and acceptable manner that does not endanger your safety, the safety of others in the work area, the end-user, or the equipment being serviced.

It is assumed that, prior to the installation of the system, the operator has a thorough understanding of Automated Tool Control Systems in general. In addition, it is assumed they have the proper hand and power tools necessary to perform the installation, operation, and training in a safe manner.

These safety precautions should always be followed, including:

1. Read all instructions.
2. Care must be taken as burns can occur from touching hot parts.
3. Do not operate power tools or equipment with a damaged power cord or if the equipment has been dropped or damaged until it has been examined by a qualified serviceman.
4. Do not let the cord hang over the edge of the table, bench, or counter or come in contact with hot manifolds or moving fan blades.
5. If an extension cord is necessary, a cable with a current rating equal to or more than that of the equipment should be used. Cords rated for less than the equipment may overheat. Care should be taken to arrange the cable so that it will not be tripped over or pulled.
6. Always unplug equipment from the electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.
7. Let equipment cool entirely before putting it away. Loop cord loosely around equipment when storing.
8. To reduce the risk of fire, do not operate equipment in the vicinity of open containers of flammable liquids, such as gasoline.
9. Adequate ventilation should be provided when working on operating internal combustion engines.
10. Keep hair, loose clothing, fingers, and all parts of the body away from moving parts.
11. To reduce the risk of electrical shock, do not use it on wet surfaces or exposed to rain.
12. Use the device only as described in this manual. Use only the manufacturer's recommended attachments.
13. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact-resistant lenses. They are NOT safety glasses.
14. Know and understand the proper operating procedures for all power tools used.
15. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
16. Danger: Mirror could have sharp edges, be careful of cuts along the edge of the glass when cleaning!!!

IMPORTANT!! SAVE THESE INSTRUCTIONS DO NOT DISCARD!!



SAFETY INSTRUCTIONS IMPORTANT!! SAVE THESE INSTRUCTIONS



Risk of electrical shock.

- Do not operate equipment with a damaged power cord or if the equipment has been dropped or damaged until it has been examined by a qualified service person.
- If an extension cord is necessary, a cable with a current rating equal to or greater than that of the equipment should be used. Lines rated for less present than the equipment can overheat.
- Unplug equipment from the electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.
- Do not expose the equipment to rain. Do not use it on wet surfaces.
- Plug the unit into the correct power supply.
- Do not remove or bypass the grounding pin.
- Do not use a replacement main power cord that does not meet the power rating of the original cable. SJTW 18/3 105°C, 10', 10A/125-240~VAC

Contact with high voltages can cause death or severe injury.



Risk of electrical shock. High voltages are present within the console unit.

- Service on the unit must be performed by qualified personnel.
- Do not open any part of the control shelf other than the noted areas.
- Turn the power switch off and unplug the unit before servicing.

Contact with high voltages can cause death or severe injury.



Units can tip or strike you.

- Do not open more than one loaded drawer at a time.
- Keep children away
- Close lid and lock drawers and doors before moving.
- Apply brakes on locking casters when not moving unit.
- Do not step in or on drawers.
- Secure units together with fasteners.
- Read the instruction manual.

Tipping of storage unit or unit striking you can cause injury.



Unit's edges can cut or pinch.

- Do not pull unit; push to move.
- Wear gloves when lifting by edges.
- Keep feet and fingers clear of edges when stacking hanging or moving units.

Unit's edges can cause injury.



Do not dispose a landfill.

- The unit contains electronics that must be disposed of within the bounds of EN 50149.
- Dispose of lithium-ion batteries (where applicable) in accordance with local laws.
- For more information, call 1-800-424-9300 for North America or 1-703-527-3887 for International.

SAVE THESE INSTRUCTIONS



L5 Connect User Manual

Device Overview

Optical Toolbox

The ATC Optical Toolbox works at the speed you do. A user opens the box, gets the tools, and goes to work. Other systems require additional steps to scan or log activity. We do it automatically, so you don't waste time, and you don't need to depend on other measures to ensure accurate results.

Advanced Technology that Makes Tracking Tools Simple.

With advanced digital imaging technology and proprietary software, the Toolbox scans the tool drawer and records which tools are removed and replaced in real-time. So, you know where everything is always at without slowing the technicians for even a second. The system is also aware of broken tools, allowing you to replace or repair them right away. It's tool control that works hard to keep technicians working at their best.

Features and Benefits

- No individual tool scanning required
- No RFID tags to install or replace
- No limit on tool size – If it fits in the drawer, it works
- Intuitive touchscreen interface
- Audible voice confirmation of tool removal and replacement
- Automatic locking
- Audio feedback on issued and returned tools and alerts
- 10.1" Widescreen 16:9 LED Resistive touchscreen
- Optional Black Powder Coated Paint top vs. Stainless Steel
- Dual wireless antennas for improved connectivity
- Hardware – 64-bit processors with 8GB RAM
- Uninterruptable power supply – 30 minutes of backup power

AC and Rechargeable Platforms available:

- 36" single bank roll cab, approximate capacity 450 tools
- 54" single bank roll cab, approximate capacity 750 tools
- 6, 7, and 8 Drawer mobile and Stationary
- Custom drawer configurations available
- Stainless or Black Powder coated tops

Features and Specifications

- One year Manufacturer's warranty
- One, Two, and Three-year Manufacturers Contracts Available
- Unlimited number of assigned users
- Networking through Ethernet or wireless



L5 Connect User Manual

RFID Cabinet

The ATC RFID Cabinet provides automated asset tracking to irregularly shaped items, like extension cords, tools kitted in plastic or fabric carrying cases, and personal protective equipment. In addition, the RFID Cabinet makes tracking large and awkward-sized tools and assets easy.

Features and Benefits

- The RFID Cabinet powered by advanced RFID technology and proprietary software can track Critical Industry workplace assets in real-time.
- Track serialized items like torque wrenches, multi-meters, micrometers, and more.
- Heavy-duty metal shelves with foam bear the weight of larger tools and assets
- Onboard AC power strip allows for secure recharging and storage of power tools
- Intuitive touchscreen interface
- Audible voice confirmation of tool removal and replacement
- Automatic locking
- Audio feedback on issued and returned tools and alerts
- 10.1" Widescreen 16:9 LED Resistive touchscreen
- Dual wireless antennas for improved connectivity
- Hardware – 64-bit processors with 8GB RAM
- Uninterruptable power supply – 30 minutes of backup power

Specifications

- One year Manufacturer's warranty
- One, Two, and Three-year Manufacturers Contracts Available
- Unlimited number of assigned users
- Networking through Ethernet or wireless
- Available in a variety of colors



L5 Connect User Manual

Maintenance Guide

Introduction

Thank you for your purchase of a L5 Connect™ ATC Device. This guide will inform you of basic upkeep and maintenance actions used to keep your ATC device functioning at peak performance.

This guide's first section will introduce you to your device and some essential operation and maintenance tips to keep your Device in working order for many years to come.

If at any time you require technical support for your ATC device, you can contact Snap-on® Technical Support at:

E-mail: INDPROSERVICES@snapon.com

Our technical support agents are standing by, ready to assist you with any questions or issues you may have. Once again, thank you for your purchase, and welcome to the L5 Connect™ family.

General Instructions

Regular operation requires common sense care of the L5 Connect™ Device. Below are some specific dos and don'ts to follow.

Do	Don't
<ul style="list-style-type: none">• Close drawers in a normal fashion• Clean tools before replacing into foam cutouts• Keep toolbox clean• Respect the ATC system for what it is intended to do for you• When touching the touch screen do so with clean hands• Keep touch screen clean• Use only your fingers on the touch screen• Keep box locked when not in use• Logout when not present at the box• Lock wheels when in use• Make sure all drawers are closed before moving box• Only move box with attached handle• Use only Snap-on approved RFID tags and follow install instructions in the L5 RFID Tag catalog	<ul style="list-style-type: none">• Slam drawers closed• Place objects into drawers that do not have cutouts• Allow the foam to get dirty• Use in the rain or in wet conditions• Reach inside drawer to retrieve tools beyond camera view• Place tools directly onto foam, place tools in their cutout• Modify cutouts• Plug unit into a voltage source other than that specified• Strike or beat on box• Attempt to open the box top• Plug any device into box USB ports• Step onto or into open drawers• Turn off power switch before shutting down the ATC system through the touch screen interface first• Expose toolbox to direct sunlight, the toolbox should not be positioned in such a way that sunlight can hit the drawers. Sunlight may cause incorrect drawer scans which can result in Incorrect or Wrong tool errors.



L5 Connect User Manual

Device Specific Maintenance

ATC Toolbox

The cameras, mirror and the dot strips in the drawers are the functional components of the ATC toolbox imaging system.

Inspect and Clean the Mirror

- The mirror is positioned at 45° above the front of the top drawer. To visually inspect the mirror, view it from underneath and look for grease or oil smears, dirt or dust. In older units, look for etching and defects in the surface.
- You may need to view it from both left and right side.
- Alternatively, mirror defects can be viewed in the images called up in the calibration routine.

Note: The ATC mirror is a front surface mirror and requires special care when cleaning.

Cleaning

- If the mirror surface is dusty, use a microfiber cloth with water, otherwise clean the mirror using only a microfiber lens cleaning cloth.
- To remove grease or oil, wipe excess material from the surface with a soft cloth, then clean the mirror with a soft microfiber cloth and Isopropyl Alcohol
- **Note: Use Isopropyl Alcohol sparingly. Cleaning too frequently with ISO Alcohol can result in damage to the reflective surface**
- DO NOT use any other chemical or glass cleaner on the mirror. It will damage the mirror and may void the warranty!

Inspect and Clean Dot Strips

- Use a flashlight to periodically inspect all dot strips for presence of shiny spots and defects caused by contaminants or surface damage. Shiny defects may saturate the camera pixels and interfere with proper operation of the system.
- Ensure there are no foreign materials or obstructions extending onto the strips.
- Use a soft cloth and mild cleaning solution to wipe down dot strips inside each drawer.

Care and Cleaning of Tool Foam and Base Layer

- Clean all objects prior to returning them to the appropriate silhouette.
 - If the items are not cleaned, oil, grease, and other contaminants are transferred from the item to the blue foam edge and the bottom yellow layer.
 - The presence and absence determination depends largely on the yellow color in the base layer. If it changes too much due to transferred contaminants, it will affect the performance of the ATC imaging system.
- Periodically clean the blue foam silhouette edges and bottom yellow layer with a commercially available detergent cleaner / degreaser.
- *Note that the hex bit pockets are particularly susceptible to contamination and color change.* If your ATC system issues excessive wrong tool warnings on hex bits, Snap-on offers the kit HEXPLUGS100, a package of 100 yellow plugs specifically designed to fit into the bottom of the hex bit silhouette.



L5 Connect User Manual

Inspecting LED's

The LED's are very bright, do not stare at them for extended length of time

ATC units assembled prior to April 2023 have a set of LED's in the front and two sets of LED's mounted on the camera beam in the rear. For units assembled from April 2023 and after, all LED's are mounted on the camera beam.

- Use the mirror to inspect the rear LED's by viewing them much the same as inspecting the mirror.
- Look for burned out or missing LED's
 - You may need to view it from both left and right side.
- To inspect the front LED's, open a lower drawer and the LED's illuminating the lower drawers will come light up.
-

In all cases, **look for dead or burned-out LED's**. If any LED's are out replace the LED strips.

ATC RFID Locker

RFID Tag Installation - BEST PRACTICES

The proper performance of your Snap-on RFID Locker depends on many factors. One of the most important of these is the proper mounting of the Tag to the asset. Best Practices for correctly mounting tags on tools is covered in the document "**TL5331J00B4 RFID Tag Catalog.**"

A copy of the RFID Tag Catalog is included in the literature pack of each locker.

RFID Tag Troubleshooting guide

RFID Tag Troubleshooting Guide

If your Snap-on ATC Locker is experiencing problems reading a tag, here are some suggested diagnostic steps:

- 1) Check that the tag is the correct type for the tool or object material.
- 2) Check that "On metal" tags are mounted correctly on the metal tool or object. The back surface of the tag should be in contact with and parallel to the mounting surface of the tool or object. Only a thin layer of adhesive should be evident.
- 3) RFID waveforms cannot pass through moisture. Confirm the adhesive or epoxy has fully cured. See the adhesive or epoxy manufacturer's specifications and confirm the material has had adequate cure time. Typical cure times are at least 24 hours.
- 4) Check for proper application of the adhesive or epoxy. An overly thick layer of adhesive or epoxy can negatively impact RFID waveforms.
- 5) Check for proper application of heat shrink tubing or silicon tape. Multiple layers of heat shrink or excessive layers of silicon tape negatively affect RFID waveforms.
- 6) Check to see that only a single method of tag protection is used. Use only heat shrink tubing or silicone tape or epoxy. Combining any of these three methods of tag protection negatively impacts RFID waveforms.

If additional diagnostics are necessary, follows these steps:

- 1) Check the performance of the tag with a hand held RFID scanner.
- 2) Check the position of the tag in the locker. It should be at least 1/4" away from any metal surfaces or objects. If necessary, move the object to ensure adequate spacing from metal surfaces.
- 3) If possible, and without damaging the tag, move the tag to a different location on the object.
- 4) Replace the tag with an identical tag.
- 5) Replace the tag with a different type or larger tag.

P/N: EAL0414J27A



L5 Connect User Manual

RFID Antenna test

- A process to check operation of the RFID antennas is available to administrator and maintenance users in the Maintenance menu.
- Call Technical Support at 1-800-940-2397 to obtain procedures to access the Antenna test function.

All Devices

LED Touchscreen Display

- If the LED display screen requires cleaning, spray window cleaner on a soft lint-free cloth and wipe down, making sure no liquids drip into the edges of the screen. Do not spray any cleaner directly onto the touch screen.
-

Recommended Monthly Battery Maintenance

- Inspect the Battery Details screen and address any detected battery errors.
- Models Z1x, Z3x, Z5x, and Z7x
 - Disconnect from AC power until all batteries (including the internal UPS battery if present) are at 85% or lower.
 - This should take approximately 4 hours to complete.
 - Connect to AC power until all batteries (including the internal UPS battery if present) are at 95% or higher
 - This should take approximately 4 hours to complete.
 - If any batteries fail to discharge to 85% or fail to charge to 95% please contact Snap-on Technical Support for assistance.
- Models Z4x, Z6x, and Z8x
 - Disconnect from AC power until the internal UPS battery is at 85% or lower.
 - This should take approximately 30 minutes to complete.
 - Connect to AC power until the internal UPS battery is at 95% or higher
 - This should take approximately 30 minutes to complete.
 - If the internal UPS battery fails to discharge to 85% or fails to charge to 95% please contact Snap-on Technical Support for assistance.

Electrical Specifications

Connect to a grounded (Earthed) electrical outlet using a detachable cord set. The electrical outlet must be readily accessible. The maximum cord length is 3 meters.

Optical Toolbox

- Without External Batteries
 - AC Input: 100-240~, 3A Max, 60-50 Hz (+10%/-6%), 1-Phase
- With External Batteries
 - AC input: 100-240~, 5-3A, 60-5 Hz.(+10%/-6%), 1-Phase.

RFID Cabinet

NOTE: RFID Cabinet current rating includes customer devices connected to internal power outlets

- Americas / Japan:
 - AC Input: 100-120~, 15A, 60 Hz (+10%/-6%), 1-Phase.
- EU / Asia / Oceania
 - AC Input: 220-240, 10A, 50 Hz (+10%/-6%), 1-Phase

Internal Power Supply

- AC Input: 100-240~, 4-2A, 60-50 Hz. 1-Phase

Environmental Operating Specifications:

- Indoor Use Only
- Temperature Range: 0-50 °C
- Humidity Range: Maximum relative humidity 80% for temperatures up to 31 °C, decreasing linearly to 50% relative humidity at 40 °C
- Altitude Range: 0-2000 Meters
- Pollution Degree: 2
- Overvoltage Category: II
- Ingress Protection: IP20

Sound Pressure Level:

- On the drawer (operator) side @ 1 meter distance = 59.4 dBA
- On the back side @ 1 meter distance = 62.5 DBA



L5 Connect User Manual

Dimensions and Weight

- 54" Toolbox
 - 54.14" Wide
 - 33.04" Front to Back
 - 57.80" Tall
 - 550 lbs. (No Tools)
- 36" Toolbox
 - 35.50" Wide
 - 33.04" Front to Back
 - 56.30" Tall
 - 450 lbs. (No Tools)
- RFID Locker
 - 36" Wide
 - 33.11" Front to Back
 - 75.23" Tall
 - 550 lbs. (No Tools)

Battery Info

! WARNING !



Only use Snap-on battery P/N: **2-04805A**.

The use of any other battery will void the manufacturer's warranty and could potentially damage the unit and/or inflict bodily harm. Batteries should only be charged by placing the batteries in a toolbox with the AC plugged into an electrical outlet or with an approved Snap-on Battery Charger model **L5A0298J21A**.

Battery Classification and Type

4.1 Battery Classification - SANYO Lithium-Ion Battery

4.2 Battery Type - 4UR18650A-3

Items		Specifications	Notes
5.1 Rated Capacity (Minimum)		5850 mAh	1290mA discharge at 20° C
5.2 Nominal Capacity (Minimum)		6000 mAh	1290mA discharge at 25° C
5.3 Nominal Capacity (Typical)		6300 mAh	Reference only
5.4 Nominal Voltage		14.4V	1290mA discharge at 25° C
5.5 Discharge End Voltage		12.0V	
5.6 Charging Current (Std.)		3.0V	0 ~ +45° C
5.7 Charging Voltage		16.44 +0.12/-0.12V	
5.8 Charging Time (Std.)		3.0 hours	Approx
5.9 Continuous Discharge (Max)		6.0A	0 ~ +60° C
5.10 Internal Resistance		less than 160Ω	AC Impedance 1 kHz
5.11 Weight		less than 920 g	
5.12 Operating Temperature	Charge	0 ~ +45° C	
	Discharge	-20 ~ +60° C	
	less than 1 month	-20 ~ +50° C	Percentage of recoverable capacity 80% *
	less than 3 months	-20 ~ +40° C	
5.13 Storing Conditions	less than 1 year	-20 ~ +20° C	

*Percentage of recoverable capacity = (Discharge time after storage / Initial discharging time) x 100. The discharging time is measured by the discharge current of 1290mA until 12.0V of end voltage after the battery is fully charged at 25° C.

Battery Safety Instructions

Prohibited Instructions

The battery contains flammable objects such as organic solvents. If the battery is mishandled, it may cause fire, smoke, or an explosion, and the battery's functionality will be seriously damaged. Please read and check the following prohibited actions.



!Danger!

Immersion

"Do not immerse the battery in a liquid such as water, seawater, or soda."

If the protection circuit in the battery is exposed to liquid, the battery cannot be protected and may catch on fire, smoke, explode, or generate heat by the unexpected electrical load.

High temperature

"Do not use or place the battery near fire, a heater, or a high temperature (more than 80°C)."

The battery's polyolefin separator may get damaged from the heat and could cause an internal short circuit. This may cause the battery to catch on fire, smoke, explode, or cause heat generation.

Charger and charge condition

"Do not use unauthorized chargers."

If the battery is charged under unacceptable conditions (for example: outside of restricted temperature ranges, overvoltage, or over current with unauthorized chargers), the battery may catch on fire, smoke, explode, or generate heat.

Reverse polarity

"Do not force a reverse-charge or a reverse-connection."

The battery has the correct polarity. If the battery doesn't fit easily, please check the battery's orientation and do not force it into the battery compartment. If the battery is forced to attach to a Device with reversed polarity, the battery may catch on fire, smoke, explode, or generate heat.

Direct connection

"Do not connect the battery with ac plug (outlet) or car plugs."

The battery requires a specific charger. If the battery connects with the outlet directly, the battery may catch on fire, smoke, explode, or generate heat.



L5 Connect User Manual

Inappropriate use with other equipment

"Do not adapt the battery to unspecified applications."

If the battery is used for unspecified applications or systems, the battery may get damaged or catch on fire, smoke, explode, or generate heat.

Incineration and heat

"Please keep the battery away from heat and fire."

The battery materials will get damaged and may catch on fire, smoke, explode, or generate heat.

Short-circuit

"Do not apply a short-circuit."

Do not connect positive (+) and negative (-) terminals with conductive material. Do not carry or store the battery with metal objects (such as wire, necklace, or hairpins). If the battery is in a short circuit, an excessively large current will flow and may catch on fire, smoke, explode, or generate heat.

Impact

"Avoid unnecessary impact to the battery."

An unnecessary impact may cause the battery to leak, generate heat, smoke, catch on fire or explode. Also, the protection circuit may break, and that will lose the function of the battery's protection system.

Penetration

"Do not penetrate with a nail or strike with a hammer."

The battery cell may get destroyed or damaged. And the battery's protection circuit may get damaged and cause an internal short-circuit. Additionally, the battery may catch on fire, smoke, explode, or generate heat.

Soldering

"Do not directly solder the battery."

The insulator could melt, or the gas release vent might get damaged from the heat. Additionally, the battery may catch on fire, smoke, explode, or generate heat.

Disassemble and reconstruction

"Do not disassemble the battery."

If the protection circuit gets damaged, the battery will not be protected. Then, the battery may catch on fire, smoke, explode, or generate heat.

Charge near high temperatures

"Do not charge the battery near high temperatures."

If the battery is charged near high temperatures, the battery may not be able to charge due to the activation of the protection circuit. In these conditions, the protection circuit may break, and the battery may catch on fire, smoke, explode, or generate heat.

! WARNING !

Ingestion

"Keep away from infants."

The battery should be kept away from infants. In case of swallowing the battery, see a doctor immediately.

Storing

"Do not put the battery in the microwave or other cooking appliances."

The battery may catch on fire, smoke, explode, or generate heat due to the heat or the electrical impact from the microwave.



L5 Connect User Manual

Mixed-use

"Do not mix the battery with other batteries."

The battery should not be used with other batteries having a different capacity, chemistry, or manufacturer. Do not connect with other batteries or mix with other batteries. The battery may catch on fire, smoke, explode, or generate heat.

Rust, changing color, and deformities

"Do not use abnormal batteries."

Please stop using the battery if there are noticeable abnormalities such as abnormal smell, heat, deformities, or discoloration. The battery may have a defect and may catch fire, smoke, generate heat or explode if used continuously.

Charging time

"Stop charging if the charging process cannot be finished."

If the battery cannot finish the charging process within the specified time, please stop the charging process. The battery may catch on fire, smoke, explode, or generate heat.

Leakage

"Do not use a leaking battery near flames."

If the battery or liquid leaking from the battery has a pungent odor, the battery should be kept away from flames. The battery may ignite and explode.

"Do not touch a leaking battery."

If the liquid leaking from the battery gets into the eyes, it will cause significant damage. If the leaking liquid gets into your eyes, please flush your eyes immediately with pure water. Please consult a physician immediately. If the liquid remains in the eyes, it will cause significant damage.

Transport

"Pack the battery tightly during transport."

To prevent short-circuit or damages, please tightly pack the battery into a case or a carton box.

! CAUTION !

Use under direct sunlight

Do not use or leave the battery in excessive heat, such as in a car under direct sunlight. The battery may catch on fire, smoke, explode, or generate heat. Also, it might also deteriorate the battery's characteristics and life.

Static electricity

The battery pack has a protection circuit. Do not use the battery where it generates static electricity (more than 100V) that might damage the protection circuit. If the protection circuit is broken, the battery may catch on fire, smoke, explode, or generate heat.

Charging temperature range

The charging temperature range is regulated between 0°C and 45°C. Do not charge the battery out of the specified temperature range. Otherwise, it may cause heat generation, leakage, or serious damage. Also, it might cause deterioration of the battery's characteristics and battery life.

Manual

Please read the manual before use. Please save the manual for future reference.



L5 Connect User Manual

Charging method

Please read the charger's manual for the proper charging method.

First-time use

Please contact the supplier if the battery has an unusual odor, heat generation, or rust during the initial use.

Use by children

Parents must explain how to use the system and the battery. Please check back periodically to ensure children are using the system and the battery correctly.

Inflammable materials

Please keep the battery away from flammable materials during the charge and the discharge. It may catch on fire, smoke, explode, or generate heat.

Leakage

If an electrolyte leak from the battery comes into contact with the skin or clothes, immediately flush it with water. Otherwise, it may cause skin irritation.

Insulation

If lead wires or metal objects come out from the battery, please seal, and insulate them completely. Otherwise, the battery may cause a short circuit and catch on fire, smoke, explode, or generate heat.

Recycle

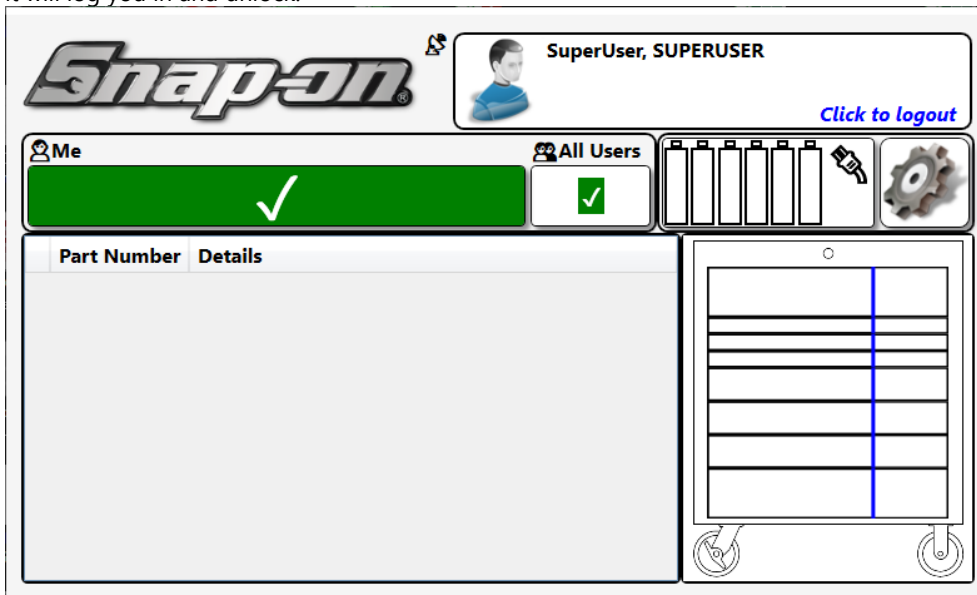
Please recycle the battery according to local rules or regulations after use.

ATC Toolbox Basic Operation Issue & Return

This document will cover basic operation of the ATC Toolbox. The ATC Toolbox is designed for ease of use and quick response. The following is the standard workflow for issuing and returning tools from an ATC Toolbox.

Issue

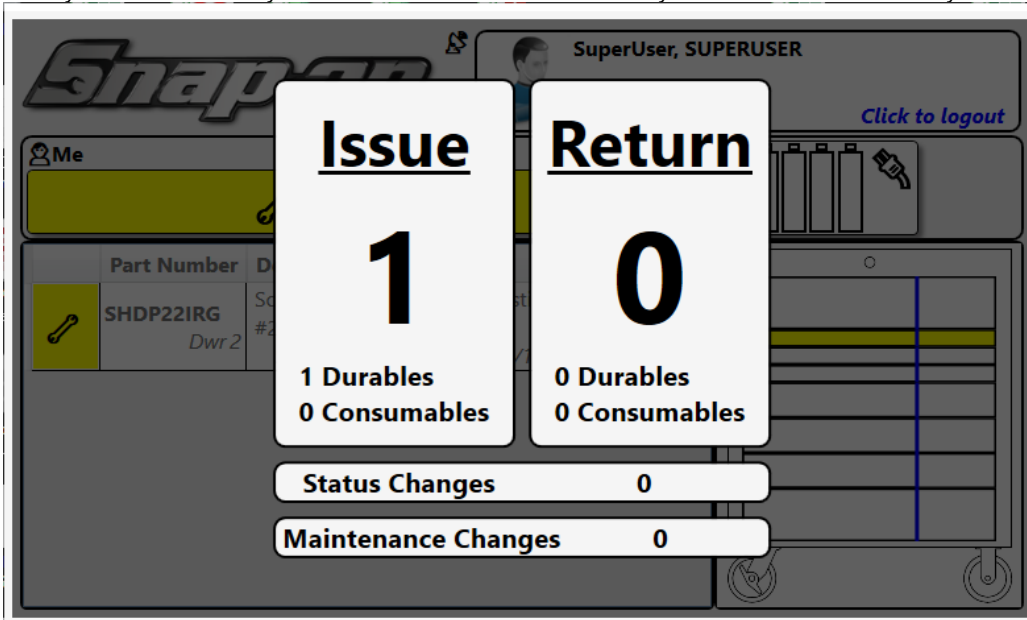
1. Wave your badge near the card reader on the front of the toolbox. If you have permission to access this box, it will log you in and unlock.



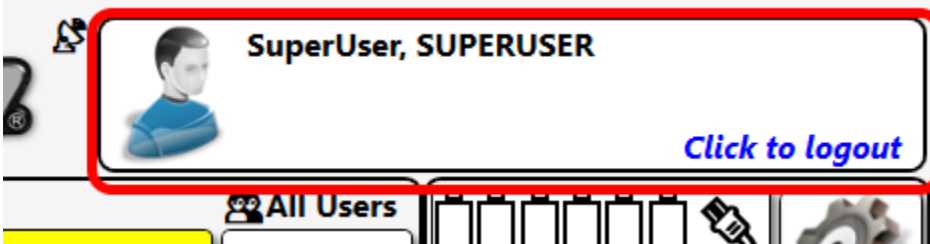
2. Select the drawer that contains the tool you wish to retrieve and open it. Once opened, find the tool you want and take it out of its pocket. All the while the system will display the current drawer open onscreen.



- Once you have retrieved your tool, close the drawer, and the system will issue the tool to you.

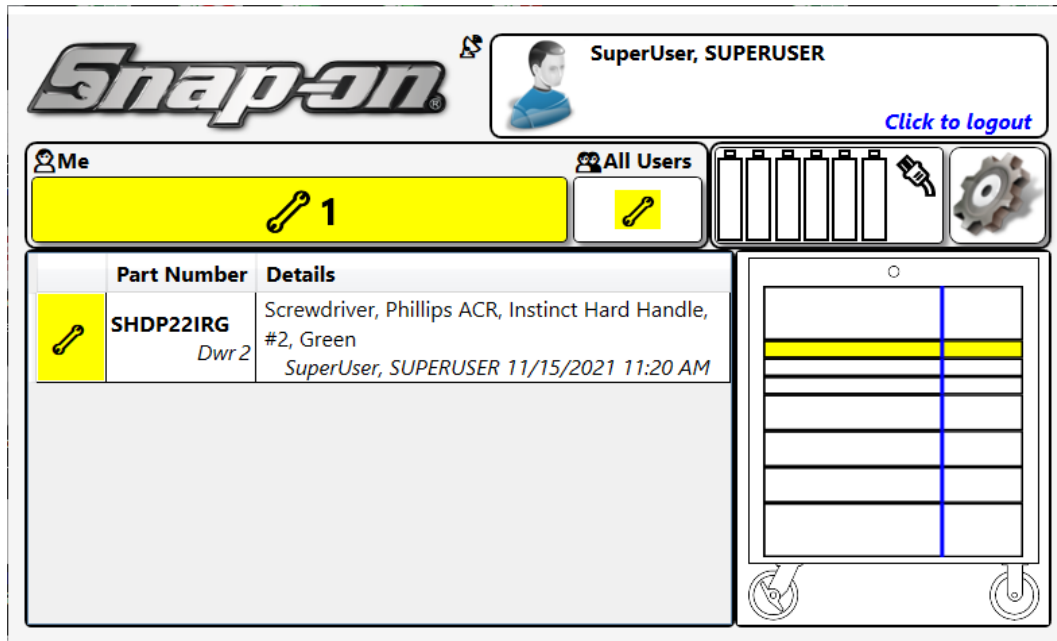


- You can tap the screen to clear the summary. To log out, tap the User frame in the top right corner of the screen.

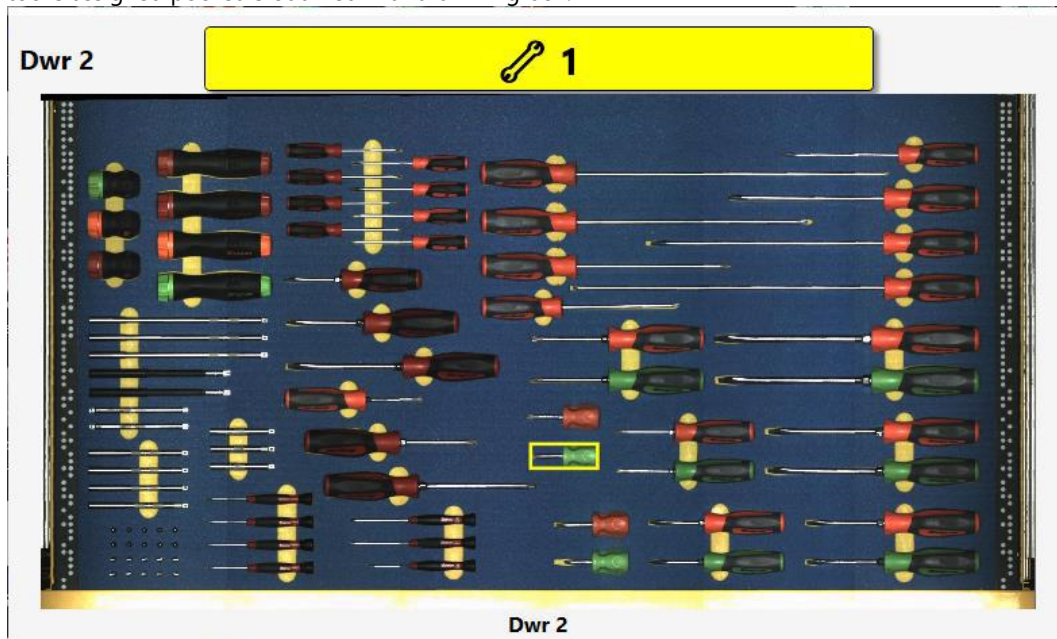


Return

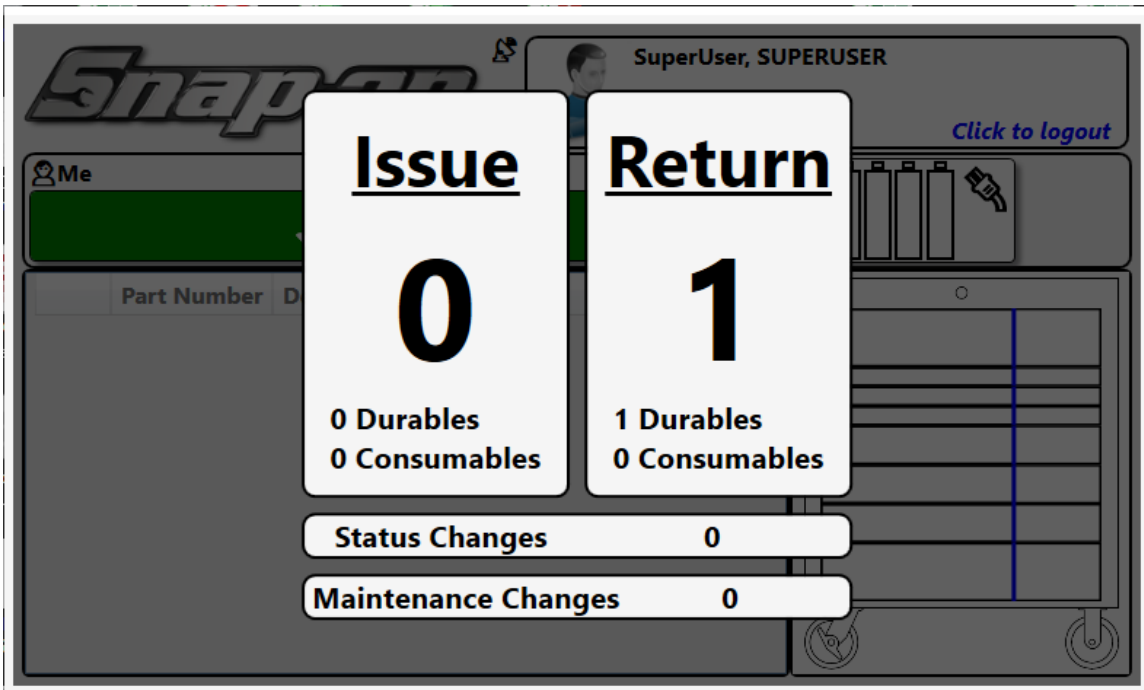
1. To return a tool, you will follow a similar process. First wave your badge near the card reader on the front of the toolbox. If you have permission to access this box, it will log you in and unlock.
2. When the system logs you in, the screen displays a list of tools issued to you and their status. It will also show the drawer from which the tool came from.



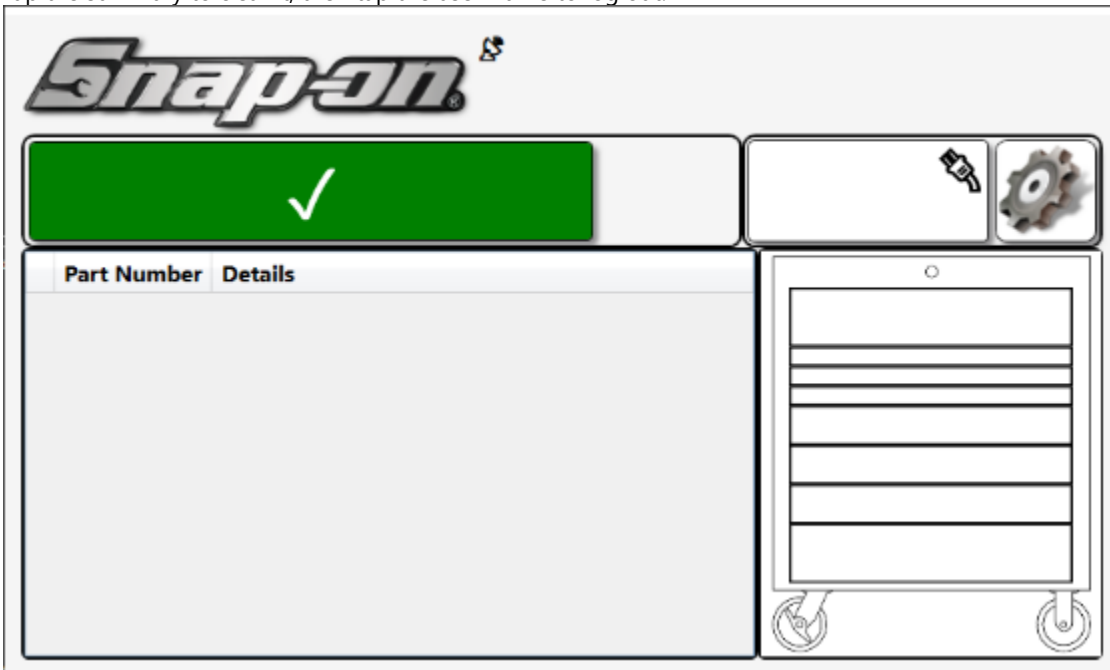
To return the issued tool, open the drawer it belongs to, the screen displays an image of the drawer, and the tool's assigned pocket is outlined with a blinking box.



- Place the tool in its assigned pocket, then close the drawer. A summary of the transaction will display on the screen.



- Tap the summary to clear it, then tap the user frame to log out.





L5 Connect User Manual

Returning Current Employee's Tools

Multiple Unique Choices (Tool Status, Customer ID, etc.)

If you have multiple instances of the same tool issued to you, and one of them has something that makes it different, like a status, the system will need an employee to confirm which tool is being returned.

The screenshot shows the Snap-on L5 Connect interface. At the top, the Snap-on logo is on the left, and the user's name "Smith, John J." and "Work Loc2" are on the right, with a "Click to logout" link. Below the header, there are tabs for "Me" and "All Users". The "Me" tab is active, showing a list of tools. The first two tools are both VGP12406, with the same description: "Pliers, Locking, C-Clamp, Standard Tip, 6\"". The first tool has a status of "Dwr 6" and a date of "3/27/2025 4:24 PM". The second tool has a status of "Dwr 6" and a date of "3/28/2025 10:27 AM". A red "Cal. Req." button is visible next to the first tool. To the right of the tool list is a confirmation screen with a grid of tool images and a "Don't Know" button.

Part Number	Details
VGP12406 Dwr 6	Pliers, Locking, C-Clamp, Standard Tip, 6" Smith, John J. 3/27/2025 4:24 PM Cal. Req.
VGP12406 Dwr 6	Pliers, Locking, C-Clamp, Standard Tip, 6" Smith, John J. 3/28/2025 10:27 AM

Since one has a status, these two tools are no longer interchangeable, and the system needs more information to handle the situation. When you return one of these tools you will be prompted with the following screen asking which of the tools you are returning.

The screenshot shows a confirmation screen titled "Confirm which tool was returned to pocket: VGP12406". Below the title is a "Tap tool to confirm" instruction. There are two tool images with their details: "Smith, John J. 3/28/2025 10:27 AM" and "Smith, John J. 3/27/2025 4:24 PM". A red "Cal. Req." button is visible next to the second tool. At the bottom is a "Don't Know" button. To the right is a grid of tool images, with one tool highlighted by a red box.

Confirm which tool was returned to pocket: VGP12406
Tap tool to confirm

Smith, John J. 3/28/2025 10:27 AM


Smith, John J. 3/27/2025 4:24 PM
Cal. Req.


Don't Know



L5 Connect User Manual


If you select one of the tools in the list that tool will be returned as normal. If you select **Don't Know**, the system will make its best guess at which tool should be returned and return that tool. It will also mark the drawer with a purple color to show that you have a tool in the drawer that needs confirmation.








Smith, John J.
Work Loc2

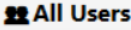
[Click to logout](#)


**Me**


**i1**

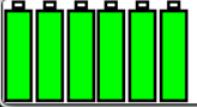
**2**


**?1**


**All Users**



**i**

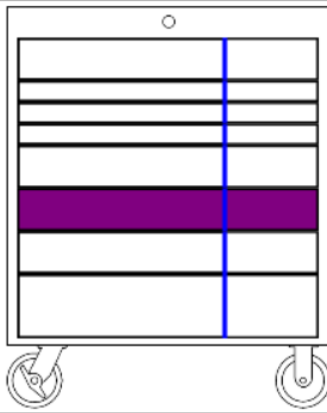
**?**









	Part Number	Details
	VGP12406 Dwr 6	Pliers, Locking, C-Clamp, Standard Tip, 6" Smith, John J. 3/27/2025 4:24 PM Cal. Req.
	VGP12406 Dwr 6	Pliers, Locking, C-Clamp, Standard Tip, 6" Smith, John J. 3/28/2025 10:27 AM




If you have not logged out yet, you can reopen the drawer and remove the tool, and the system will return to the state where you have both tools issued.







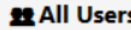
Smith, John J.
Work Loc2


[Click to logout](#)


**Me**

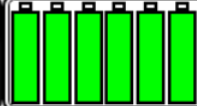
**i1**


**2**


**All Users**



**i**


**?**



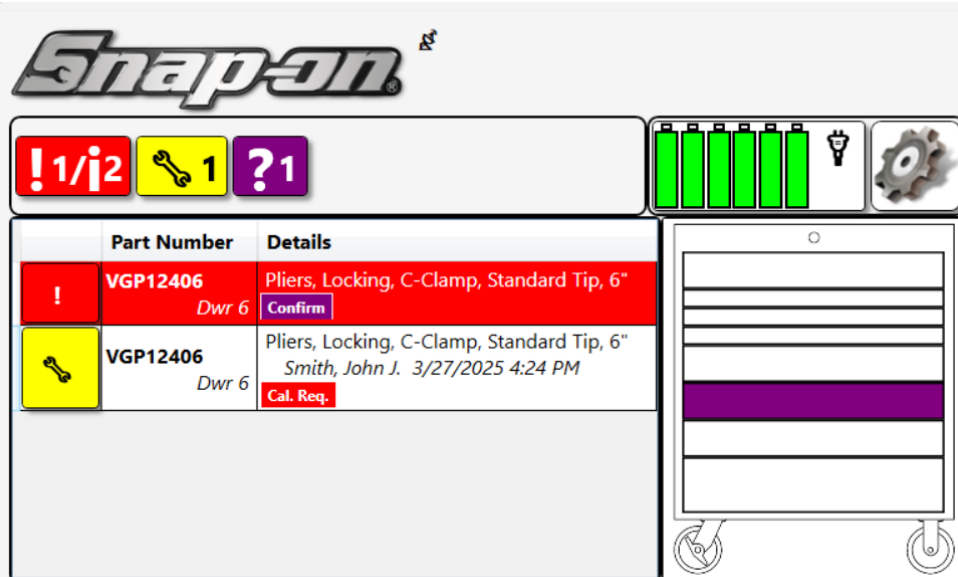




	Part Number	Details
	VGP12406 Dwr 6	Pliers, Locking, C-Clamp, Standard Tip, 6" Smith, John J. 3/27/2025 4:24 PM Cal. Req.
	VGP12406 Dwr 6	Pliers, Locking, C-Clamp, Standard Tip, 6" Smith, John J. 3/28/2025 10:27 AM



If you log out with the tool still in the box in a returned state with the purple notification that the system still needs clarification, the system will set a **Needs Confirmed** status on this tool and the purple color will remain to show this status.

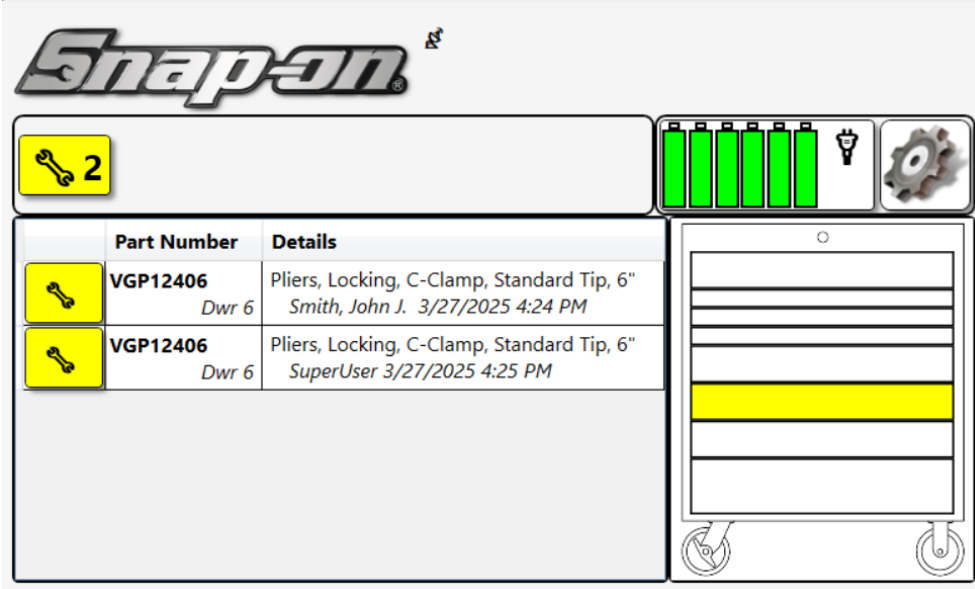


Clearing this status will require someone with the **Needs Confirmed Clear** permission in their profile. The built-in profiles, **Maintenance** and **Administrator** both have this permission.

NOTE: Tools with ZoomID tags can be individually identified by the system so the system would not need to prompt a user for clarification.

All Non-Unique Choices

Sometimes you may have multiple instances of the same tool type in a drawer issued all to you.



If you have multiple instances of the same tool and they have no unique characteristics, the system will just pick one of them and return it without a prompt.

NOTE: The system will always assume that you are returning the tools that are currently issued to you. This is true even if you return the tool to a pocket different from the pocket the tool was issued from. (Assuming that both pockets hold a tool of the same Master Tool type.)

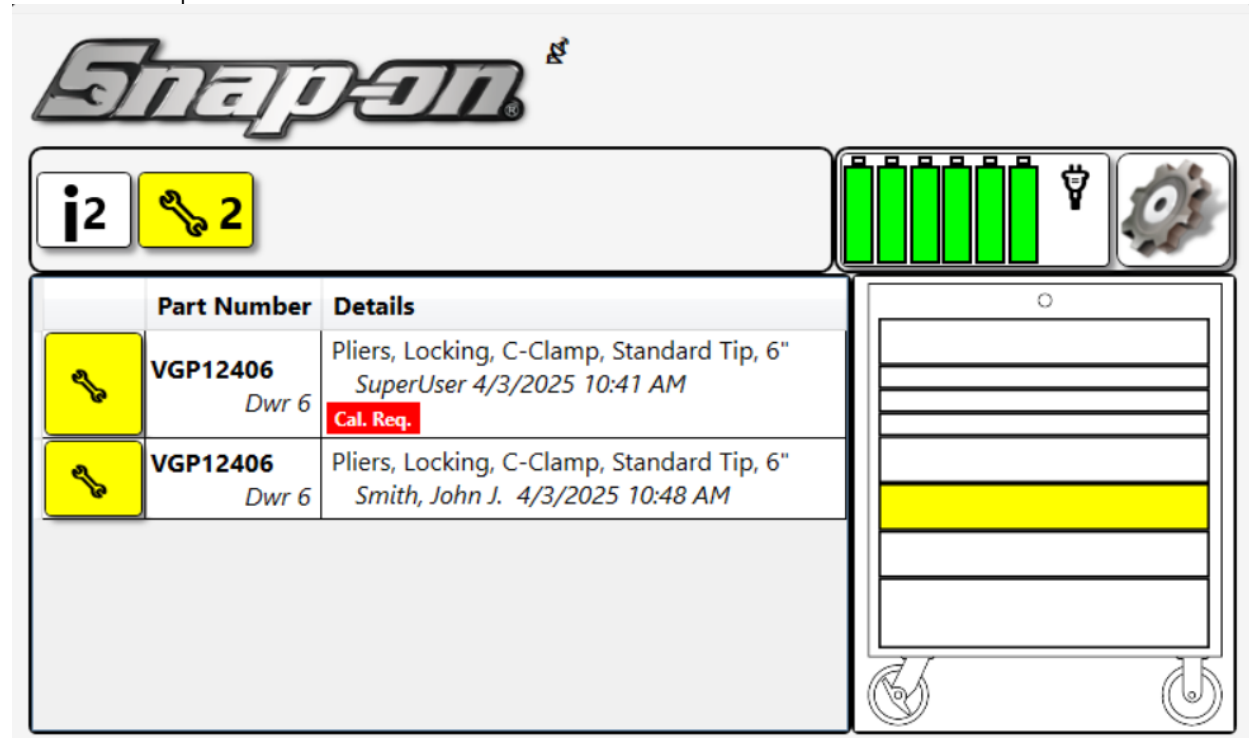
Returning Other Employee's Tools

The ATC system allows employees to return tools that were issued to other employees. However, the return behaviors are slightly different for this use case.



Multiple Unique Choices (Issued To, Tool Status, Customer ID, etc.)

When there are multiple instances of a Master Tool type issued that are unique, the system will need to prompt the user to select which tool(s) are being returned and to where. This might be because otherwise identical tools are checked out to multiple other users, or because one of the tools has a status set on it.

Here is an example of two tools issued to different users.

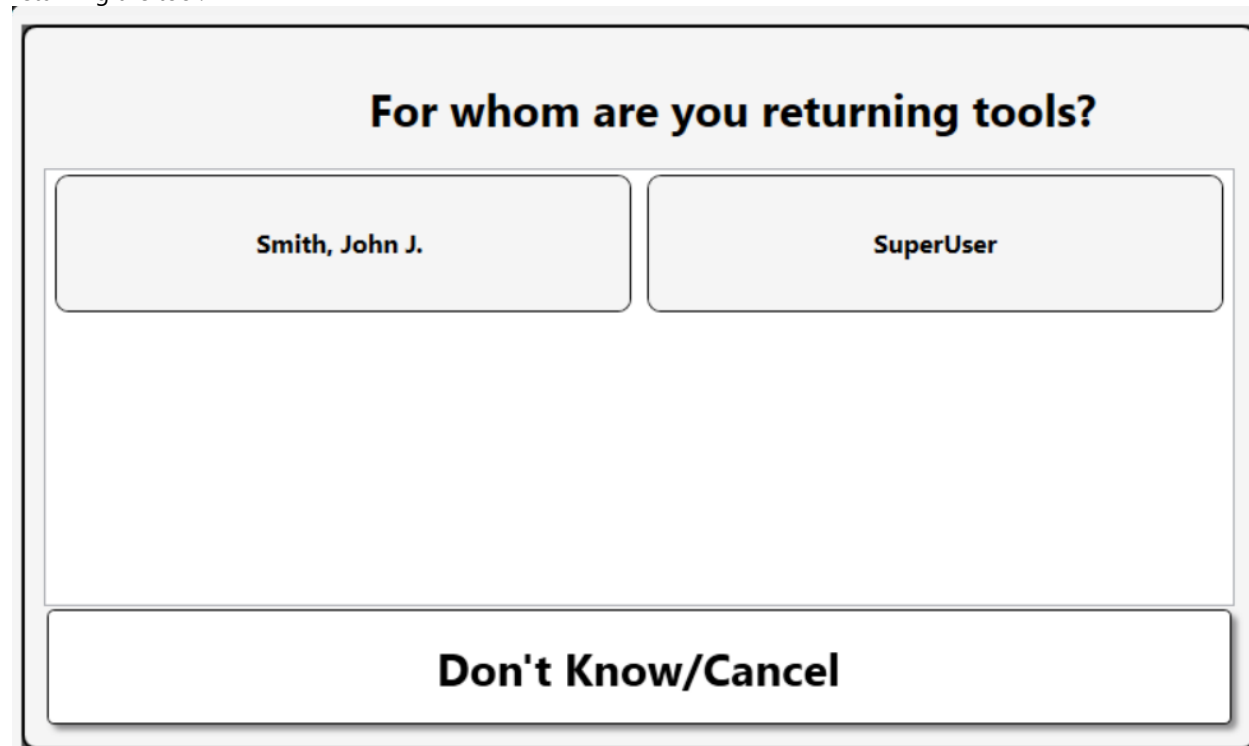


The screenshot shows the Snap-on L5 Connect interface. At the top is the Snap-on logo. Below it is a header bar with a user icon 'i2', a wrench icon with the number '2', a battery level indicator with six green bars, a lightbulb icon, and a gear icon. The main area contains a table with two columns: 'Part Number' and 'Details'.

	Part Number	Details
	VGP12406 Dwr 6	Pliers, Locking, C-Clamp, Standard Tip, 6" SuperUser 4/3/2025 10:41 AM Cal. Req.
	VGP12406 Dwr 6	Pliers, Locking, C-Clamp, Standard Tip, 6" Smith, John J. 4/3/2025 10:48 AM

To the right of the table is a rack with seven slots. The fourth slot from the top is highlighted in yellow. The rack has a lightbulb icon at the top and two wheels at the bottom.

If a third user tries to return one of these tools, the system needs to prompt him to determine for which user he is returning the tool.



The screenshot shows a prompt box with the title 'For whom are you returning tools?'. Inside the box are two buttons: 'Smith, John J.' and 'SuperUser'. Below these buttons is a large button labeled 'Don't Know/Cancel'.

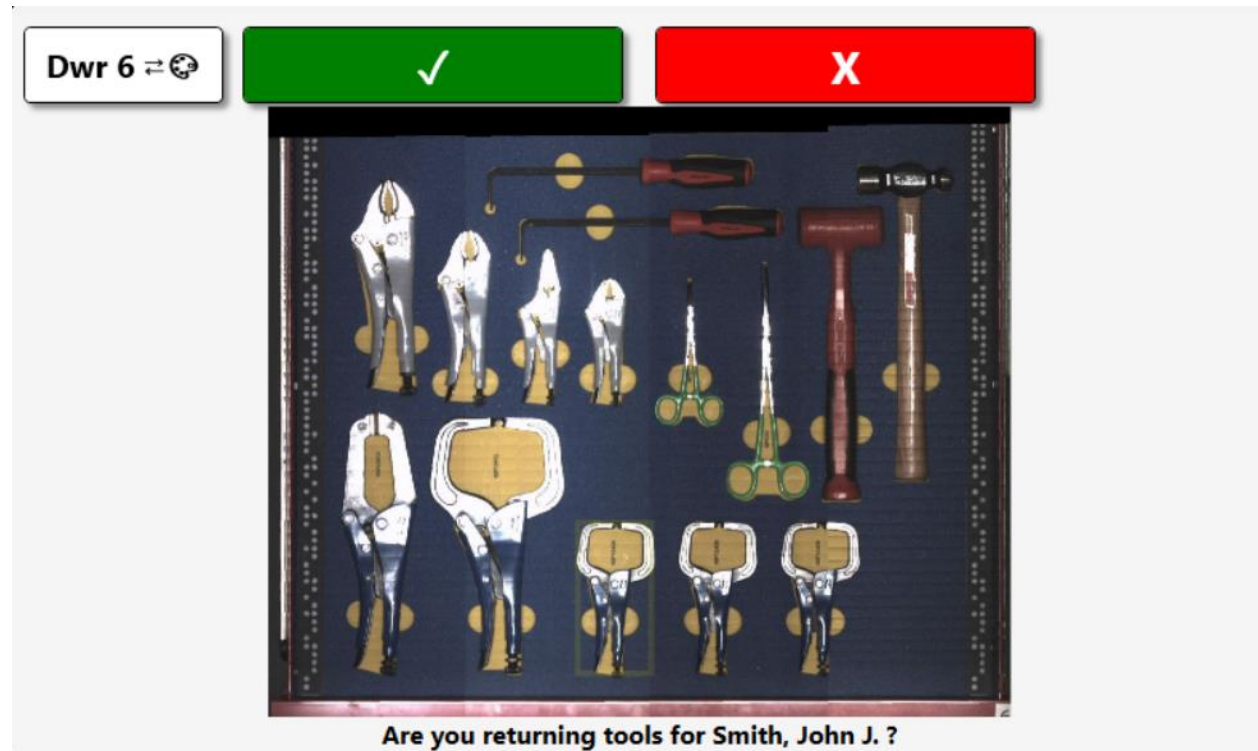
He would then need to select the user to let the system know which tool to return. If he chooses the **Don't Know/Cancel** button and leaves the tool in the drawer and logs out, the system will mark the tool with a **Needs Confirmed** status as discussed earlier in the document.

All Non-Unique Choices

When you return a tool that is currently issued to another user with no other unique choices, the system will (by default) return the tool just like if the tool was issued to you. However, the device can be forced to prompt the employee requesting confirmation that they are returning another employee's tools. See the Force Prompt to Check in Another Employee's Tools section below for more details.

Force Prompt to Check in Another Employee's Tools

An employee may accidentally return their tool to an incorrect device (different from the device it was issued from). A prompt to the returning employee could help them realize and correct their mistake. If the **Prompt to check in another user's tools** option is enabled, the "incorrect" box can detect and report that its issued tool is issued to an employee different from the current user.





L5 Connect User Manual

This feature can be found by logging into the Admin application and going to the **Locations** tab.

5 Snap-on L5 Connect Admin Client, v9.13.9.0325

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard **Locations** Tools Tool States Employees Groups History Reports Settings

System Status

	Filtered	Total
Devices Online :	1	1
Devices Offline :	11	11
Tools Issued :	15	15
Users with Tools Issued :	5	5
Devices with Tools Issued :	2	2
Tools Issued with Alerts :	0	0
Managed Tools Out :	0	0
Tools Managed :	1601	1601

Device Status 11 3 0 0 0 0

Name	Alerts	Issued	Issued Users	Mngd Out	Alert	Location
Tool Box 1	5	0	0	0	Offline	Tool Crib East
ZA8BT001	2	0	0	0	Maintenance Overdue	Tool Crib East
Tool Crib East	12	14	4	0	Maintenance Overdue	Tool Crib East
Z98AT001	6	0	0	0	Maintenance Overdue	Tool Crib East
Z99LS001	2	1	1	0	Maintenance Overdue	Tool Crib East
Z94BJ001	1	4	1	0	Maintenance Overdue	Tool Crib East
Tool Crib West	1	0	0	0	Maintenance Overdue	Tool Crib East
Z93GS001	1	0	0	0	Maintenance Overdue	Tool Crib East
Z97AT001	1	0	0	0	Maintenance Overdue	Tool Crib East
Z93AU001	1	0	0	0	Maintenance Overdue	Tool Crib East
Z98BT001	1	0	0	0	Lost	Tool Crib East
Z91BJ001	0	0	0	0	Maintenance Overdue	Tool Crib East

Work Location Status 1 1 1 1 0 0

Name	Alerts	Issued	Issued Users	Issued Devices	Mngd Out	Alert	Location	Tool
Work Loc2	0	1	1	1	0			
Work Location 1	0	0	0	0	0			
Work Location one	0	0	0	0	0			
Work Location 3	0	0	0	0	0			
Work Location 4	0	0	0	0	0			
Work Location 5	0	0	0	0	0			
Work Location 6	0	0	0	0	0			
Work Location 7	0	0	0	0	0			
Work Location 8	0	0	0	0	0			
Work Location 9	0	0	0	0	0			
Work Location 10	0	0	0	0	0			
Work Location 13	0	0	0	0	0			
Work Location 14	0	0	0	0	0			

Top Employees with Issued Tools

Plane Maintenance Hangar, Harry	10
Plane Maintenance Hangar, Preston	2
SuperUser	1
Runner, Rhode	1
Smith, John J.	1

Top Work Locations with Issued Tool

Item assembly 9000	2
False Org	2
Work Loc2	1

Top Devices with Issued Tools

Tool Crib East	14
Z94BJ001	4
Z99LS001	1

Inventory with Serial Number

Storage Location Name	Part Number	Description
Tool Box 1	1410 NO KEY	Sioux 1410 Drill
Tool Box 1	1650	Prybar, 16"
Tool Box 1	1AM1541	Sioux 45 Degree Angle Air Drill,
Tool Box 1	1DA221HP NO WRENCHES	Sioux 1DA221HP Die Grinder
Tool Box 1	208CCP	Pliers, Angle Nose
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finis
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Finis
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel,
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel,
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"
Tool Box 1	A2A	Adaptor, 3/8" Internal drive x 1/2" External dr

Then select the location at which you would like this feature to be set, and then select the **Options** sub-tab.

5 Snap-on L5 Connect Admin Client, v9.13.9.0325

Top Level [Change Current Location](#) SuperUser [Click to logout](#)

Dashboard **Locations** Tools Tool States Employees Groups History Reports Settings

Name

- Top Level
- Maintenance
- Manufacturing
- R&D Lab
- Tool Crib West
- Work Loc2
- Work Location 1
- Work Location 10
- Work Location 13
- Work Location 14
- Work Location 3
- Work Location 4
- Work Location 5
- Work Location 6
- Work Location 7
- Work Location 8
- Work Location one
- Z91BJ001
- Z93AU001
- Z93GS001
- Z94BJ001
- Z97AT001
- Z98AT001
- Z98BT001
- Z99LS001
- ZA8BT001

☐ Show Deleted Items

Top Level
Organizational Location

Info Profiles (Employee) Profiles (Group) **Options** Subscriptions Audit Types Quantity Monitoring Attachments Favorites

Name: Top Level

Customer ID

Notes

Parent Location

Responsible Employee



L5 Connect User Manual

Expand the **Optical Toolbox** section of the options.

The screenshot shows the Snap-on L5 Connect Admin Client interface. The top navigation bar includes the Snap-on logo, a search bar, and a user profile for SuperUser. The main menu on the left lists various locations and tool categories. The central pane displays the 'Options' page for 'Top Level'. The 'Optical Toolbox' section is expanded, showing options such as 'Language' (English), 'Bar code scan prompt' (Single Play), 'Single Play' (Sun, 1:00 AM), 'Device Weekly Reboot' (Device Local Time), and 'Admin Session Timeout' (0 minutes). A red arrow points to the 'Optical Toolbox' section.

Now you will see an option **Prompt to check in another user's tools**.

The screenshot shows the Snap-on L5 Connect Admin Client interface. The top navigation bar includes the Snap-on logo, a search bar, and a user profile for SuperUser. The main menu on the left lists various locations and tool categories. The central pane displays the 'Options' page for 'Top Level'. The 'Optical Toolbox' section is expanded, showing options such as 'Bar code scan prompt' (Work Order Entry UI Style), 'Single Play' (Audio Alert Level), 'Device Weekly Reboot' (Device Local Time), and 'Admin Session Timeout' (0 minutes). A red arrow points to the 'Prompt to check in another user's tools' option.



L5 Connect User Manual

ATC Toolbox Drawer Retraining Procedure

This document will cover the different drawer retraining options that are available on the ATC Toolbox: Full, Present, Absent, and Single Tool.

Required Permissions

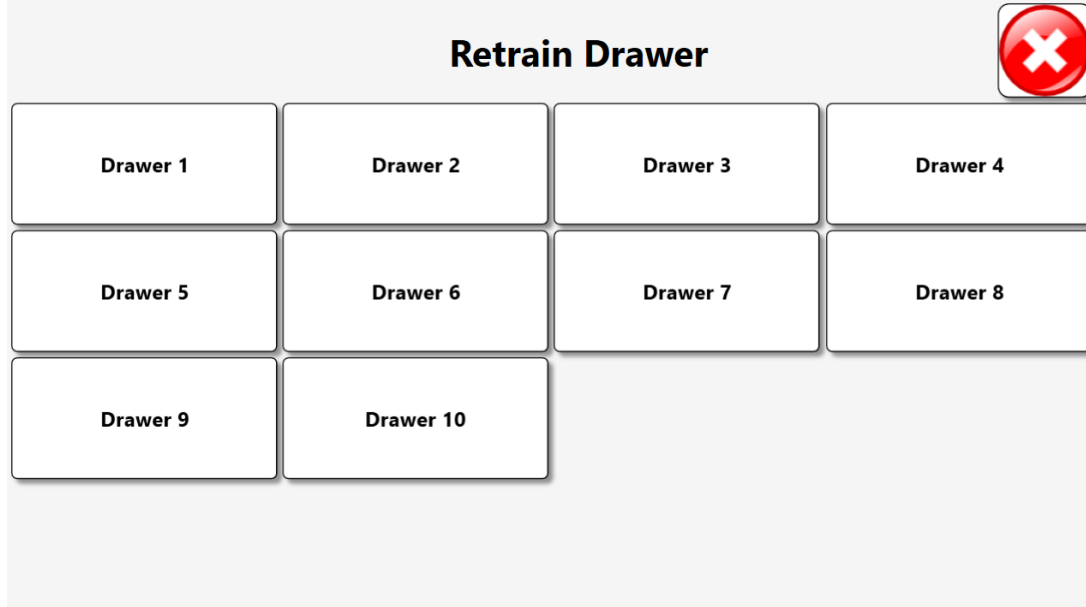
- Tool Training - Drawer
- Tool Training - Single

NOTE: This document does not apply to a drawer foam change. If the drawer foam has been altered contact Pro-Services for assistance.

Full Training

If you have any Tool Detection Issues such as the Wrong Tool message, conduct a Full drawer training on the effected drawer.

1. Log into the toolbox using the badge scanner. From the Toolbox dashboard navigate to **Settings=>Troubleshooting=>Retrain Drawer**. You will need the proper permissions to access this menu.



2. Select the drawer you wish to retrain.

3. Select **Full Training** and then click on the green arrow.


Select options for retraining drawer (2)

☐ Full Training

☐ Absent

☐ Present

☐ Update Drawer Image

 **Select options for retraining drawer (2)**

☒ Full Training

☒ Absent

☒ Present

☒ Update Drawer Image

4. Follow the onscreen prompts to complete the full drawer training.

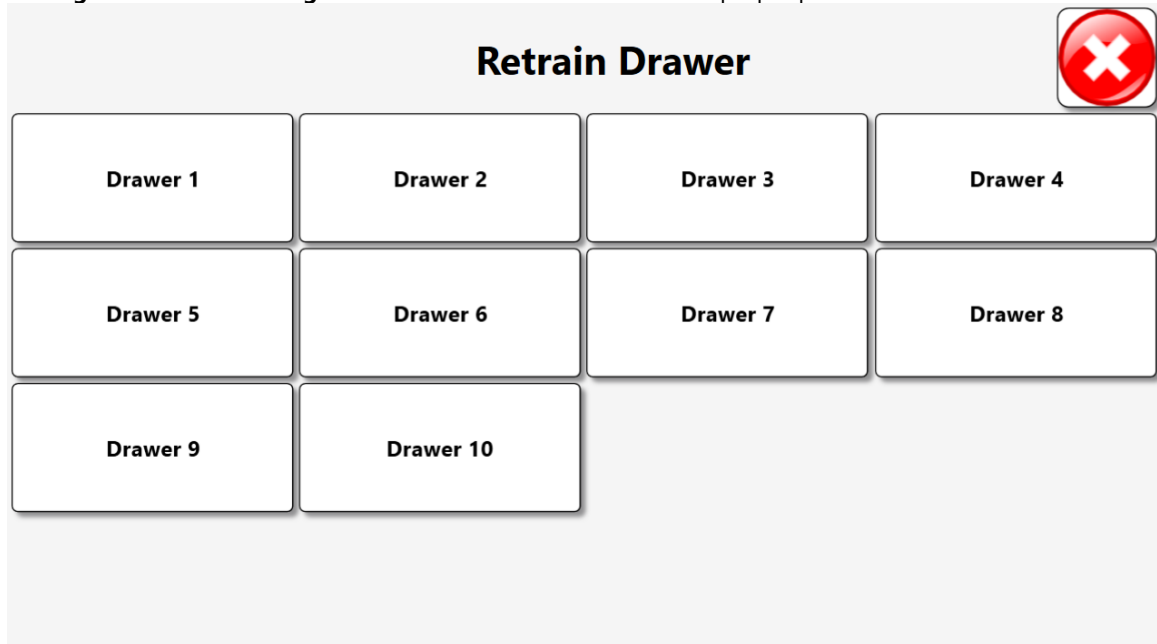
Present & Absent

Absent and Present training only refresh certain portions of the ATC Toolbox training process. **WARNING: Only conduct Present or Absent Training if instructed by Snap-on® Technical Support.**

Update Drawer Image


If you wish to have a different image displayed when you open a drawer, select the Update Drawer Image option.

1. Log into the toolbox using the badge scanner. From the Toolbox dashboard navigate to **Settings=>Troubleshooting=>Retrain Drawer**. You will need the proper permissions to access this menu.



2. Select the drawer you wish to Update the Drawer Image on.

3. Then select **Update Drawer Image**



Select options for retraining drawer (2) 

☐ Full Training

☐ Absent

☐ Present

☐ Update Drawer Image

 **Select options for retraining drawer (1)** 

☐ Full Training

☐ Absent

☐ Present

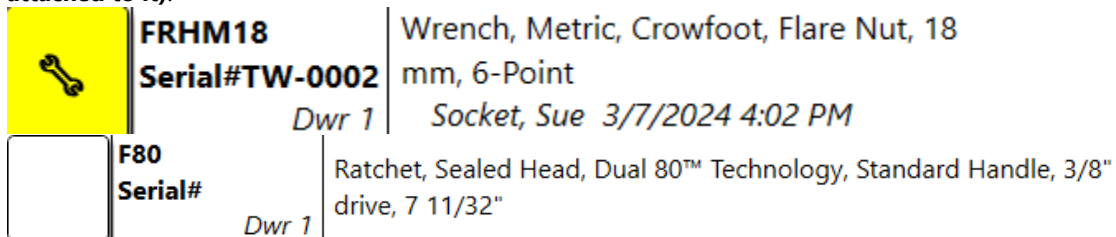
☒ Update Drawer Image

4. Follow the onscreen prompts to Update the Drawer Image.

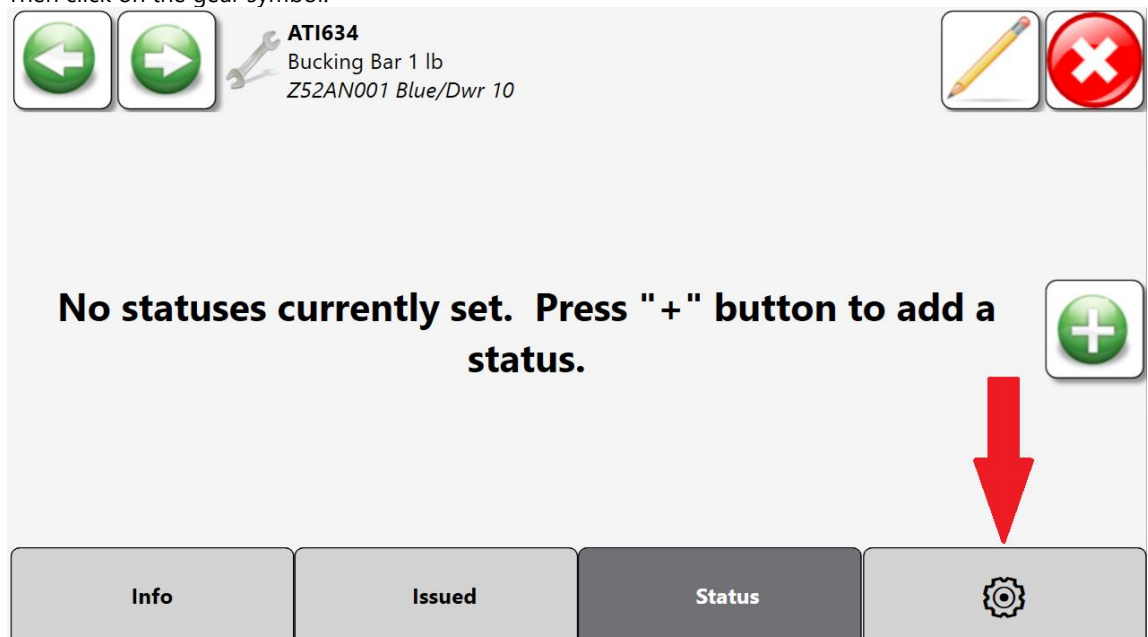
Single Tool

Single tool retraining allows you to retrain a singular tool within a drawer. This allows you to replace a tool in a drawer without training the entire drawer or if a tool's color profile has changed since its initial training.







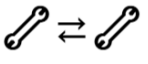


1. Log into the toolbox using the badge scanner. There are two ways to perform a single tool retrain; either by navigating to the device inventory menu screen (**Settings=>Inventory**) or via the device dashboard (**Note: A tool will only be shown on the dashboard if Issue/Returned or if a status such as wrong tool is attached to it**).



- 2 Double click the tool in the inventory or dashboard. You will see a similar screen to that pictured below. Then click on the gear symbol.



2. To retrain this particular tool, click the triangle icon circled below.

   <div> ATI634 Bucking Bar 1 lb <i>Z52AN001 Blue/Dwr 10</i> </div> 
 <div> Tolerance <div>0 (Device Default)</div> </div>
 <div> Training </div>
 <div> Tool Replacement </div>
 <div> Signature </div>
<div> <div>Info</div> <div>Issued</div> <div>Status</div> <div>  </div> </div>

3. You will be shown an image of the drawer where the tool selected for retraining is highlighted. Click the green check mark and follow the onscreen prompts to train this tool.



L5 Connect User Manual

Optical Toolbox Issued Tool Lockout Feature

The L5 Connect System has a feature that allows you to lock employees out of other L5 Connect optical toolboxes if they have tools issued from a different L5 Connect optical toolbox. This feature had been requested as a way to help prevent employees from accidentally returning tools to the wrong toolbox.

Profile Configuration

To prevent any changes to previously deployed L5 Connect systems, this feature is disabled by default. It can be easily configured in the Admin application by setting up a custom profile.

1. Open the Admin application and go to the **Settings** tab.

The screenshot displays the Snap-on L5 Connect Admin Client interface. The top navigation bar includes tabs for Dashboard, Locations, Tools, Tool States, Employees, Groups, History, Reports, and Settings. The Settings tab is selected, indicated by a red arrow. The interface shows various status reports and configuration options. On the left, there's a 'System Status' section with filters and totals. The main area is divided into several panels: 'Device Status' (showing alerts and issued users), 'Work Location Status' (showing alerts and issued users), 'Top Employees with Issued Tools', 'Top Work Locations with Issued Tools', 'Top Devices with Issued Tools', and 'Inventory with Serial Number'.

System Status	Filtered	Total
Devices Online :	0	0
Devices Offline :	13	13
Tools Issued :	19	19
Users with Tools Issued :	5	5
Devices with Tools Issued :	4	4
Tools Issued with Alerts :	0	0
Managed Tools Out :	0	0
Tools Managed :	2189	2189

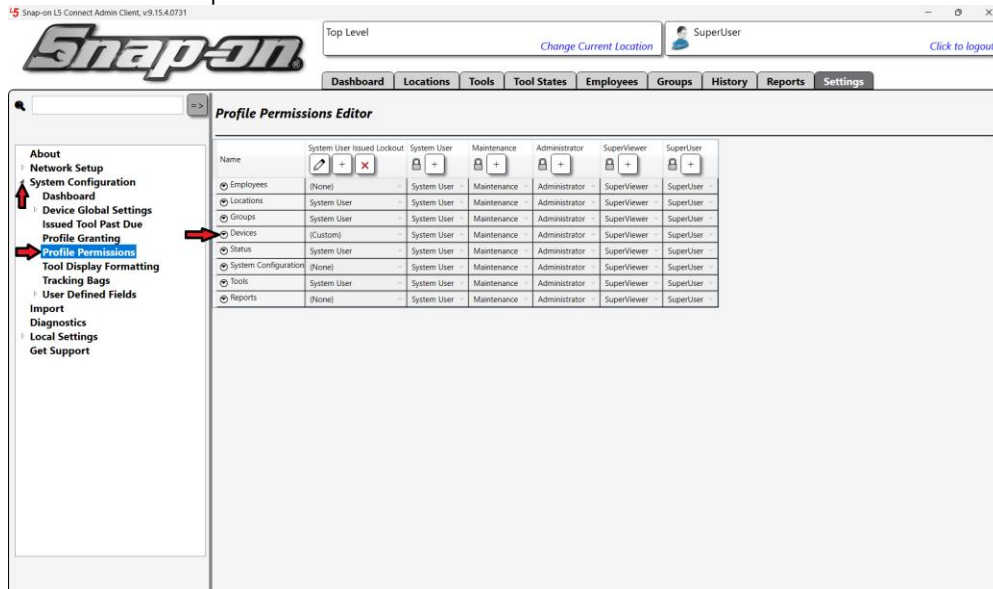
Device Status	Alerts	Issued	Issued Users	Mngt Out
Tool Box 1	5	0	0	0
ZAB8T001	2	0	0	0
Tool Crib East	169	15	4	0
Z98AT001	6	0	0	0
Z91B/J001	4	0	0	0
Z99L5001	2	1	1	0
Z94B/J001	1	4	1	0
Z97AT001	1	2	2	0
Z91B/J002	1	1	1	0
Tool Crib West	1	0	0	0
Z93G5001	1	0	0	0
Z93AU001	1	0	0	0

Work Location Status	Alerts	Issued	Issued Users	Issued Devices	Mngt Out
Work Loc2	0	1	1	1	0
Work Location 1	0	0	0	0	0
Work Location one	0	0	0	0	0
Work Location 3	0	0	0	0	0
Work Location 4	0	0	0	0	0
Work Location 5	0	0	0	0	0
Work Location 6	0	0	0	0	0
Work Location 7	0	0	0	0	0
Work Location 8	0	0	0	0	0
Work Location 10	0	0	0	0	0
Work Location 13	0	0	0	0	0
Work Location 14	0	0	0	0	0

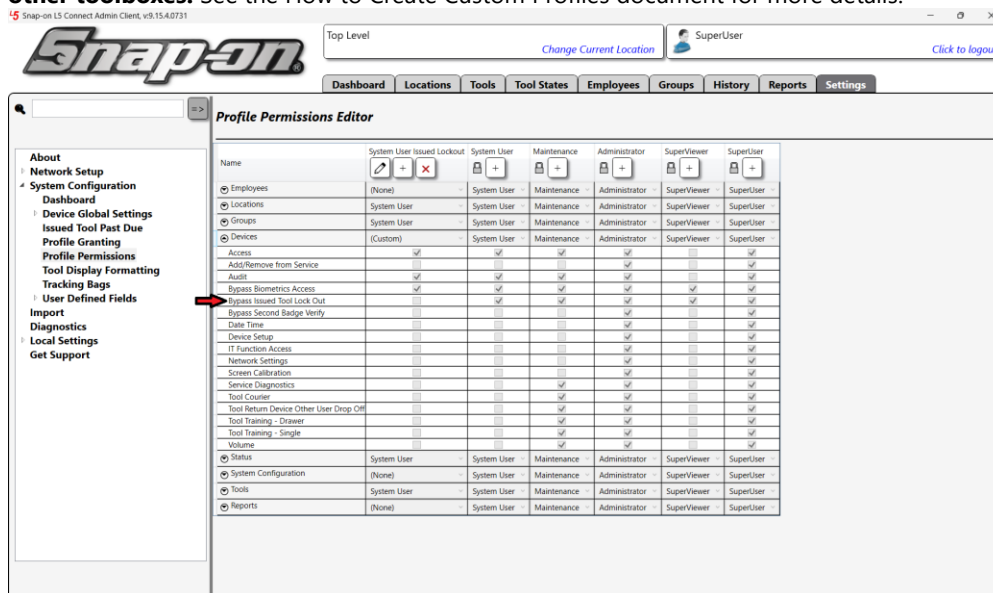
Top Employees with Issued Tools	Top Work Locations with Issued Tools	Top Devices with Issued Tools
Plane Maintenance Hangar, Harry	False Org	Tool Crib East
Plane Maintenance Hangar, Preston	Item assembly 9000	Z94B/J001
Smith, John A.	Work Loc2	Z97AT001
SuperUser		Z99L5001
Runner, Rhode		Z91B/J002

Inventory with Serial Number	Storage Location Name	Part Number	Description
Tool Box 1	1410 NO KEY	Sioux 1410 Drill	
Tool Box 1	1630	Prybar, 16"	
Tool Box 1	1AM1541	Sioux 45 Degree Angle Air Drill,	
Tool Box 1	1DA221HP NO WRENCHES	Sioux 1DA221HP Die Grinder	
Tool Box 1	298CCP	Pliers, Angie Nose	
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Final	
Tool Box 1	47ACP	Pliers, Combination Slip-Joint, Industrial Final	
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"	
Tool Box 1	87CF	Cutters, Diagonal, Vinyl Grips, 7 3/8"	
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel,	
Tool Box 1	91ACP	Pliers, Adjustable Joint, Interlocking Channel,	
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"	
Tool Box 1	96CF	Pliers, Long Needle Nose, Vinyl Grips, 8"	
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"	
Tool Box 1	97CCP	Pliers, Needle Nose, Vinyl Grips, 8"	
Tool Box 1	A2A	Adaptor, 3/8" Internal drive x 1/2" External dr	

- Expand the **System Configuration** list item. Then select the **Profile Permissions** list item. Then expand the **Devices** section of permissions.



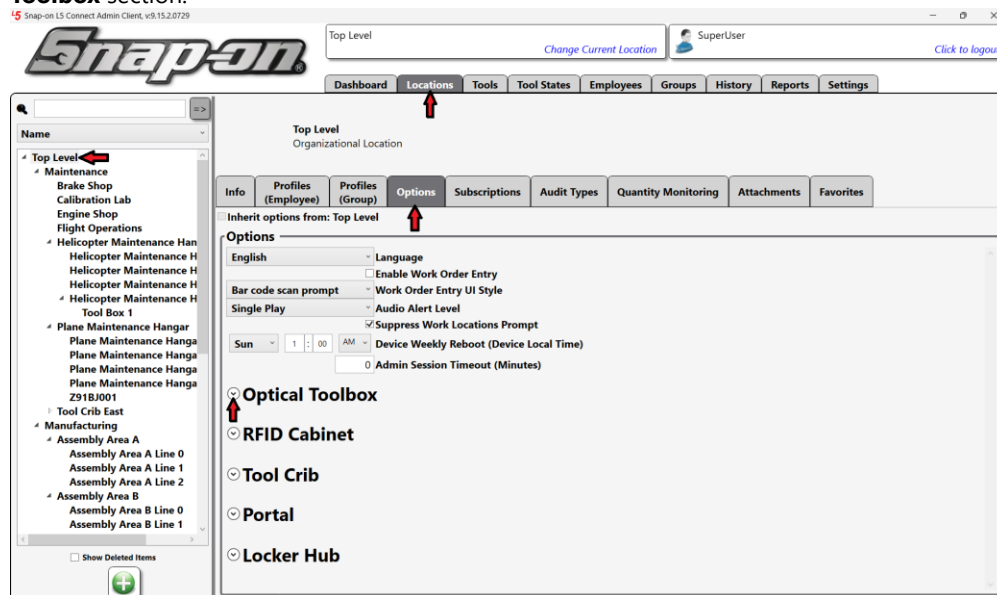
- You will see the **Bypass Issued Tool Lock Out** permission is selected for all the built-in permission profiles. To enable this feature, you will need to create custom profiles for the employees/groups for which this feature should be applied. For example, if most of your technicians have the **System User** profile you could create a custom profile based on the **System User** profile and replace their current profile with the new custom one. This profile would uncheck the **Bypass Issued Tool Lock Out** permission. **NOTE: It is important to note that if an employee receives permissions from multiple location or group profiles, if any of them give them the power to bypass this feature they will not be blocked from accessing other toolboxes.** See the How to Create Custom Profiles document for more details.



Configuration of the Feature Option

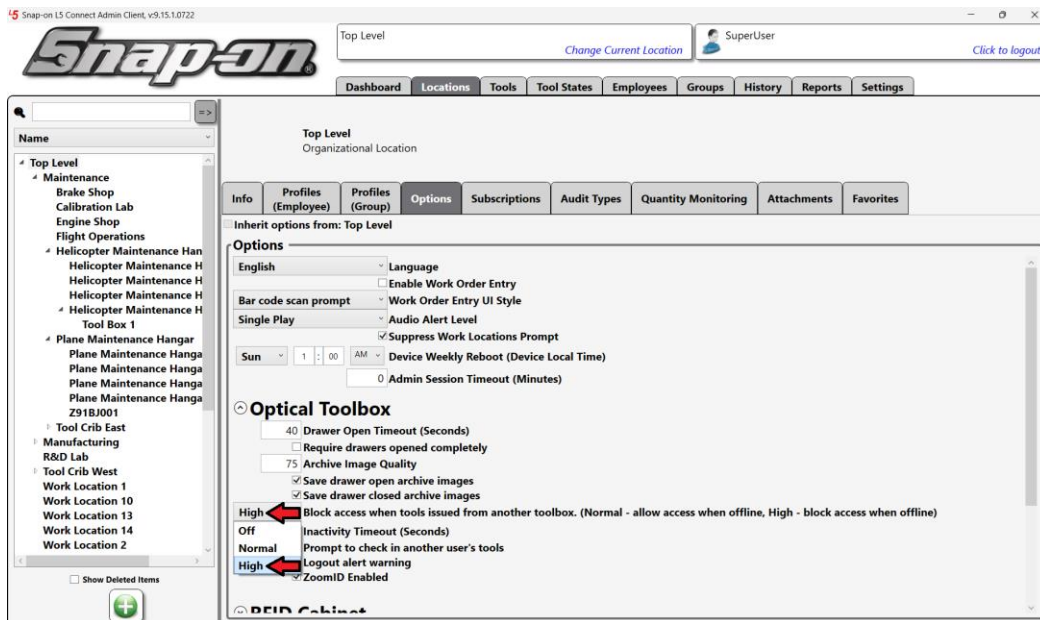
Now that you have setup permission profiles to pay attention to the issued tool lock out feature, you need to set the feature to the proper setting.

1. Go to the locations tab of the Admin application and then select the location at which you wish to apply this feature. For this example, we will choose the **Top Level** location. This will ensure that the feature is configured for the entire L5 System. If you wish to set this for only a specific area, such as the maintenance area, you can simply select that location instead. Then click the **Options** sub-tab and expand the **Optical Toolbox** section.

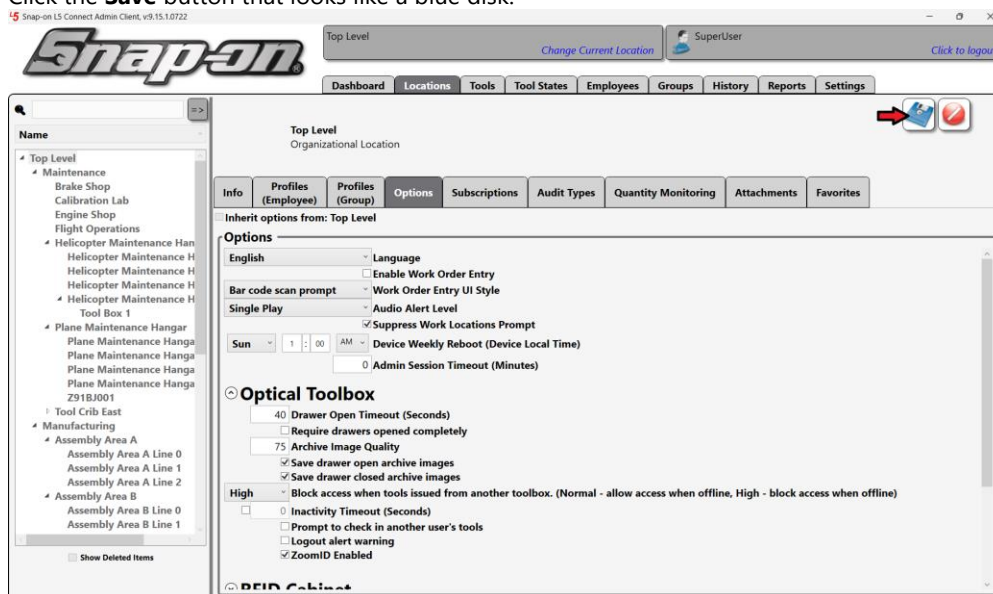


2. Expand the pull-down menu for the **Block access when tool issued from another toolbox** item and select the desired option. More details on how these options will cause the system to behave can be found in the **Toolbox Behavior** section.

- **Off**
- **Normal**
- **High**



1. Click the **Save** button that looks like a blue disk.



You should now have the system setup to properly handle blocking users from accessing other toolboxes when they have tools issued from a different toolbox.



L5 Connect User Manual

Toolbox Behavior

Notes

- The toolbox will always allow the employee to log in if they have tools to return locally.
- This feature applies only to toolbox tools. Other device types are not affected by and have no effect on this feature.

Offline Behavior

Normal Mode

When the system is set to **Normal**, an employee will always be granted access to an offline box. The Normal mode does not deny access if the issue tool state cannot be checked on other toolboxes.


High Mode


When the system is set to **High**, an employee will be denied access to an offline toolbox. High mode requires the device to be online to check for issued tools from other toolboxes. However, an employee will always be allowed access if that employee has tools to return locally.

Online Behavior

In both **Normal** or **High** modes, an employee will be denied access if that employee has tools issued from another toolbox. An audio prompt and on-screen display (see below) will explain why the employee is being denied access. However, an employee will always be allowed access if that employee has tools to return locally.

Access denied. Tools out of other box

	Part Number	Details
	F80 <i>Dwr 1</i>	Ratchet, Sealed Head, Dual 80 Technology, Standard Handle, 3/8" drive, 7 11/32" Z91BJ002 7/29/2025 2:56 PM



Managed Out of Box Behavior

If an employee has a tool issued from another box but that tool has a status on it that causes the tool to be managed out box, he will be allowed into other boxes in both **Normal** and **High** modes.



L5 Connect User Manual

RFID Cabinet/Locker

ATC OP Guide

See ATC OP Guide section in the ATC Toolbox section above.

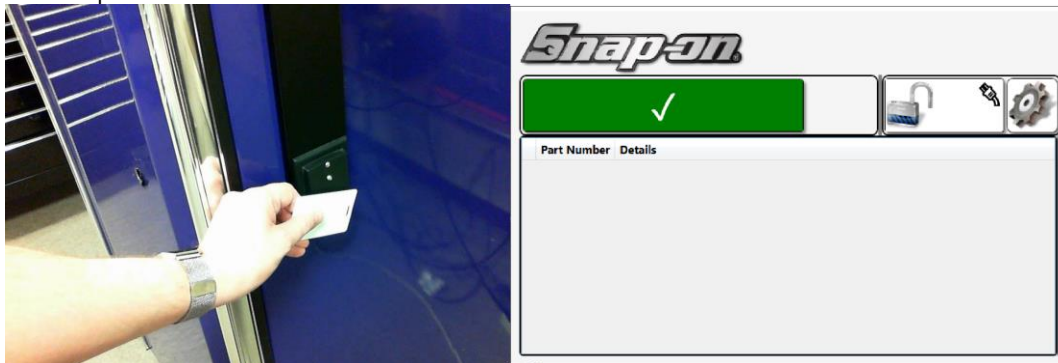
ATC RFID Locker Basic Operation Issue & Return

This document will the basic operation of the ATC RFID Locker. The ATC RFID Locker is designed for ease of use and quick response. The following is the standard workflow for issuing and returning tools from an ATC RFID Locker.

Issue/Return

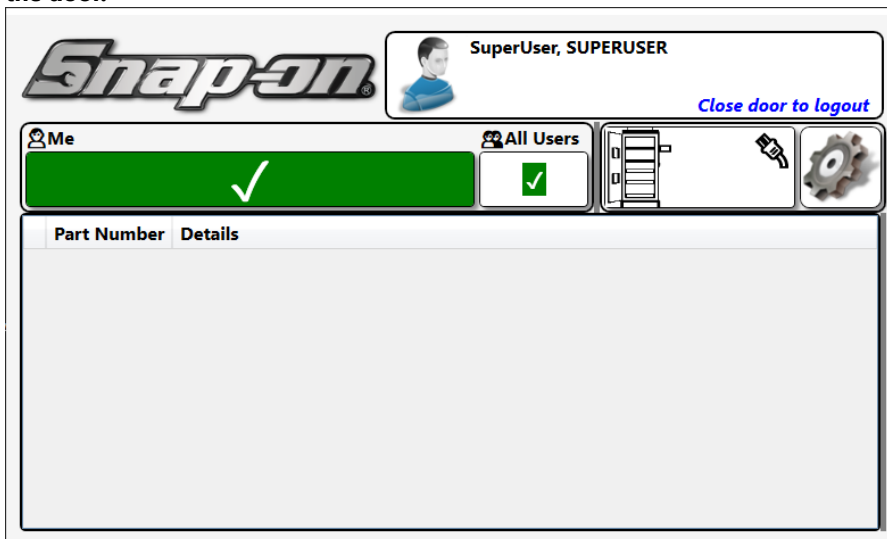
The workflows for Issuing and Returning tools from the RFID Locker are similar to each other, with the key differences being whether taking or leaving tool(s) and what information is displayed onscreen.

1. To begin, wave your badge in front of the card reader on the right side of the cabinet. If you are an authorized user, you will hear the clicking sound of the door unlocking. This is represented on the screen with the padlock icon.

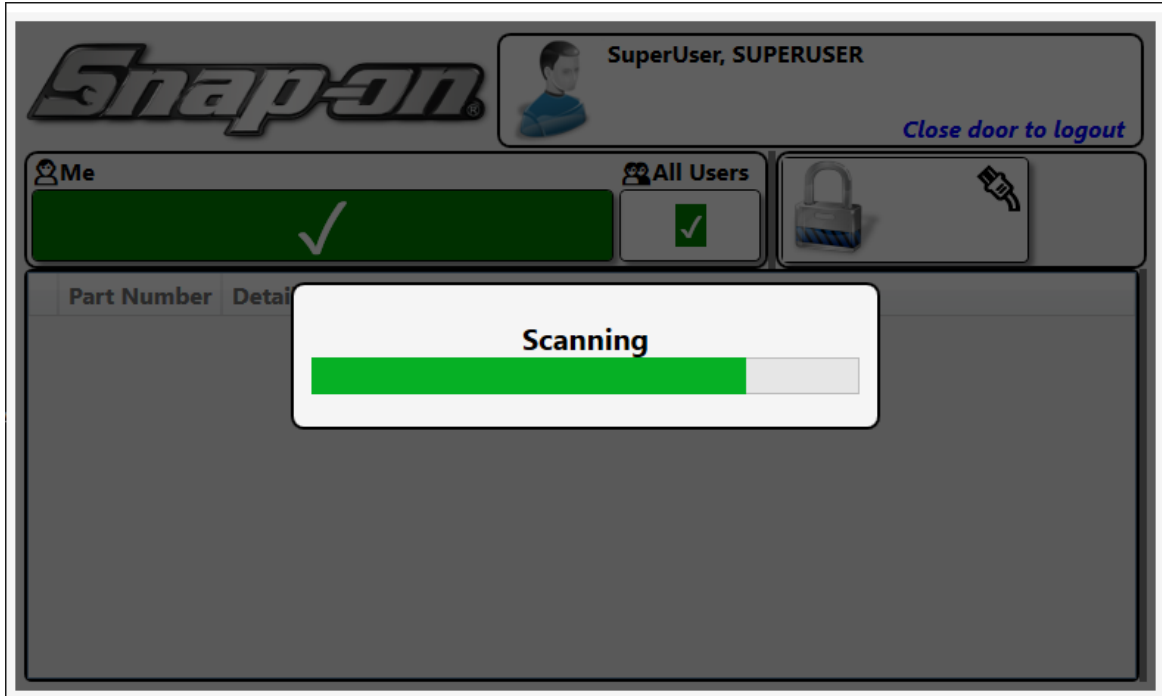


2. Upon opening the door, the system will log you in. You will notice that the padlock icon has now changed to show that the door is open.

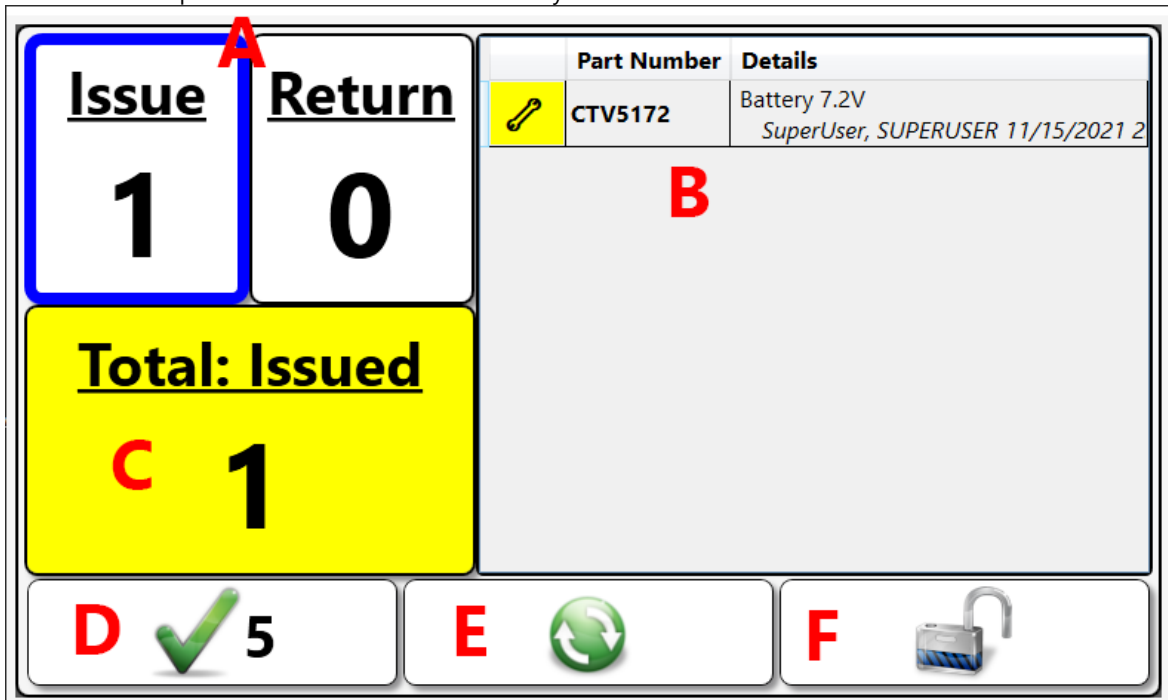
NOTE: Sometimes the door may not unlock properly. This may be due to pulling on the door before the locking mechanism engages. Please make sure to wait for the click of the lock before you pull on the door.



3. Either return the tool(s) in hand to the RFID Cabinet or find the tool(s) you want and remove them from the RFID Cabinet. Then close the door the system will then perform an RFID scan and issue or return whatever tool(s) that were removed/returned.

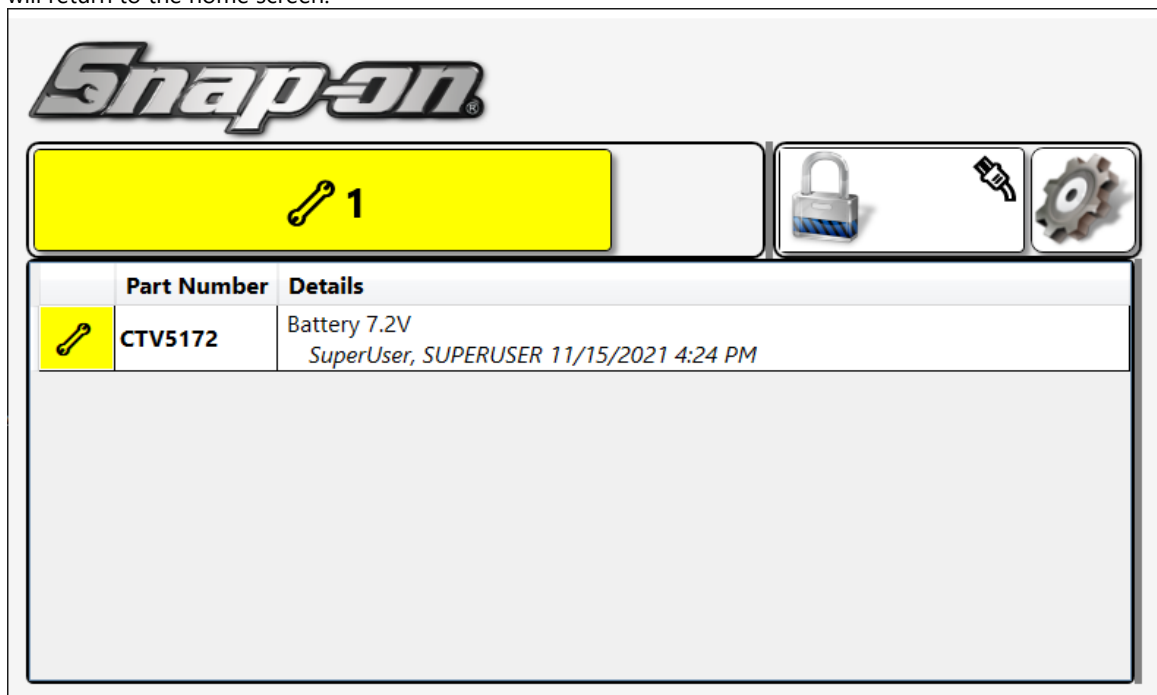


4. You will then be presented with the session summary screen.



- A. Transaction Summary – These are the number of items that you are being issued or have returned. You can tap each to toggle the List of Tools (B).

- B. List of Tools – This is the list of the currently selected tools. You can toggle it to show the list of tools being issued and tools being returned by tapping one of the options of the Transaction Summary (A).
 - C. The number of Issued tools this session – Displays the number of tools that are being issued to the user.
 - D. Confirm – Confirms and completes the transaction. If no input is made in 5 sec, this is automatically executed.
 - E. Rescan – Forces the RFID Cabinet to rescan for RFID Tags.
 - F. Unlock the door – Aborts the transaction and unlocks the door.
5. You can either tap the Confirm button or wait 5 sec, the tool(s) will be issued/returned to you, and the locker will return to the home screen.





L5 Connect User Manual

True-Crib

True Crib Work Flows

The purpose of this wiki is to document the work flows for the True-Crib device. This document will focus on the True-Crib specific portions of the device.

Setting Up Attendants

True-Crib requires an Attendant to unlock the software before any tools can be issued or returned. An employee with special permissions is required to perform this action. To set a user as an attendant, you must use the L5 Connect™ Administration Client.

1. In the admin client, select the user you want to set as an attendant.

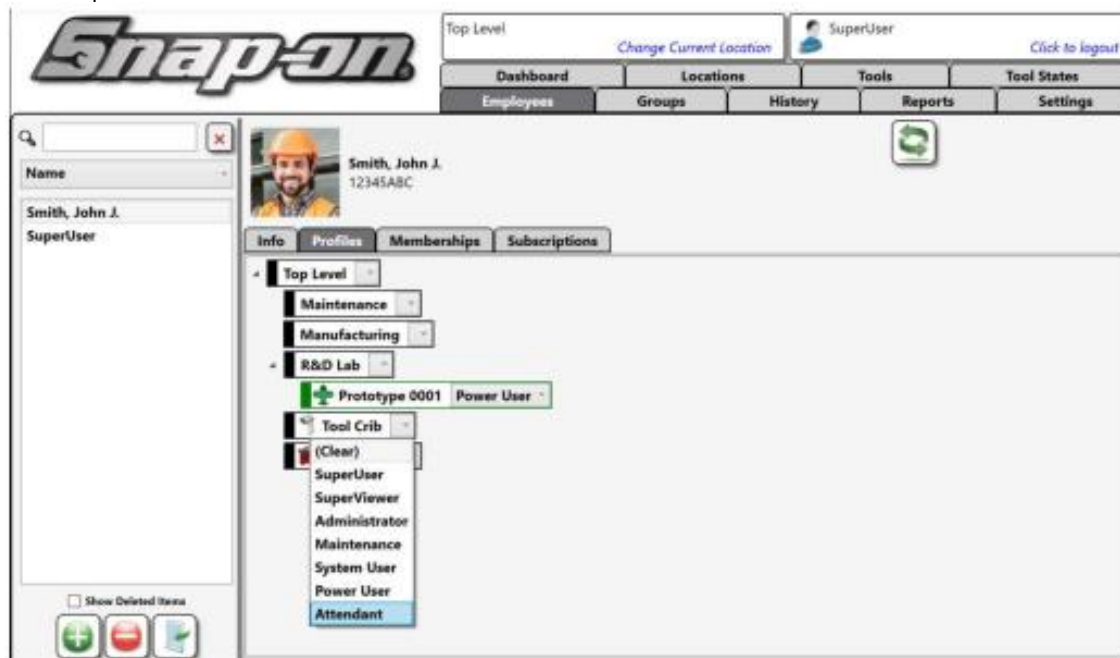


The screenshot displays the Snap-on L5 Connect Administration Client interface. At the top, the Snap-on logo is on the left, and navigation links for 'Top Level', 'Change Current Location', and 'SuperUser' are on the right. Below this is a horizontal menu with 'Dashboard', 'Locations', 'Tools', 'Tool States', 'Employees', 'Groups', 'History', 'Reports', and 'Settings'. The 'Employees' tab is selected. On the left side, there is a search bar and a list of users: 'Smith, John J.' and 'SuperUser'. The main area shows the profile for 'Smith, John J.' with a photo of a worker in a hard hat. The profile includes fields for 'Last Name', 'First Name', 'M. Initial', 'Title', 'Customer ID', 'Email', 'Cell Phone', 'Carrier', 'Home Location', and 'Language'. There are also tabs for 'Info', 'Profiles', 'Memberships', and 'Subscriptions'. On the right side of the profile, there is a 'Badge Info' section with 'Badge' and 'Temp Badge' fields, and a 'Photo' section. At the bottom left, there are three buttons: a green plus button, a red minus button, and a blue refresh button. At the bottom right, there is an 'Admin Login' section with 'User Name' and 'Password' fields, and a 'Clear Login' button.

- Go to the **Profiles Tab** and select the **Tool Crib**.

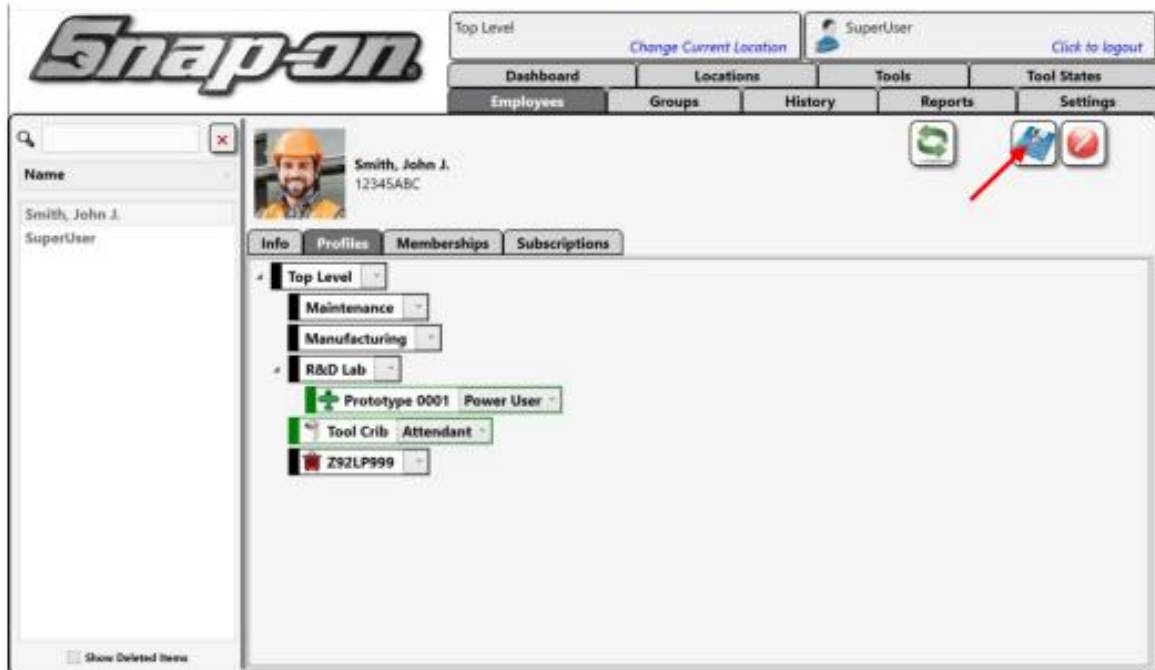


- Use the pull-down and select the **Attendant Profile**.



4. Click **Save** in the Upper right Corner. The Employee can now log in as an attendant.

Click Save in the Upper right Corner. The Employee can now log in as an attendant.



NOTE: Attendant is a custom profile. You must first create the profile before you can assign it to a user. In this case, it is a System User Profile with the added permission Location/Tool Crib Attendant.

For more information and instructions on how to create custom profiles, please see the Profiles Section of the L5 Connect™ Administration Guide.

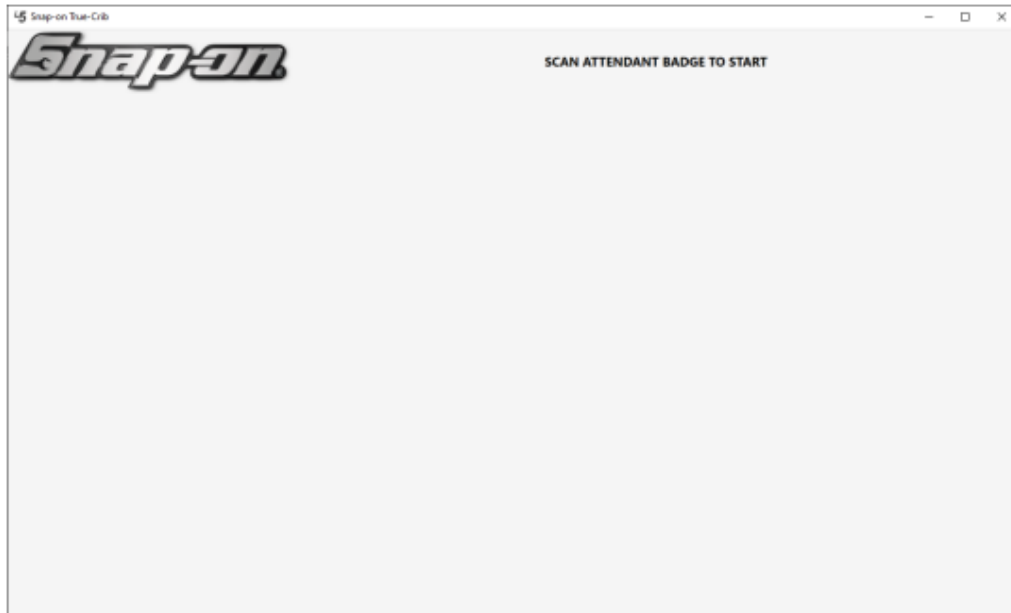


L5 Connect User Manual

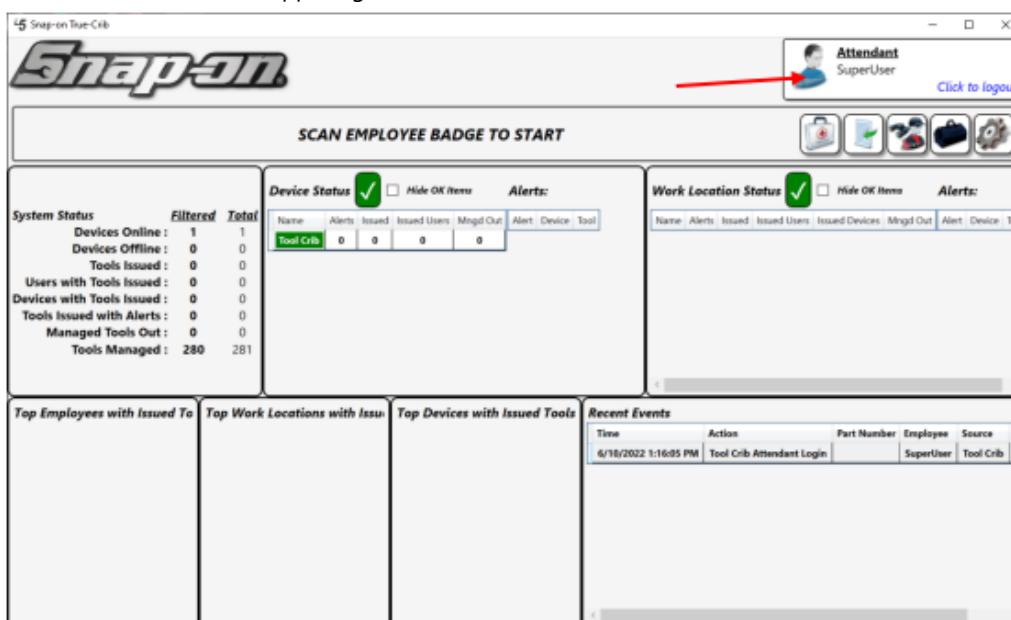
Accessing the Crib

When you start the True-Crib™, you will be prompted to sign in as an attendant. This is the Employee who will be responsible for the Crib. You will need to have the Tool Crib Attendant permission granted to you beforehand to log in as an attendant.

1. To log in, scan your Badge with the RFID card reader.



2. Once you have scanned your Badge, you will be at the Attendant Dashboard. To log out, tap the Current Attendant button on the upper right-hand side of the screen.





L5 Connect User Manual

Scan Tag for Tool Options

In cases where there is an attendant logged in and there are no other overlay windows currently open, you can scan the tag of a tool to open the tool options screen for that tool.

Snap-on True-Crib, v9.12.6.1125, Tool Crib East

TRUE-CRIB

Attendant SuperUser [Click to logout](#)

SCAN EMPLOYEE BADGE TO START

System Status

	Filtered	Total
Devices Online :	1	1
Devices Offline :	0	0
Tools Issued :	14	14
Users with Tools Issued :	4	4
Devices with Tools Issued :	1	1
Tools Issued with Alerts :	2	2
Managed Tools Out :	0	0
Tools Managed :	257	258

Device Status 1 1 ☐ Hide OK Items

Name	Alerts	Issued	Issued Users	Mngd Out
Tool Crib East	15	14	4	0

Alerts:

Alert	Location
Maintenance Overdue	Tool Crib East
Maintenance Overdue	Tool Crib East
Maintenance Overdue	Tool Crib East
Maintenance Overdue	Tool Crib East
Maintenance Overdue	Tool Crib East
In Transit	Tool Crib East
Maintenance Overdue	Tool Crib East
Maintenance Overdue	Tool Crib East
Maintenance Overdue	Tool Crib East
Maintenance Overdue	Tool Crib East
Maintenance Overdue	Tool Crib East
Maintenance Overdue	Tool Crib East

Issued Tools Work Location Status 1

Name	Alerts	Issued	Issued Users	Issued Devices	Mngd Out
Work Loc2	0	1	1	1	0

Alerts:

Alert	Location	Tool

Top Employees with Issued Tools

Plane Maintenance Hangar, Harry	10
Plane Maintenance Hangar, Preston	2
Runner, Rhode	1
Smith, John J.	1

Top Work Locations with Issued Tool

Item Assembly 9000	2
False Org	1
Work Loc2	1

Top Devices with Issued Tools

Tool Crib East	14
Z94B/001	4

Recent Events

Time	Action	Part Number	Employee	Source	Destination
------	--------	-------------	----------	--------	-------------

From this screen, simply scan the tag of a tool in the crib with an approved L5 Connect barcode scanner.

Snap-on True-Crib, v9.12.6.1125, Tool Crib East

TRUE-CRIB

Attendant SuperUser

Editing 5970000374158

5970000374158
Tape, electrical, black
Tool Crib East

Info **Issued** **Status** **Attachments**

Quantity 20 + -

Customer ID

Serial Number (Tool)

Additional Info

User Label 2

Tag 100008 ✎ ✖ 🖨 🔍

Color ID Tag ✎ ✖

Home Location Tool Crib East ✎

ToolID 100008

Default Part # / Desc. 5970000374158 / Tape, electrical, black



L5 Connect User Manual

Issuing and Returning Tools

Once an attendant has signed into the True-Crib™, they can then begin to issue and return tools. All tool exchanges are done manually by the Crib Attendant. Employees authorized to utilize the tool crib must have permission to the tool crib for the attendant to issue and return tools to them.

When the Employee scans their Badge, it starts a session in which they can check out and return tools simultaneously. All transactions are saved when the session is closed. The Employee will then be presented with a summary screen letting them know how many tools were issued and returned during the session.

Issue a Tool

1. To issue a tool, an attendant must log in to unlock the system. While on the True-Crib™ Dashboard, an employee must scan their Badge to start the process.

System Status	
Filtered	Total
Devices Online :	1
Devices Offline :	0
Tools Issued :	0
Users with Tools Issued :	0
Devices with Tools Issued :	0
Tools Issued with Alerts :	0
Managed Tools Out :	0
Tools Managed :	280
	281

Device Status	
Name	Alerts
Tool Crib	0

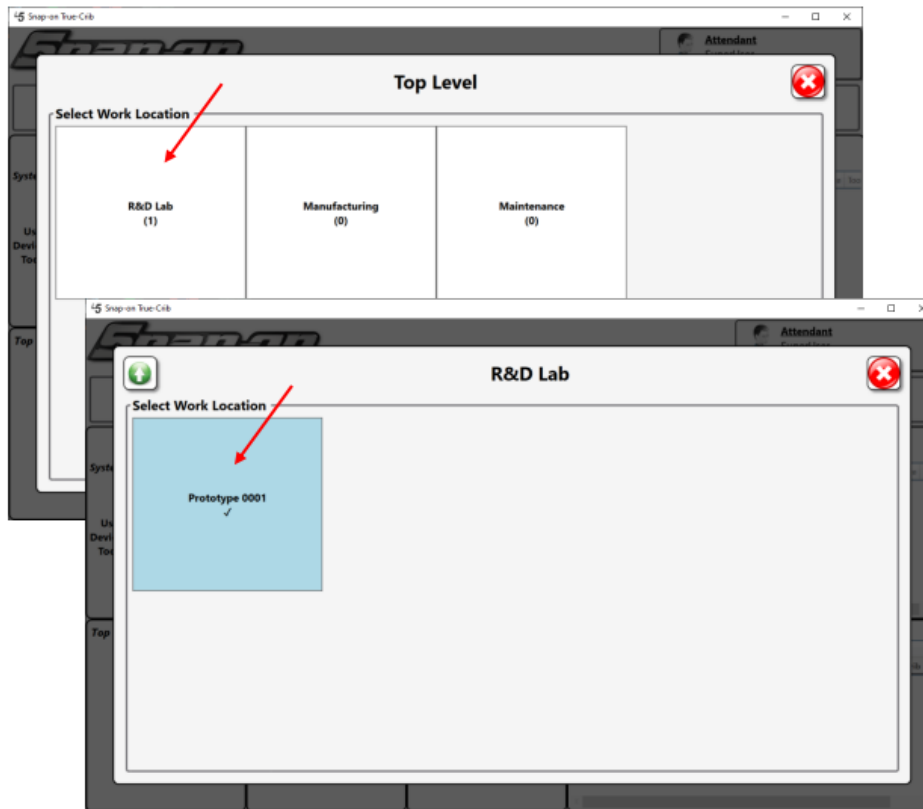
Work Location Status	
Name	Alerts

Recent Events	
Time	Action
6/16/2022 1:16:05 PM	Tool Crib Attendant Login

2. Once True-Crib™ scans the Badge, it will prompt you to select a Work Location if one is present. If there are no work locations in the system, this prompt will not display.

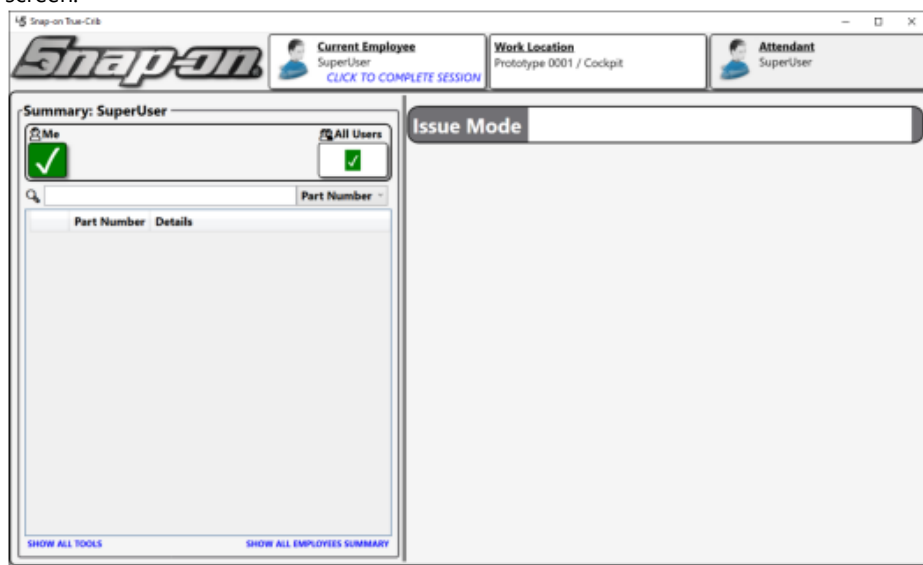
Note: More information about Locations can be found in the L5 Connect™ Administration Guide.

The example below shows three locations with the R&D Lab location containing 1 Work location. First, select R&D and then select Prototype 0001 as the work location to assign the tool.

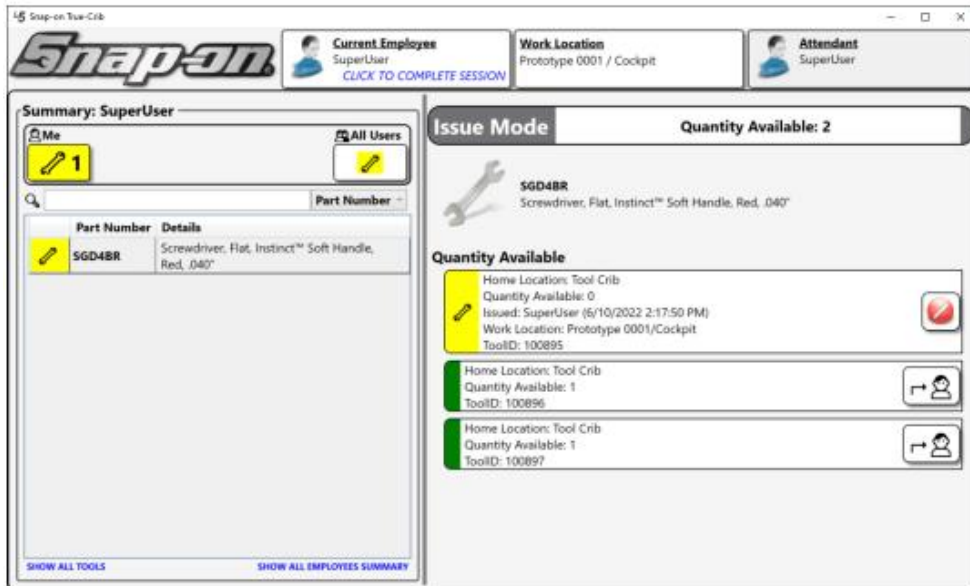


NOTE: Even though you can navigate the entire Location Tree, you will only see work locations that the employee has access to.

- Once you have selected a Work Location (if available), you will be presented with the tool issue and return screen.



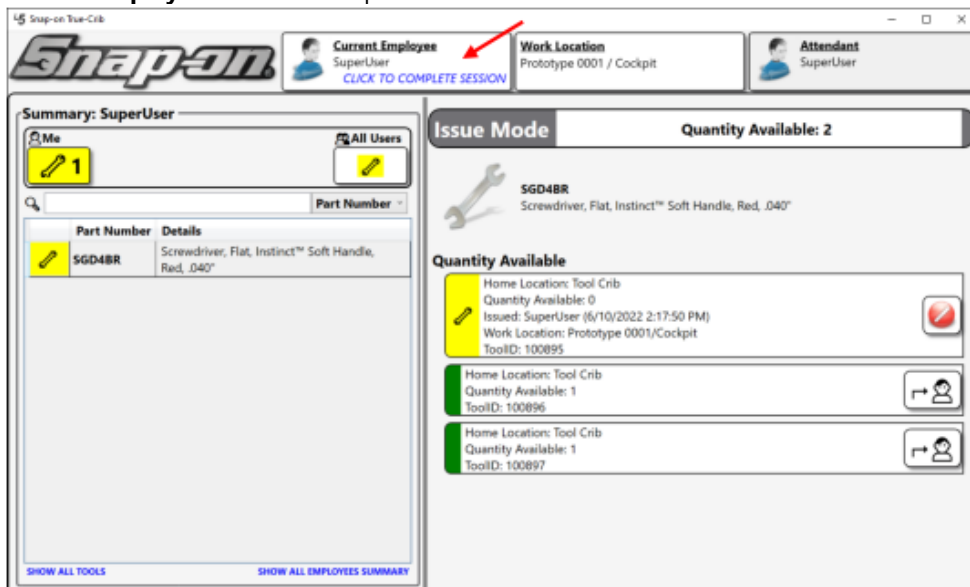
- True-Crib™ can utilize barcode tags that can be scanned to issue and return tools quickly. For example, scan the barcode for a **.040" Flat-head Screwdriver**. Once you do, the system will find the chosen tool and select one instance of that tool to be issued if there is one available.



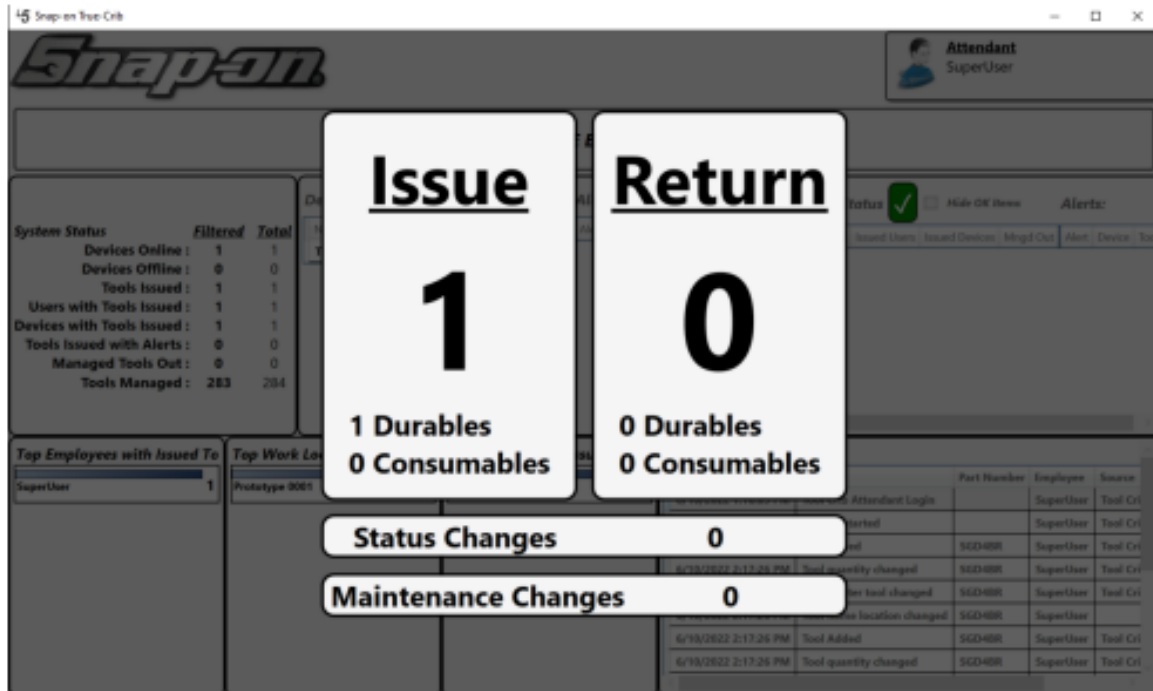
NOTE: If there are not Tool Instances available to Issue, you will receive an error via audio feedback. For more information about tools and Instances, please read the Tools section of the L5 Connect™ Administration Guide.

If the wrong tool instance is selected accidentally, you can clear your selection by clicking on the cancel button.

- Now that you have scanned the tool and selected an available instance, you are ready to end the session and issue the tool to the Employee. The Employee will need to either swipe their badge again or click on the **Current Employee** button to complete the transaction.



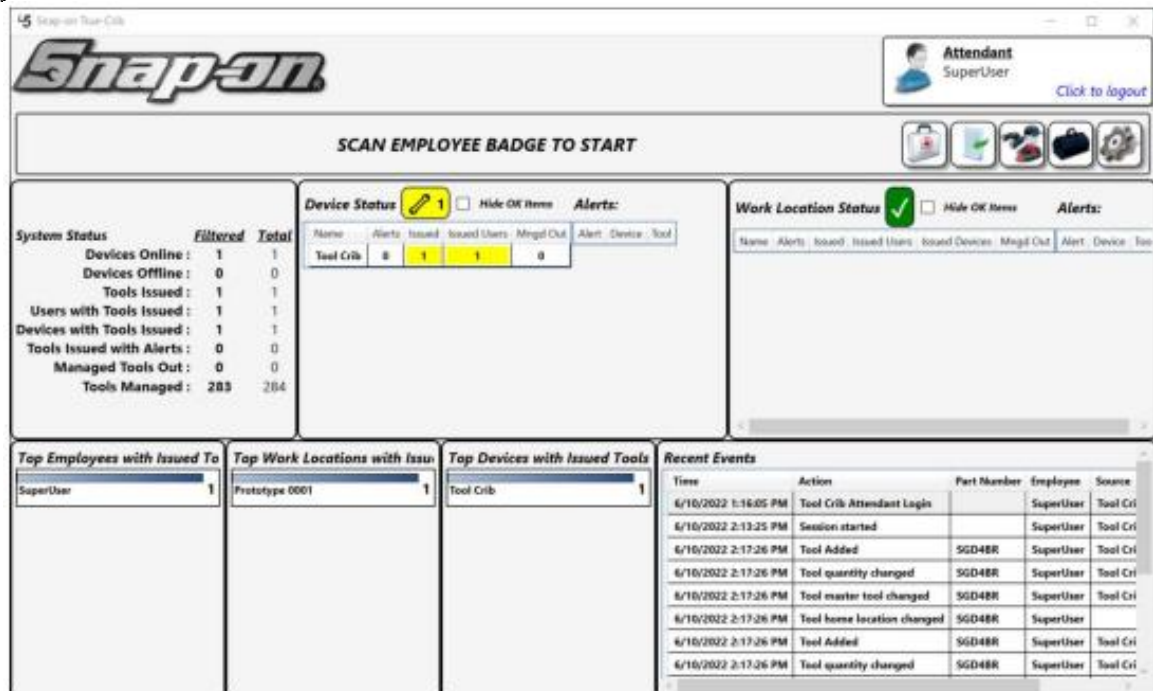
- You will then be presented with a transaction summary that displays the number of tools issued/returned during the session.



The screenshot shows the Snap-on L5 Connect dashboard. In the center, there are two large white boxes with black text. The left box is titled "Issue" and displays a large "1" with "1 Durables" and "0 Consumables" below it. The right box is titled "Return" and displays a large "0" with "0 Durables" and "0 Consumables" below it. Below these boxes, there are two more white boxes with black text. The left one is titled "Status Changes" and displays "0". The right one is titled "Maintenance Changes" and displays "0". In the background, the dashboard shows various system status metrics, top employees with issued tools, and a recent events log.

The tool is now issued to the Employee.

- You will now notice that the Dashboard has been updated to reflect the new status of the tool that was just issued.



The screenshot shows the Snap-on L5 Connect dashboard after the tool has been issued. The "Issue" box now displays "1" with "1 Durables" and "0 Consumables". The "Return" box still displays "0" with "0 Durables" and "0 Consumables". The "Status Changes" box still displays "0". The "Maintenance Changes" box still displays "0". The dashboard also shows updated system status metrics, top employees with issued tools, and a recent events log.



L5 Connect User Manual

8. Suppose you click on the device with the status, you will get the tool-issued information. You can click on the X to clear the tool info from the screen.

The screenshot displays the Snap-on L5 Connect web application interface. At the top, the Snap-on logo is on the left, and the user is logged in as 'Attendant SuperUser' on the right. Below the header is a 'SCAN EMPLOYEE BADGE TO START' button. The main content area is divided into several sections:

- System Status:** A table showing filtered and total counts for various system metrics.
- Device Status:** A table showing device status with filters for Alerts, Issued, Issued Users, and Mngd Out. It includes a sub-table for 'Issued' tools.
- Work Location Status:** A table showing work location status with filters for Alerts, Issued, Issued Users, Issued Devices, and Mngd Out.
- Top Employees with Issued To:** A table showing the top employees with issued tools.
- Top Work Locations with Issued To:** A table showing the top work locations with issued tools.
- Top Devices with Issued Tools:** A table showing the top devices with issued tools.
- Recent Events:** A table showing a log of recent events, including tool additions, changes, and sessions.

	Filtered	Total
Devices Online :	1	1
Devices Offline :	0	0
Tools Issued :	1	1
Users with Tools Issued :	1	1
Devices with Tools Issued :	1	1
Tools Issued with Alerts :	0	0
Managed Tools Out :	0	0
Tools Managed :	283	284

Name	Alerts	Issued	Issued Users	Mngd Out
Tool Crib	8	1	1	0

Tool	Employee
SGD48R	SuperUser

Name	Alerts	Issued	Issued Users	Issued Devices	Mngd Out
------	--------	--------	--------------	----------------	----------

Employee	Count
SuperUser	1

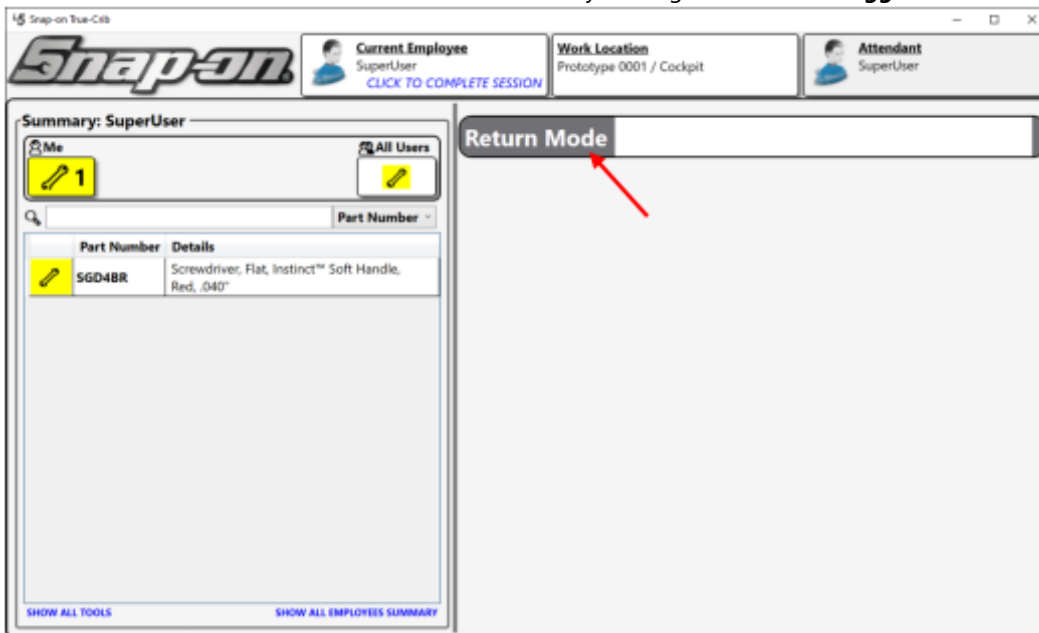
Work Location	Count
Prototype 0001	1

Device	Count
Tool Crib	1

Time	Action	Part Number	Employee	Source
4/18/2022 1:16:05 PM	Tool Crib Attendant Login		SuperUser	Tool Crib
4/18/2022 2:13:25 PM	Session started		SuperUser	Tool Crib
4/18/2022 2:17:26 PM	Tool Added	SGD48R	SuperUser	Tool Crib
4/18/2022 2:17:26 PM	Tool quantity changed	SGD48R	SuperUser	Tool Crib
4/18/2022 2:17:26 PM	Tool master tool changed	SGD48R	SuperUser	Tool Crib
4/18/2022 2:17:26 PM	Tool home location changed	SGD48R	SuperUser	Tool Crib
4/18/2022 2:17:26 PM	Tool Added	SGD48R	SuperUser	Tool Crib
4/18/2022 2:17:26 PM	Tool quantity changed	SGD48R	SuperUser	Tool Crib

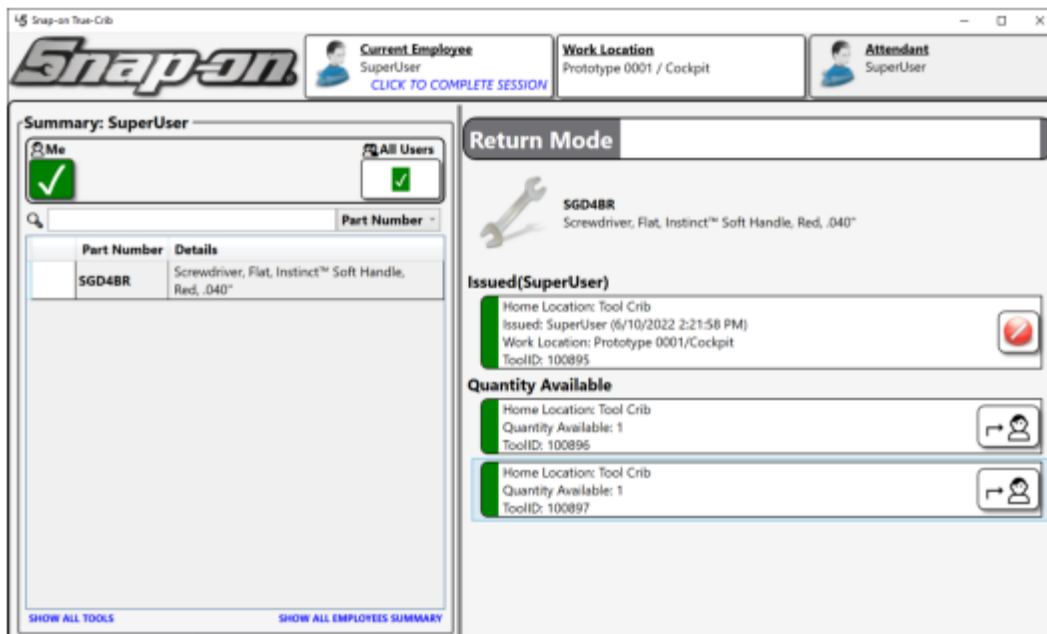
Return a Tool

1. Returning a tool follows a similar process to issuing a tool. First, an attendant will unlock the system. Then, the Employee will use their Badge to start a session and select a **Work Location** (if available). This time when they do, since they have tools checked out, the system will default to a **Return Mode** instead of **Issue Mode**. You can switch between these modes by clicking on the **Mode Toggle** button.

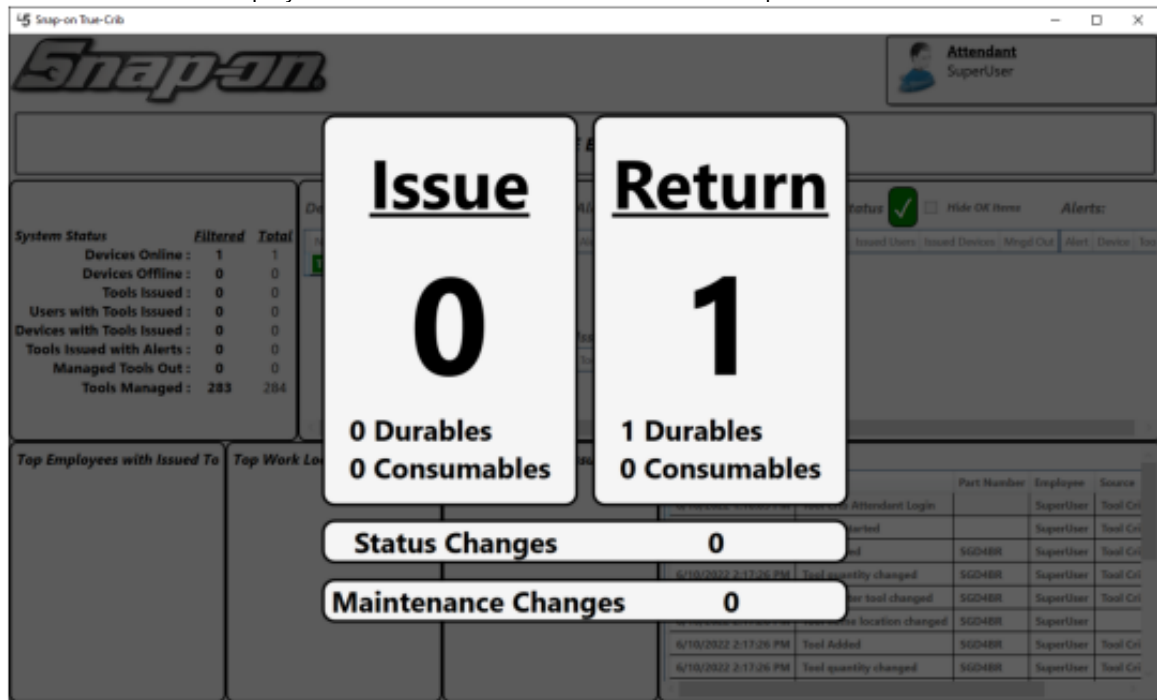


Switching between these two modes during a session will allow you to check-in and out tools within the same session. You can also press **I** or **R** followed by **Enter** on the keyboard to switch modes quickly.

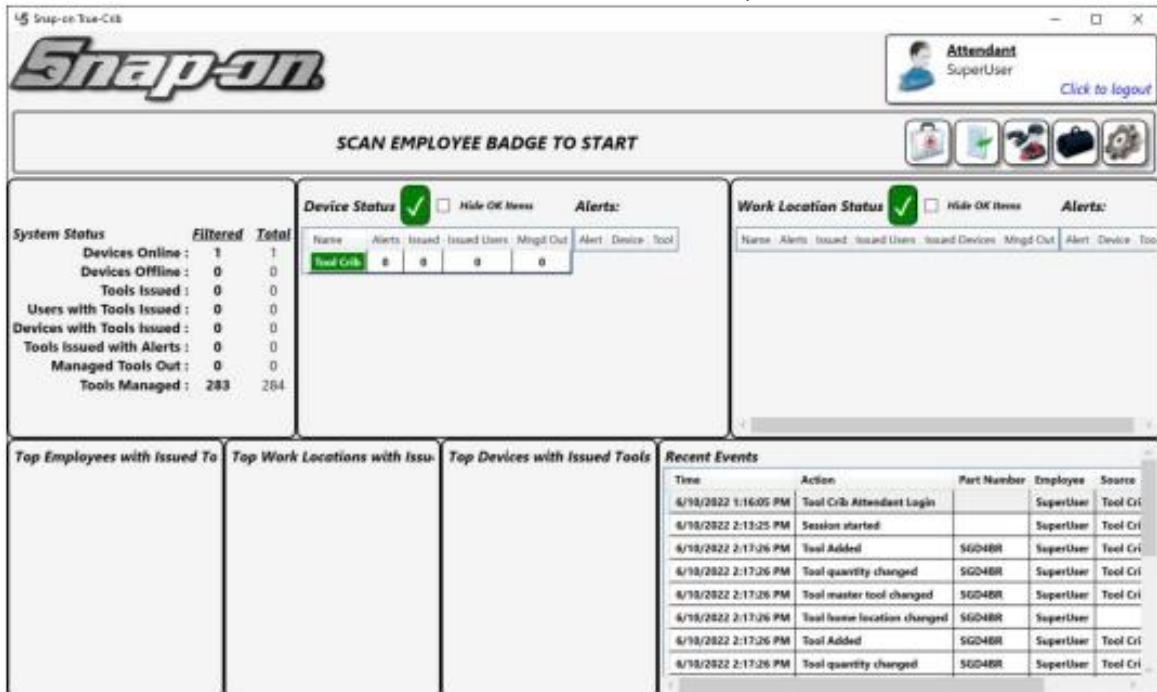
2. In **Return Mode**, scan the barcode for the tool to be returned. When you do, the assigned instance will be marked for return.



- Click on the Current Employee Button to close out of the session to complete the return.



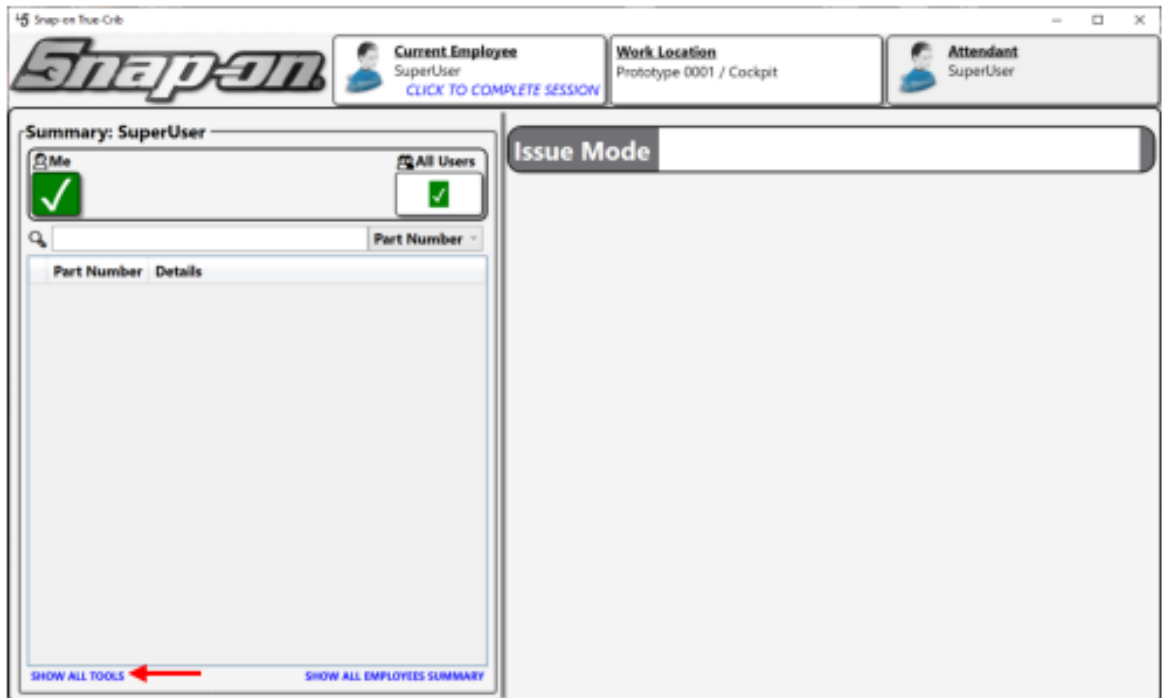
- The tool has been returned to the Crib, and the Dashboard has been updated with the new information.



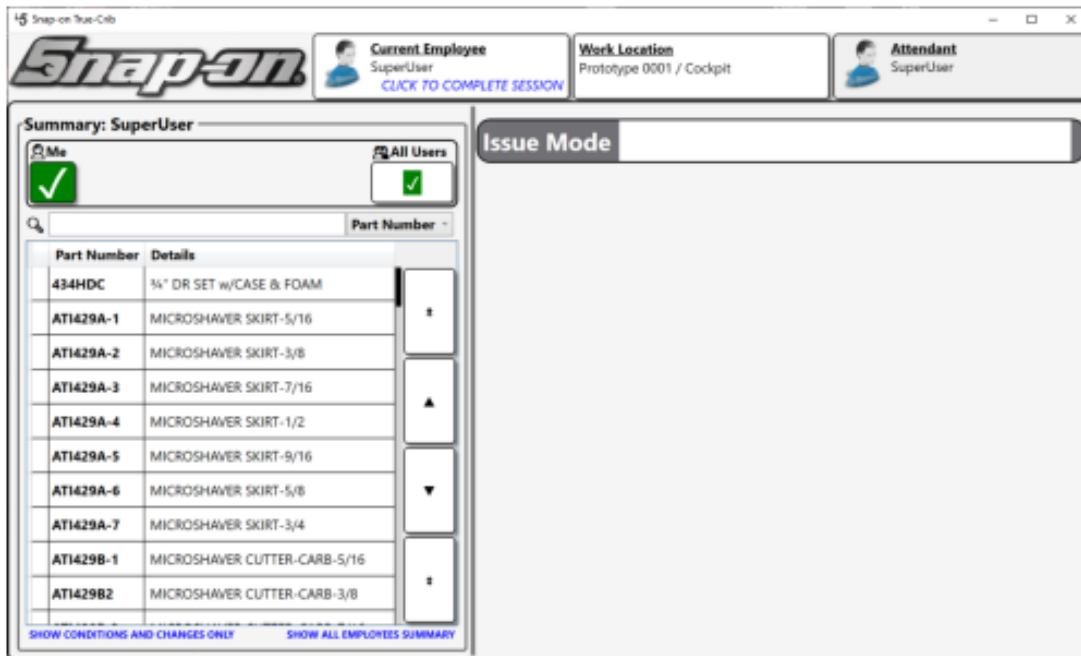
Tools Without Barcodes

Sometimes, you may have a tool where a barcode has fallen off, becomes unreadable, or is otherwise unavailable. You can still issue and return these tools manually. To do this, you will need to search for it in your tool list.

1. In the default view, you will only see tools currently issued to the Employee. To see all tools, click the **SHOW ALL TOOLS** button in the lower left-hand corner.



- This will list all tools within the Crib.



The screenshot shows the Snap-on L5 Connect interface. At the top, there's a header with the Snap-on logo, a 'Current Employee' section with 'SuperUser' and a 'CLICK TO COMPLETE SESSION' link, a 'Work Location' section with 'Prototype 0001 / Cockpit', and an 'Attendant' section with 'SuperUser'. Below the header, there's a 'Summary: SuperUser' section. On the left, there's a 'Me' section with a green checkmark and an 'All Users' section with a green checkmark. Below these, there's a search bar and a 'Part Number' dropdown menu. The main area displays a table of tools with columns for 'Part Number' and 'Details'. The table lists several tools, including 434HDC, AT1429A-1 through AT1429A-7, and AT1429B-1 through AT1429B-2. To the right of the table, there's an 'Issue Mode' section.

Part Number	Details
434HDC	1/4" DR SET w/CASE & FOAM
AT1429A-1	MICROSHAVER SKIRT-5/16
AT1429A-2	MICROSHAVER SKIRT-3/8
AT1429A-3	MICROSHAVER SKIRT-7/16
AT1429A-4	MICROSHAVER SKIRT-1/2
AT1429A-5	MICROSHAVER SKIRT-9/16
AT1429A-6	MICROSHAVER SKIRT-5/8
AT1429A-7	MICROSHAVER SKIRT-3/4
AT1429B-1	MICROSHAVER CUTTER-CARB-5/16
AT1429B-2	MICROSHAVER CUTTER-CARB-3/8

In larger cribs, this list can become quite long. To assist the attendant in finding the correct tool, there is a search feature within the tool list. This search can be used to filter the list. The pull-down by the search box allows you to search by the following:

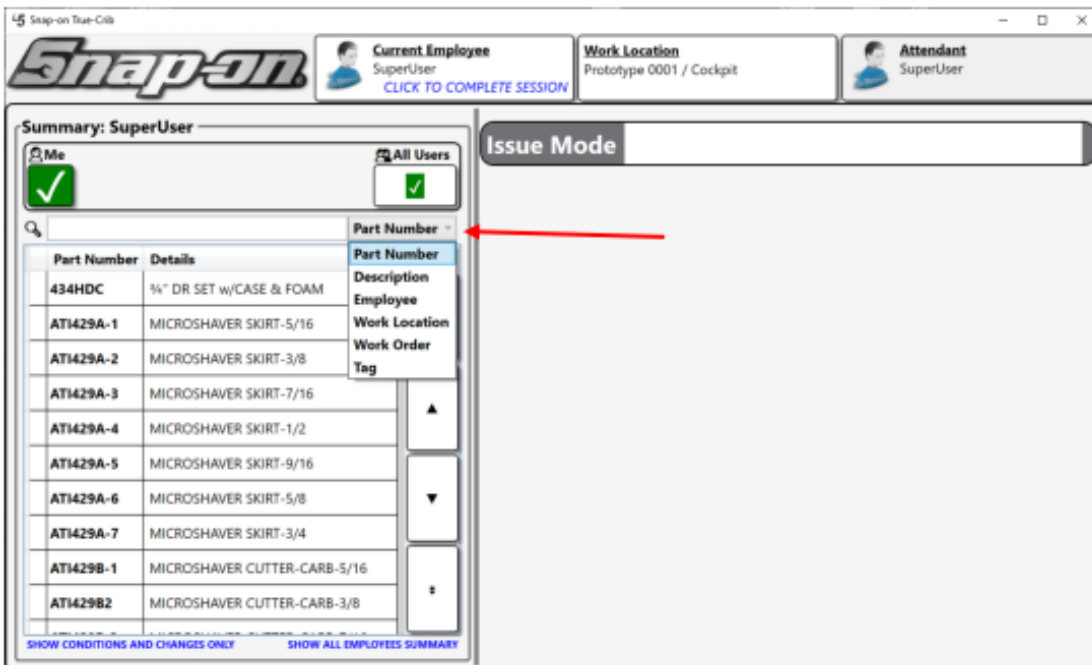
PART NUMBER – Search based on the tool's internal part number.

DESCRIPTION – Search based on a description of the tool in the system.

EMPLOYEE – Search for the tool to Employee it was issued.

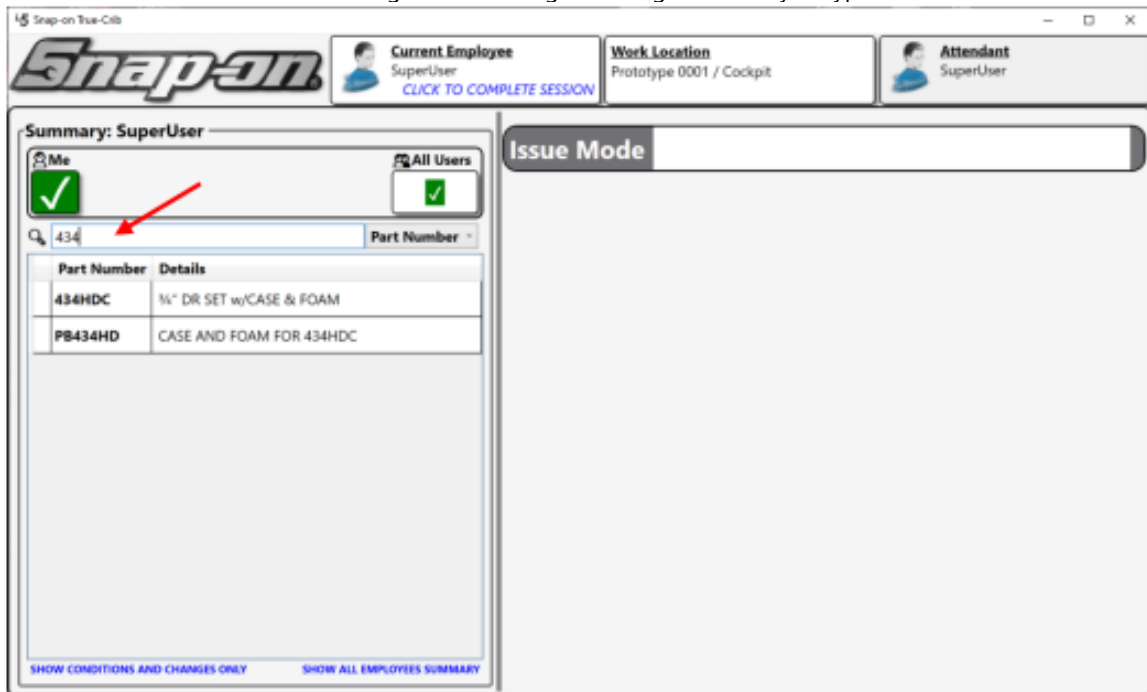
WORK LOCATION – Search for the tool based on the Work Location it was assigned.

WORK ORDER – Search for the tool based on the Work Order used to issue the tool.

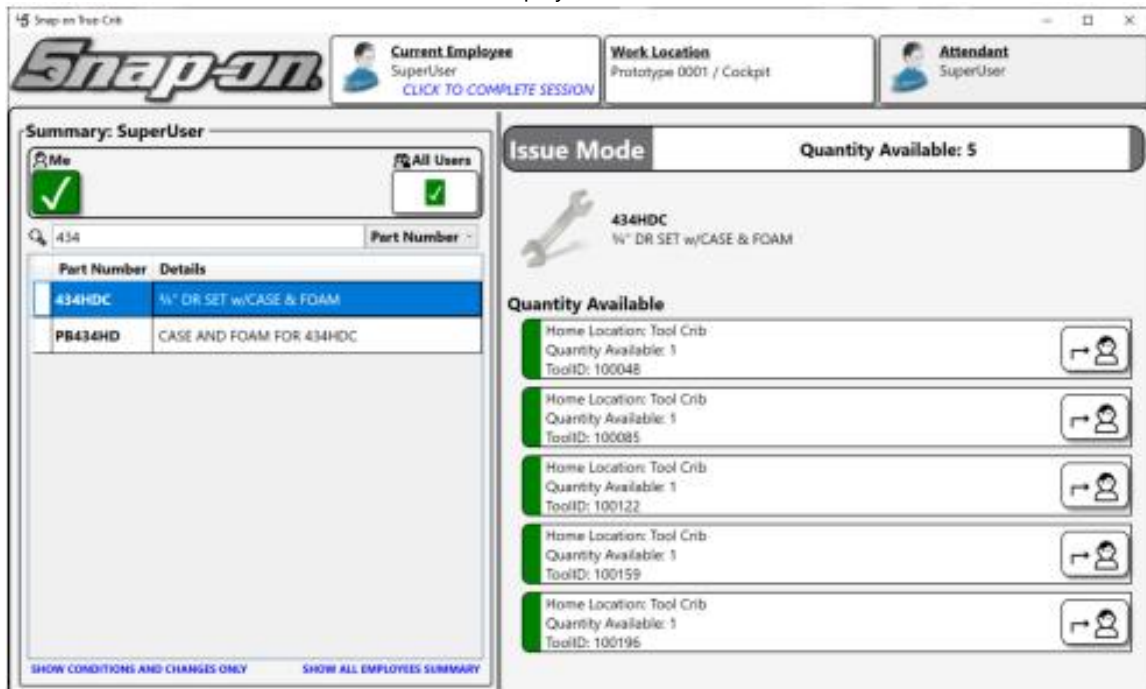


This screenshot is similar to the previous one, but it shows the search dropdown menu open. A red arrow points to the dropdown menu, which lists the following options: 'Part Number', 'Description', 'Employee', 'Work Location', 'Work Order', and 'Tag'. The 'Part Number' option is currently selected.

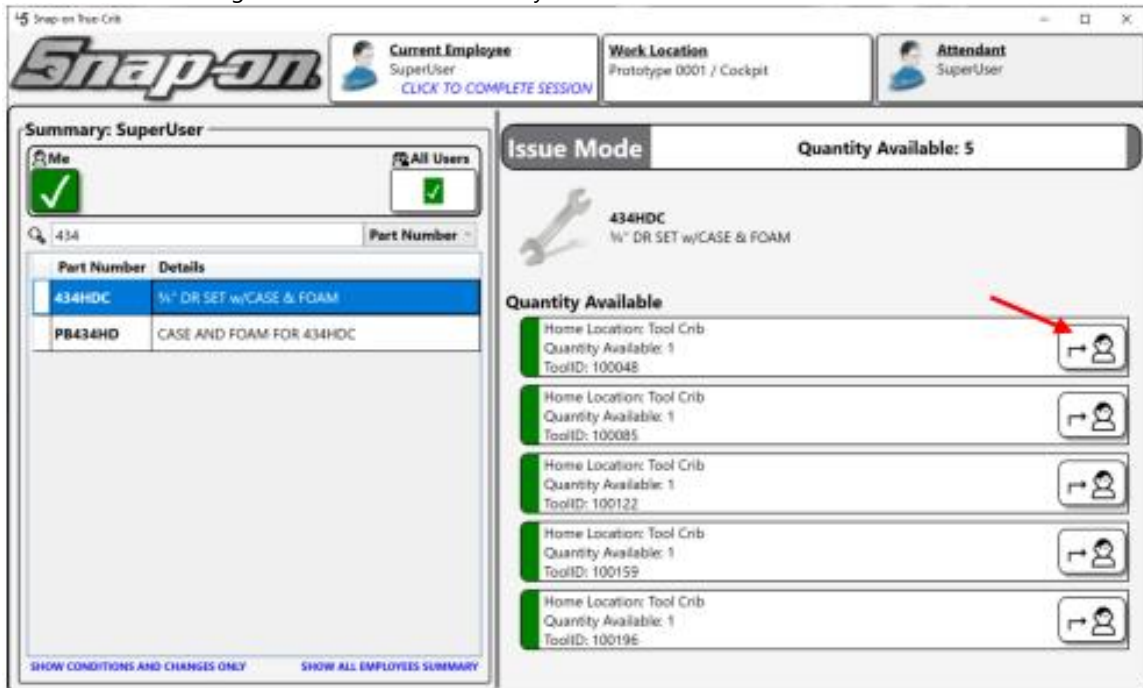
This search bar is contextual, meaning that it will begin filtering the list as you type.



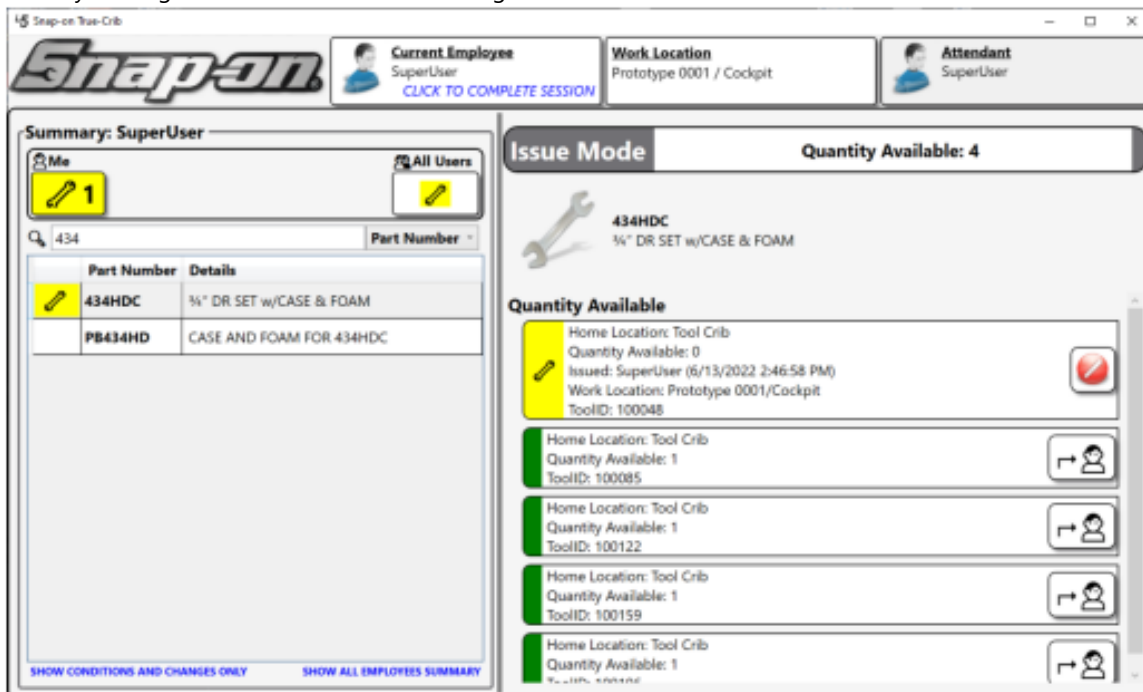
- Once you have filtered the list and found the tool you are looking for, click on the tool. You will be given the **Tool Instance** sub-screen. This screen will display all instances of that tool within the Crib.



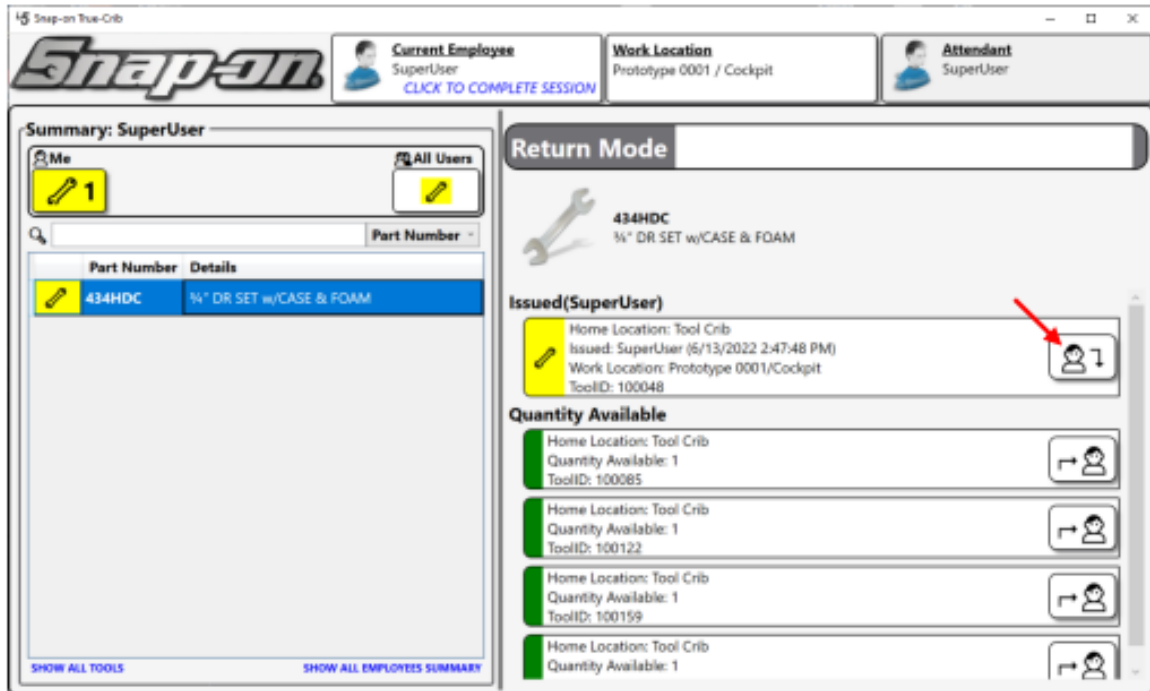
- As You can see, this Crib has five DR Sets available. To issue one of these to the Employee, click on the **issue** button on the right side of the tool instance you wish to issue.



- Once you click the Issue button, the tool will be marked as a pending issue. You can cancel the pending issue by clicking on the **cancel** button to the right of the selected instance.



6. If no more tools need to be issued, you will close the session the same way as you normally would. To return a tool manually, an Employee will log in normally. When they do, it will display a list of tools they currently have issued like normal. Simply select the tool from the list and click on the RETURN button to place the tool in a pending return.



7. Once you have all the tools ready to return, the user will log out like normal, and the tools will be returned to the Crib.

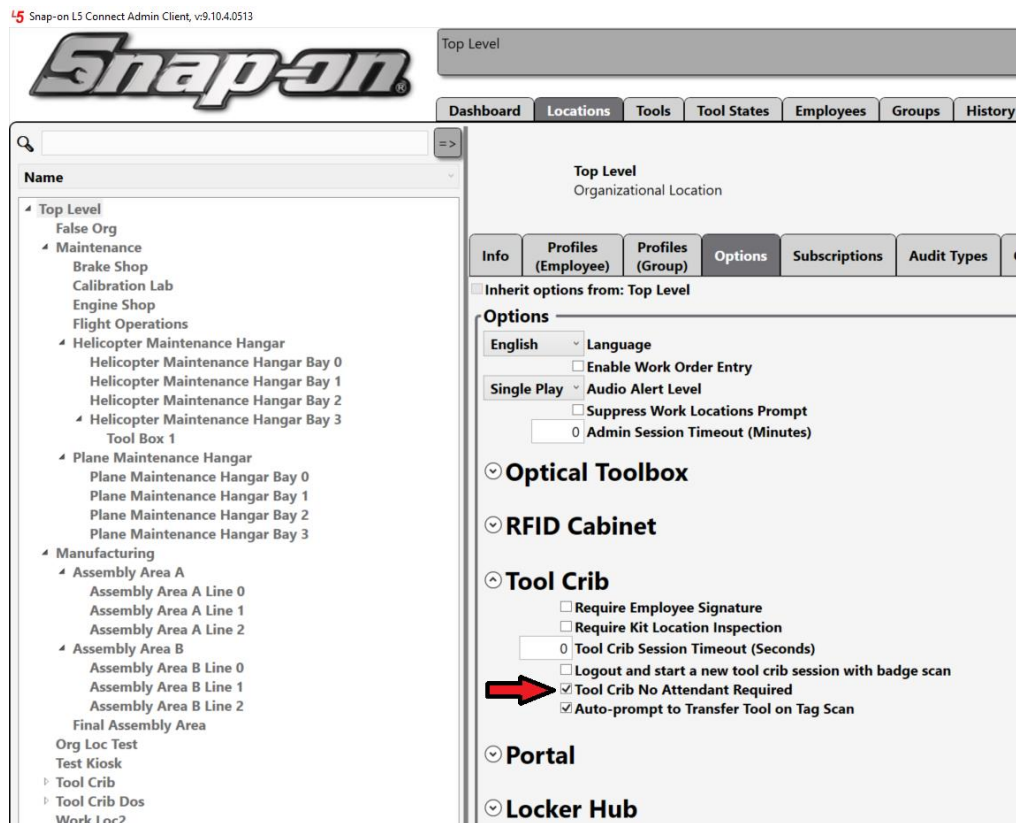
No Attendant Mode

The tool crib can be configured in such a way that an attendant is not required to log on to issue and return tools.

Configuring the No Attendant Mode

1. Using the Admin Client, navigate to the Locations Tab
2. Select the desired location level to implement the option change. (If setting the change at an organizational location make sure that no lower location levels override the Options inheritance)
3. Click on the Options sub-tab
4. Check the box for the Tool Crib No Attendant Required option
5. Click the blue disk in the upper-right to save the change
6. The tool crib must be connected to the L5 Connect service to receive the change
7. You may need to log in and out as an attendant once to update the behavior at the tool crib

Admin Client Screen



The screenshot shows the Snap-on L5 Connect Admin Client interface. The top navigation bar includes tabs for Dashboard, Locations, Tools, Tool States, Employees, Groups, and History. The main content area is titled 'Top Level' and shows the 'Options' sub-tab selected. The left sidebar lists various organizational locations, including 'Top Level', 'Maintenance', 'Helicopter Maintenance Hangar', 'Plane Maintenance Hangar', and 'Manufacturing'. The right pane displays the 'Options' configuration for the 'Top Level' location. Under the 'Tool Crib' section, the 'No Attendant Required' option is checked, indicated by a red arrow. Other options include 'Require Employee Signature', 'Require Kit Location Inspection', 'Tool Crib Session Timeout (Seconds)', 'Logout and start a new tool crib session with badge scan', and 'Auto-prompt to Transfer Tool on Tag Scan'.



L5 Connect User Manual

True-Crib Screen

Attendant Required Screen



No Attendant Required Screen

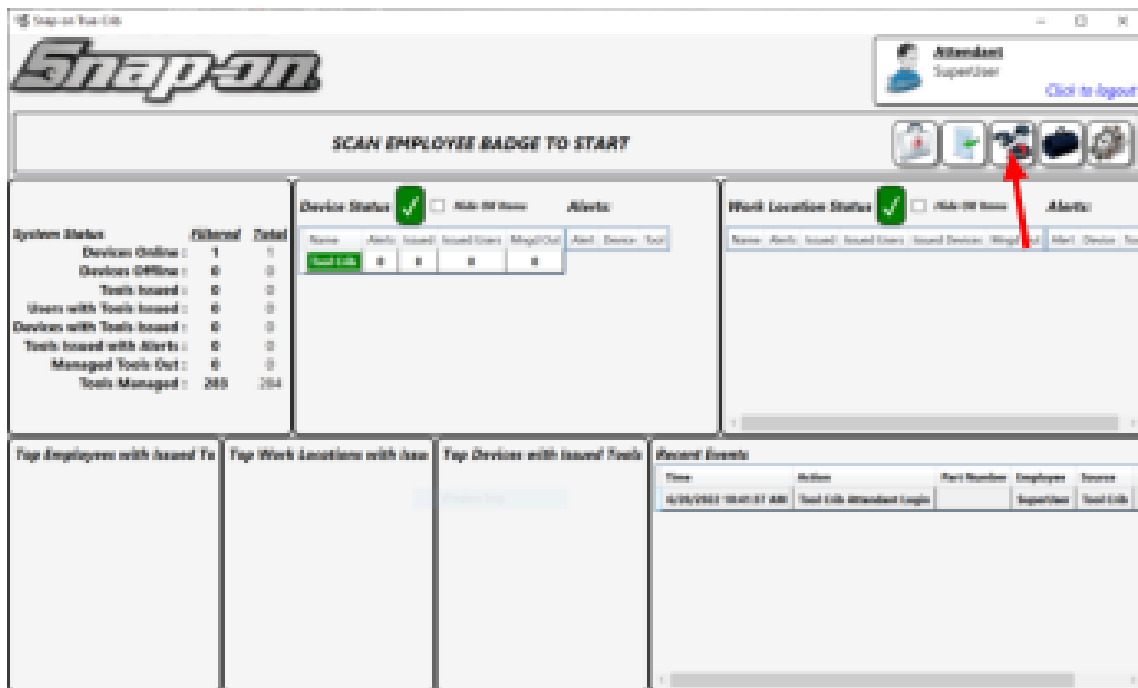


Admin Mode

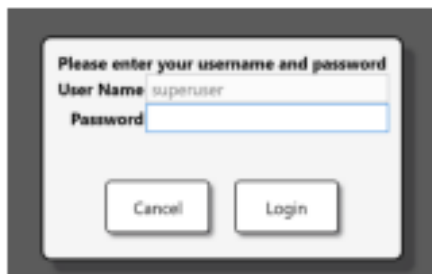
True-Crib™ contains an administrative mode like the L5 Connect™ Administration Client. However, this Mode is limited to just the Crib itself. It doesn't allow you to access any other device or make system-wide changes.

To access the administration mode, you must have an Admin Username and Password and permissions to access the admin functions.

1. You will first need to unlock the Crib as an attendant. Then click on the Admin Mode button.



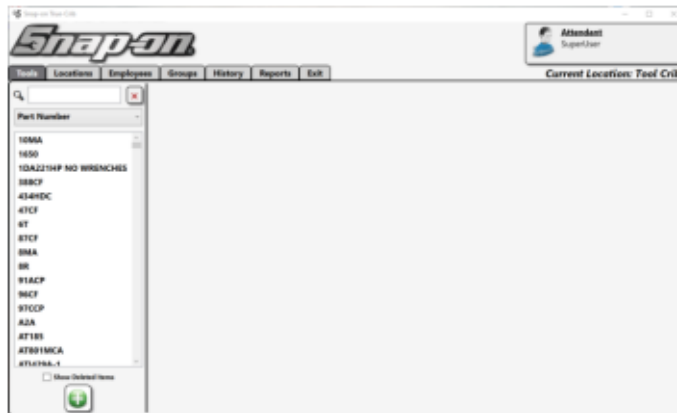
2. You will then need to enter your Admin Password as the username will automatically fill with the username of the currently signed-in attendant (if they have one).





L5 Connect User Manual

3. You will now see a screen like the Administration Client that will allow you to change the Tool Crib. Click on the Exit tab to return to the True-Crib™ Dashboard.



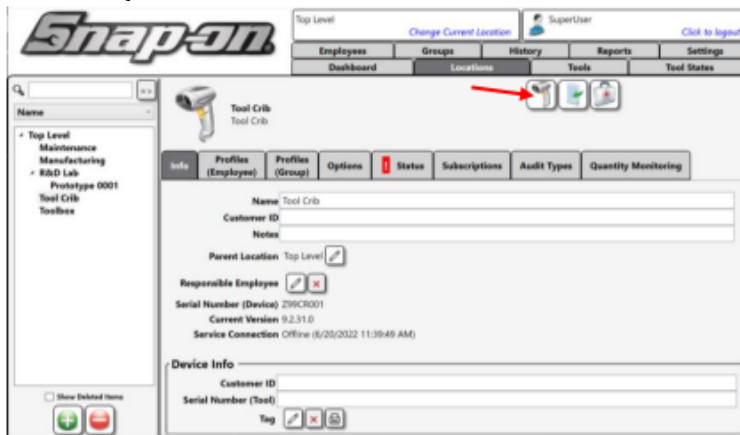
Note: For more information about these tabs and how to use them, please see the L5 Connect™ Administration Guide.

True-Crib Seats

If you need multiple transaction points (checkout lanes) in a single crib, you can use additional True-Crib™ Seats. True-Crib™ Seats allow users to open a remote terminal session to a True-Crib™ instance using the L5 Connect™ Administration Client.

The number of seats available is determined by the number of seats you purchase with your license. When a seat is not in use, it is part of a pool of seats that can be issued when someone starts a session. When they end a terminal session, the seat returns to the pool. You do not have to assign a seat to a PC statically. This allows multiple people to share seats that are not working simultaneously.

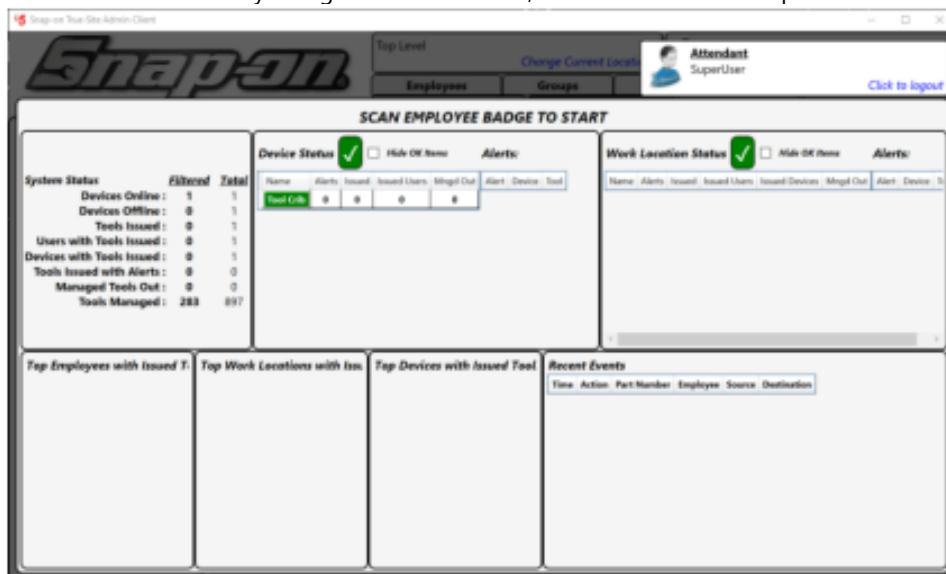
1. To start a Terminal session with a True-Crib™ instance, you must have a Username and Password to log into the L5 Connect™ Administration Client. Once you have logged in, go to the locations tab, and select the True-Crib™ you want to connect. Then click on the Tool Crib Seat button.



NOTE: The True-Crib™ software must be online to connect.

If the True-Crib™ software is not running, you will get a device offline error.

2. This will open the True-Crib Terminal Session in Attendant mode. You can now issue and return tools from the admin client. When you log out of the session, the seat returns to the pool.





L5 Connect User Manual

ATC Portal

L5 Connect™ ATC Portal Installation Guide

This guide ships with the ATC Portal product.

ATC Portal Workflows

This document will walk you through the basic operational workflows of the ATC Portal.

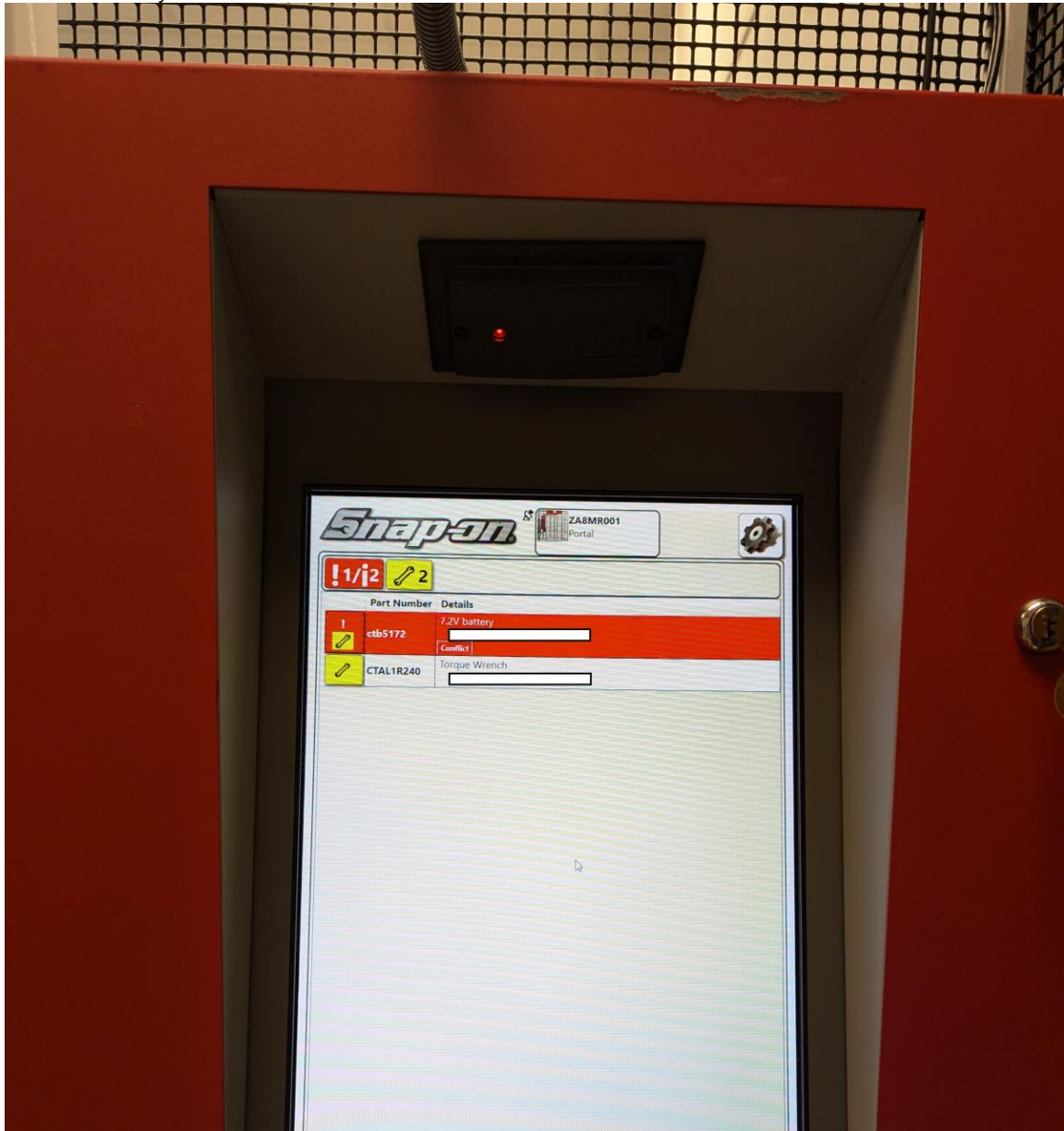
Basic Operation

Issue Items


1. Scan your badge using the external badge scanner. If you have access to the device, you will hear the message **"Access Granted"**. This will allow access into the ATC Portal cage outer door. **Note: The door will shut and lock behind you.**
NOTE: If someone is already in the Portal, or if something is obstructing the path through the Portal, you will need an Attendant to override and unlock the door to clear the path or wait for the person in the portal to complete their transaction.




2. Grab the item(s) you wish to issue from the Tool Storage area and proceed back to the portal cage closing the doors behind you.
3. Scan you badge using the interior badge scanner located above the screen. The portal will then scan for whatever items you have.





4. Check to make sure all items were properly scanned by the portal. If all items were not detected by the portal press the **Rescan** button. This will only add new tools and not remove tools that have already been detected.



Socket, Sue


Work Location















Me



All Users


3





Tools leaving with me



	Part Number Serial Number	Details	
	CTECH4R600A Serial#TW-0001	600 ft. lb. torque wrench <i>Socket, Sue 9/13/2024 2:37 PM</i>	
	PT1800AL Serial#IW-0001	1" Heavy Duty Impact Wrench <i>Socket, Sue 9/13/2024 2:37 PM</i>	
	WIND100 Serial#	Shop Fan <i>Socket, Sue 9/13/2024 2:37 PM</i>	

Tools returning to stock



Part Number Serial Number	Details
*No Items	


Check out


Rescan


Restock



5. Then click **Check Out**.



Socket, Sue


Work Location














Me



All Users


3





Tools leaving with me


	Part Number Serial Number	Details	
	CTECH4R600A Serial#TW-0001	600 ft. lb. torque wrench Socket, Sue 9/13/2024 2:37 PM	
	PT1800AL Serial#IW-0001	1" Heavy Duty Impact Wrench Socket, Sue 9/13/2024 2:37 PM	
	WIND100 Serial#	Shop Fan Socket, Sue 9/13/2024 2:37 PM	


Tools returning to stock


Part Number Serial Number	Details
*No Items	




Check out

Rescan

Restock


6. Following successful logout, a summary screen will appear on the display showing total number of tools issued/returned and # of tools with status or maintenance changes applied during the transaction. The Exit door will unlock. **Follow the audible instructions and exit the Portal.** The system will log you out and lock the exit door after you exit. **The selected items are now issued to you.**

Return Items

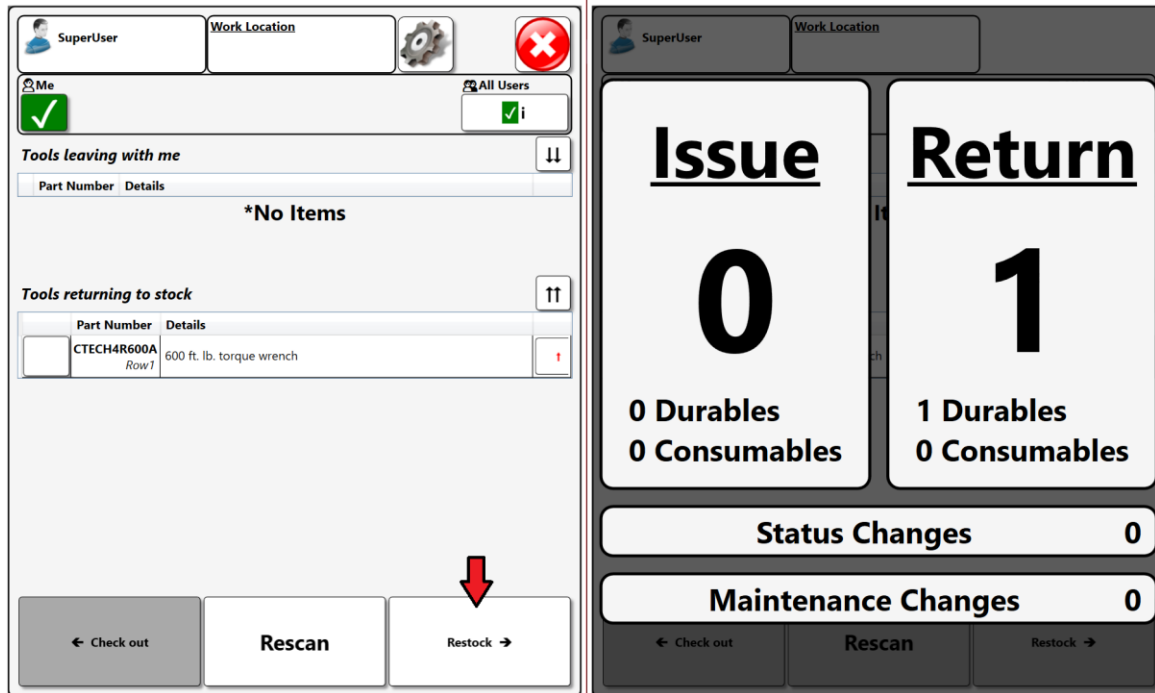
1. While in possession of the items you wish to return to the portal, scan your badge using the external badge scanner. If you have access to the device, you will hear the message "**Access Granted**". This will allow access into the ATC Portal cage. **Note: The door will shut and lock behind you.**



2. Scan your badge using the interior badge scanner located above the screen. The portal will then scan for whatever items you have.



- Check to make sure all items were properly scanned by the portal. Tap the **Restock** button at the bottom of the screen. The system will provide you with a transaction summary. **NOTE: This item has a home location of Row1 in the portal. Defining sub-locations for your portal can help make it for employees to know where to return the tool.**



- Open the door to the Tool Storage area and enter with the items to be returned and deposit them in the appropriate location.
- Re-enter the Portal from the Tool Storage area and close the door.
- To Exit the Portal, proceed as if you were issuing out a tool. When the scan is complete and it doesn't find any tools, tap **CHECK OUT**. The summary screen will show 0 transactions.
NOTE: While leaving the Tool Storage Area, if you need to check out different tools, you have the option to do so while you are leaving the Portal.
- The exit door will then unlock. You can then exit the Portal, make sure the exit door closes completely. **This Return item transaction is now complete.**

Physical Keys

The portal is equipped with two physical key locks that can be used to override some functions of the Portal.

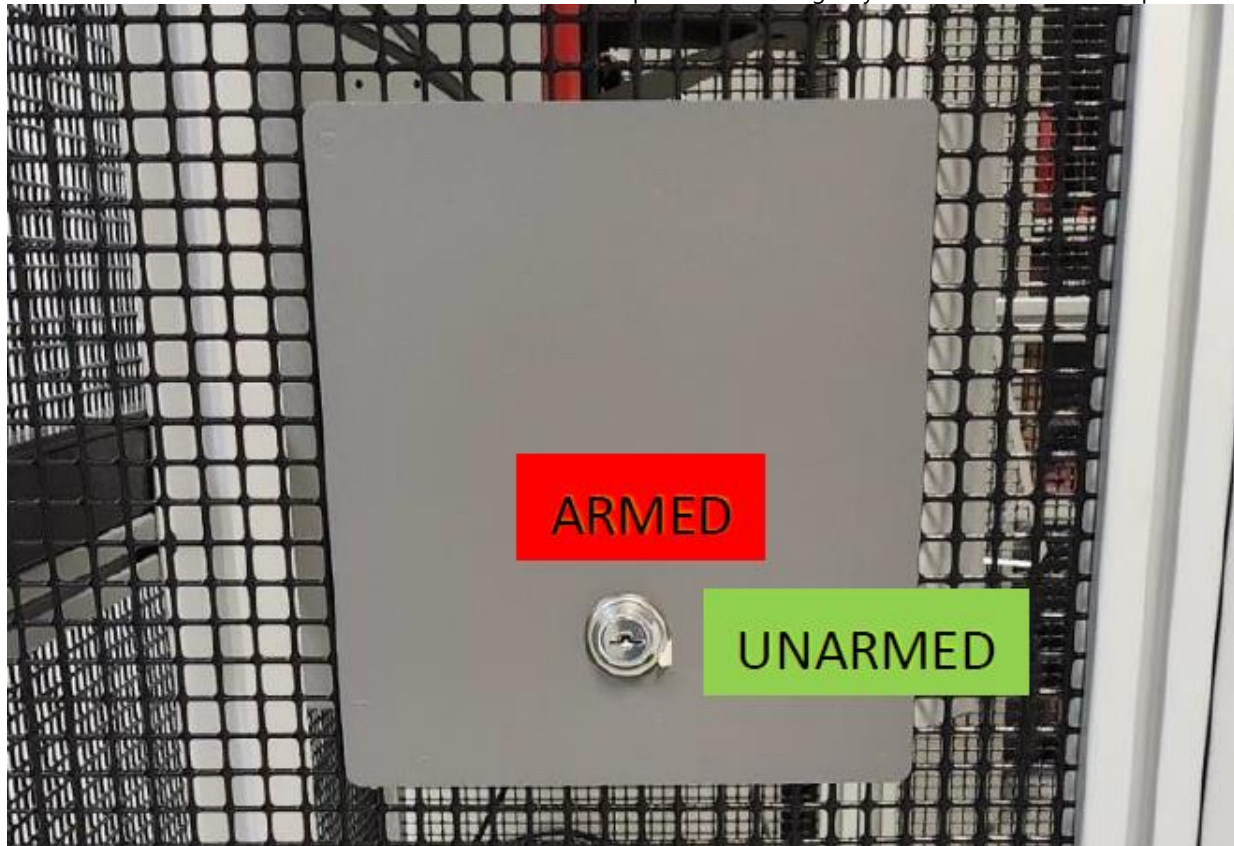
Door Lock Override

This lock will override the door lock to the portal if you need to enter it and perform maintenance or some other administrative function.



Alarm Disable Lock

This lock will disable the alarm that sounds when someone presses the emergency exit button inside of the portal.





L5 Connect User Manual

ATC FlexHub

ATC FlexHub Setup

The goal of this document is to lay out the procedure for the setup of the ATC FlexHub system. This should allow the end user to establish the frame configuration, assign inventory/drop off on a compartment-by-compartment basis, as well as editing a compartment after frame configuration.

Frame Configuration

Frame configuration defines the expected physical layout and use cases for electronically controlled compartments in the FlexHub system. If not defined at initialization, the software will prompt the user to jump to the process start screen. The process can also be started by navigating to **Menu/System Changes/Frame Configuration** if changes are made to the configuration after initial setup.

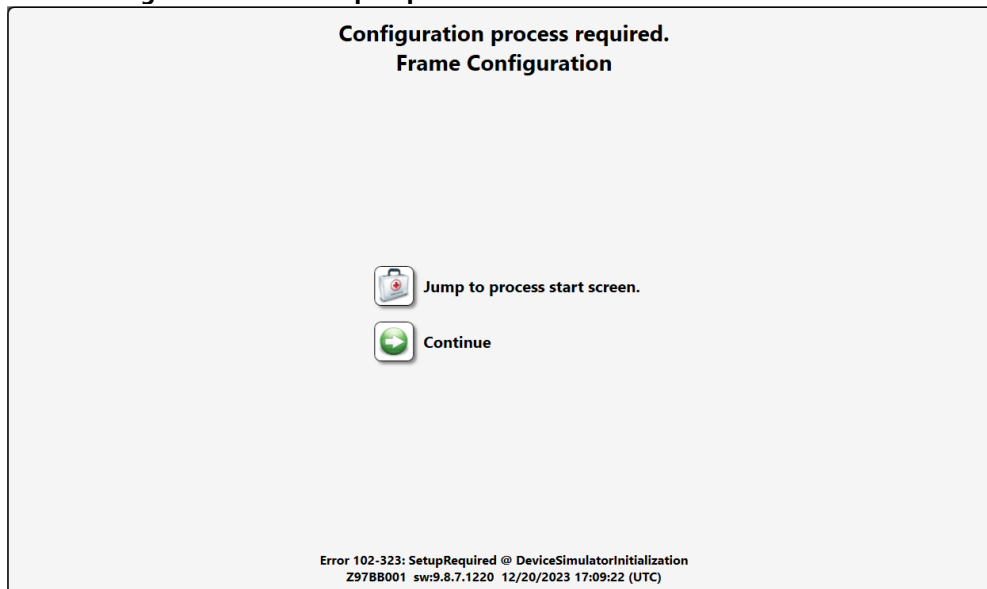
Required permission: Device setup

When to use:

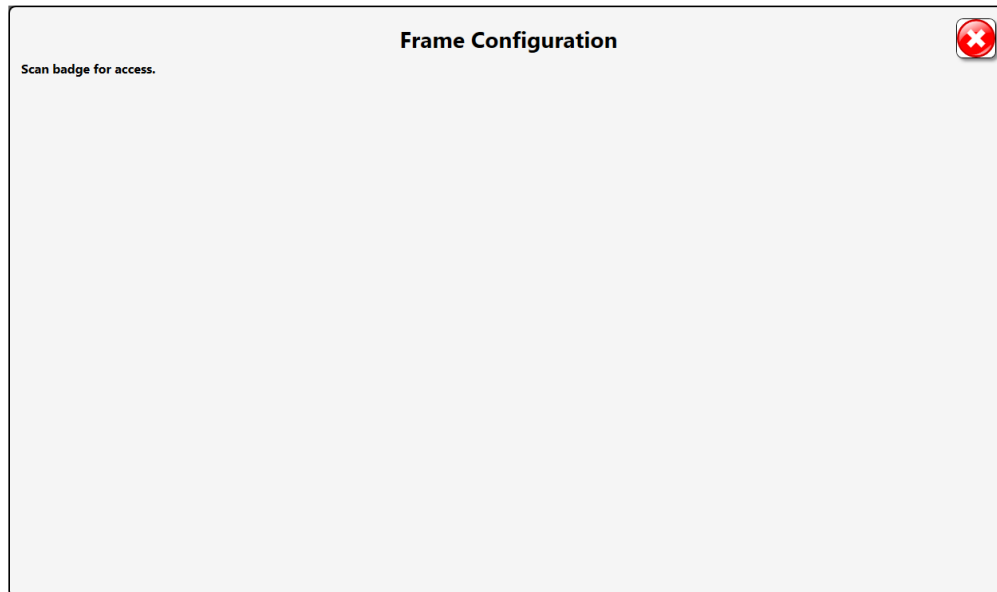
1. Initial device setup during manufacturing (device will auto-prompt to perform process at startup if stored layout is not defined)
2. Electronically controlled compartments are physically added, removed, or rearranged in the system.
NOTE: if electronic latches are replaced but the layout is not changed, use the Door Latch Assignment process instead.

Define Layout

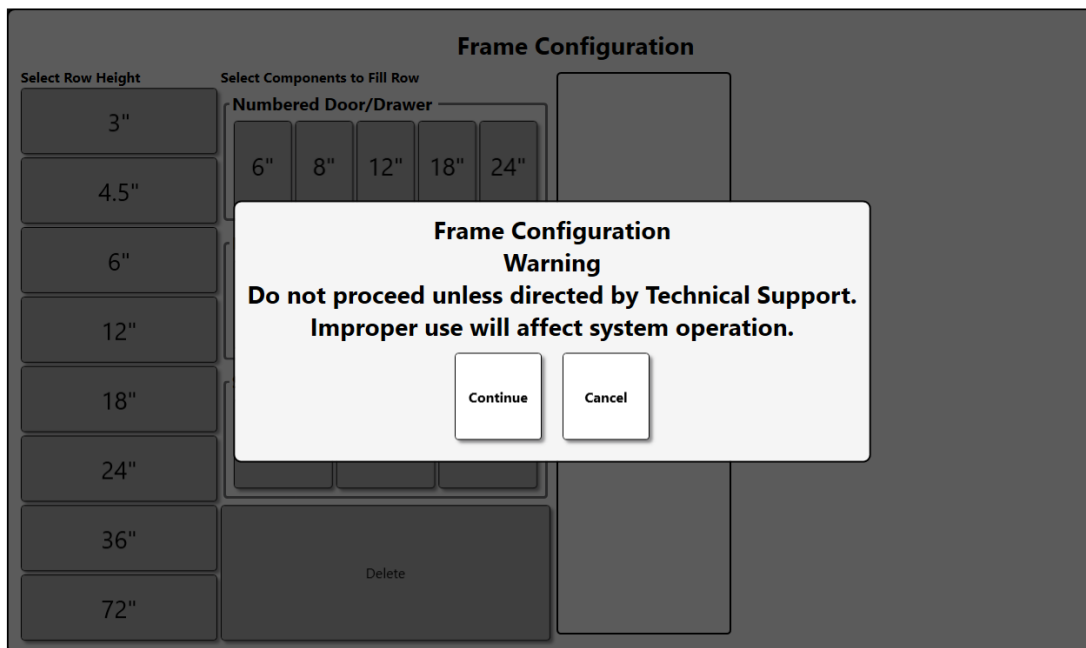
On device start up the user will be prompted with a setup screen with the text **Configuration Process Required. Frame Configuration**. Click **Jump to process start screen**.



The user will then scan their badge for access.



This brings the user to the Frame Configuration screen. A warning message will then be shown to the user warning them not to proceed unless directed by technical support. **Warning DO NOT continue unless directed.** Click **Continue**.



Now select the row height and numbered compartment width from the box shown below. **NOTE: Non-numbered items are used to fill a space in the frame currently occupied by something other than a compartment such as the FlexHub PC**



Select Row Height

3"

4.5"

6"

12"

18"

24"

36"

72"

Frame Configuration

Select components to Fill Row

Numbered Door/Drawer

6"

8"

12"

18"

24"

Non-Numbered Items

6"

12"

18"

24"

Special

Frame

CHUTE:
DROP OFF

CHUTE:
PICK UP

Delete

1 2 3

4

5 6 7 8

9 10 11

12 13 14

15 16



17

18

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L5 Connect User Manual



Frame Configuration

Select Row Height

3"

4.5"

6"

12"

18"

24"

36"

72"

Select Components to Fill Row

Numbered Door/Drawer

6"8"12"18"24"

Non-Numbered Items

6"12"18"24"

Special

FrameCHUTE: DROP OFFCHUTE: PICK UP

Delete

123

4

5678

91011

121314

1516

17

18

19

20212223

24

25

26

Press the green arrow in the top left corner to continue and select the compartment use case.

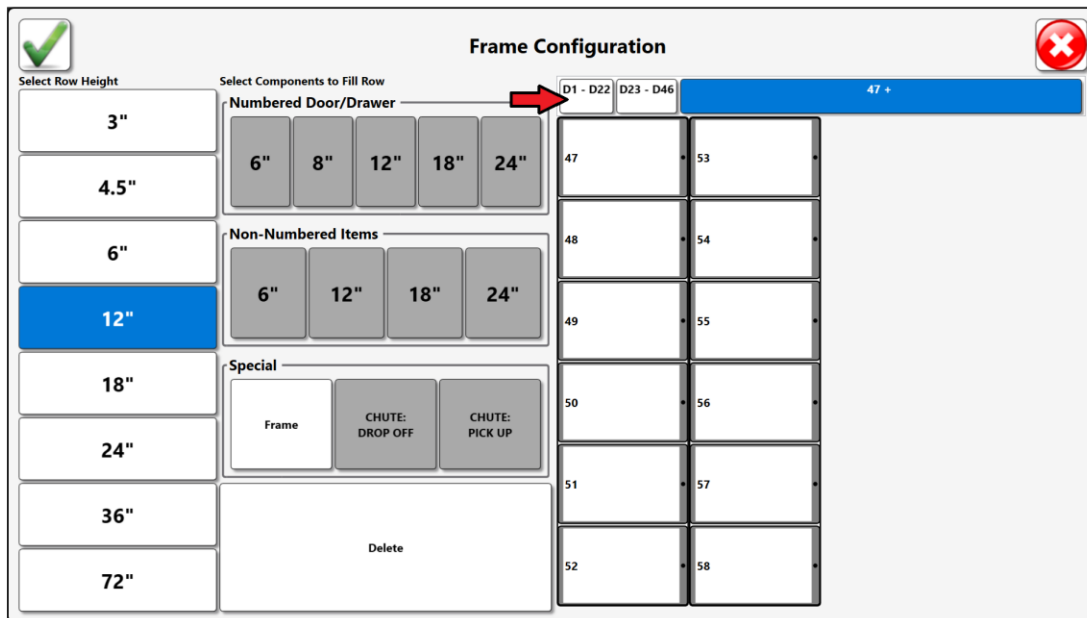
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5 December 2025

FlexHubs with more than Four Frames

The L5 Connect system supports FlexHub configurations with up to 16 frames. However, if your FlexHub configuration contains more than four frames the GUI will not be able to display them all at once. In this case, the GUI will switch to a tabbed display that allows you to toggle between groups of frames. Here is an example of a ten-frame configuration during layout definition. Notice the buttons at the top of the frame display that allow you to toggle between the frames holding the first twenty-two doors/drawers, the second twenty-four doors/drawers, and the remaining doors/drawers, which are currently displayed.

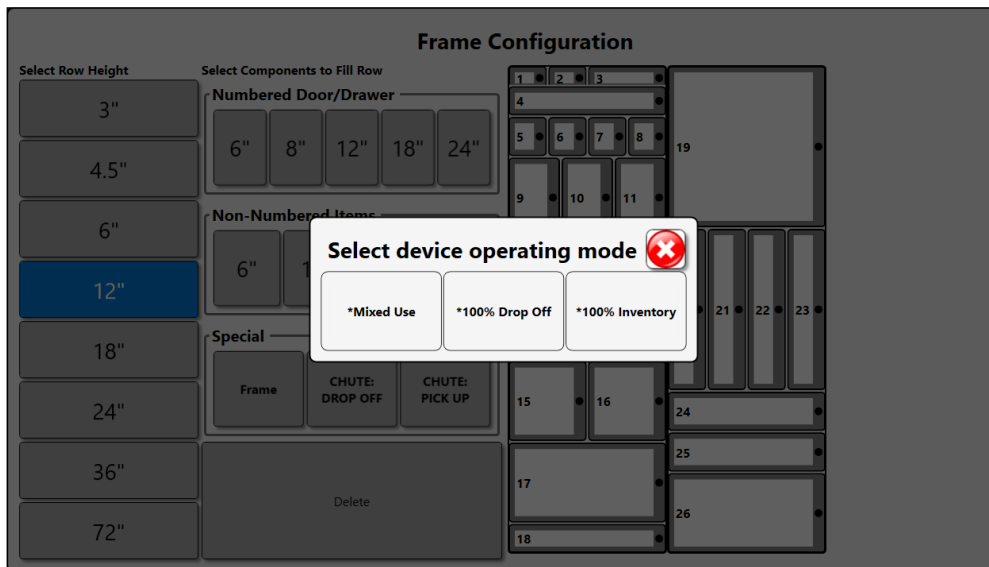
NOTE: FlexHub displays/controls that are not a part of frame configuration process indicate groupings with frame numbers instead of door/drawer numbers. EX: F1-F4, F5-F9, etc...



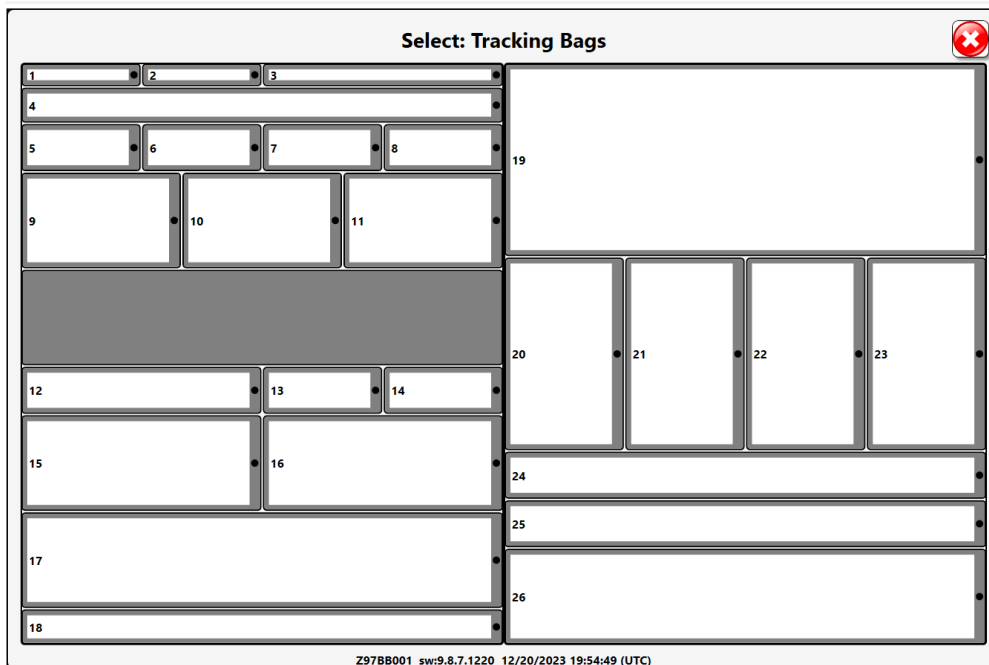
The screenshot shows the 'Frame Configuration' window. On the left, there's a 'Select Row Height' list with options: 3", 4.5", 6", 12" (selected), 18", 24", 36", and 72". In the center, 'Select Components to Fill Row' has three sections: 'Numbered Door/Drawer' (6", 8", 12", 18", 24"), 'Non-Numbered Items' (6", 12", 18", 24"), and 'Special' (Frame, CHUTE: DROP OFF, CHUTE: PICK UP, and a Delete button). On the right, a tabbed display shows three tabs: 'D1 - D22', 'D23 - D46', and '47 +'. The '47 +' tab is active, displaying a grid of 10 frames numbered 47 to 58. A red arrow points to the 'D1 - D22' tab.

Select Use Case

1. The user will then define how the compartments will be used, with the options: Mixed Use, 100% Drop Off, and 100% Inventory. **NOTE: The 100% inventory option will not be available if the drop chute hardware is selected.** Select whichever mode suits the user best. For this document we will select **Mixed Use**.

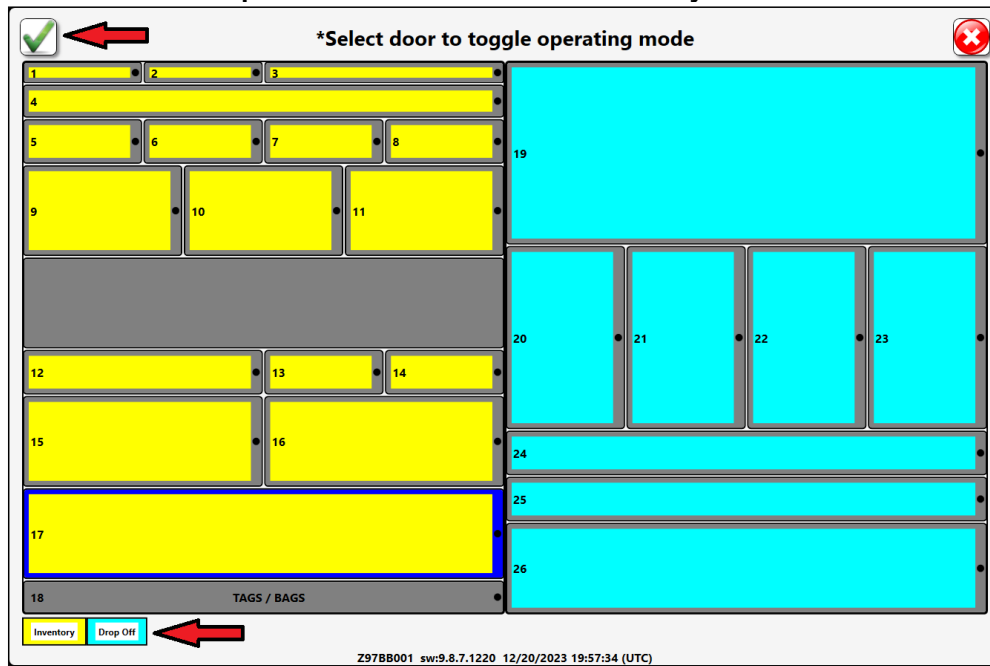


The user will then define a compartment to be used for tracking bags. This drawer will be referenced later anytime the user initiates the Tool Drop-Off workflow. Define the compartment for tracking bags by clicking any available compartment. **NOTE: bag/tag selection is not available if 100% inventory is selected.**
NOTE: The compartment designated for bag/tag cannot be changed, unless the user reconfigures the frame



- After a compartment is defined for the tracking bags, the user will then select the door to toggle the operating mode. **NOTE: The arrow in the image below shows the key for this diagram, with a yellow in the box for inventory and a blue in the box for Drop off.** Once completed click the green arrow in the top left corner. **NOTE: If 100% Inventory or 100% Drop off selected the user will not have to define the**

use case of each compartment as it will be done automatically.



*Select door to toggle operating mode

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 TAGS / BAGS 19 20 21 22 23 24 25 26

Inventory Drop Off

Z97BB001 sw:9.8.7.1220 12/20/2023 19:57:34 (UTC)

The system will then determine if the door latch assignment matches the expected number and configuration. If this is not the case, the user will then be prompted to go through the door latch assignment shown in the next section.

Door Latch Assignment

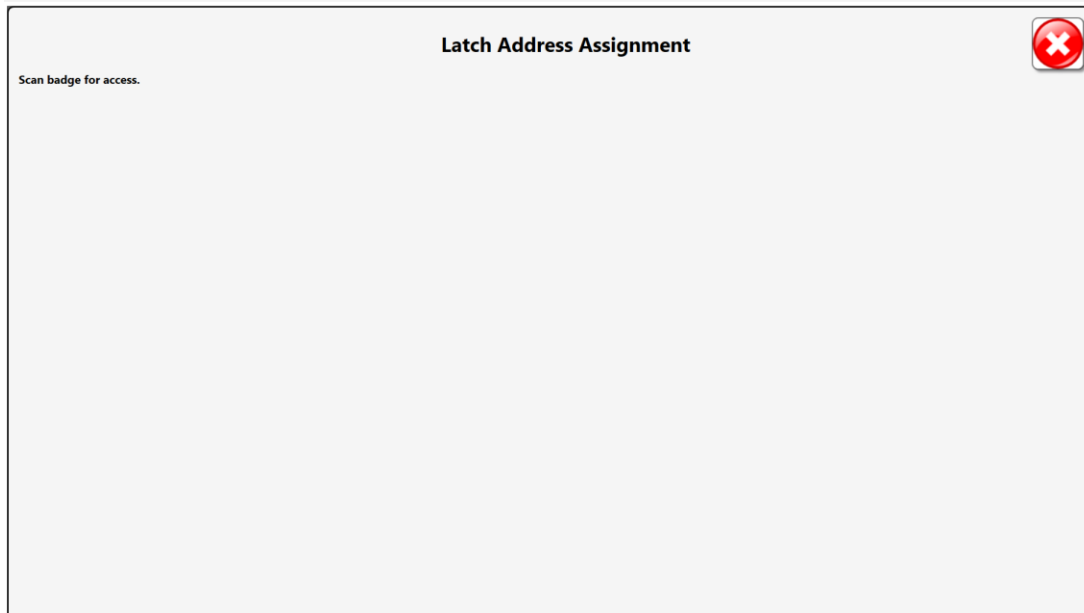
The door latch assignment process is used to associate the correct numbered door address with the hardware electronics. The steps below will be laid out as if following through the frame configuration procedure, however this will only be necessary in cases where the latch assignment does not match the defined layout. As stated, this process may occur towards the end of frame configuration and can also be reached from the settings menu in the following path **Menu/Troubleshooting/Latch Address assignment**. The user may need to navigate to this process if the latch hardware is replaced or if the layout selection completed but the previous attempt to run latch assignments failed.

Required Permissions: Device Setup

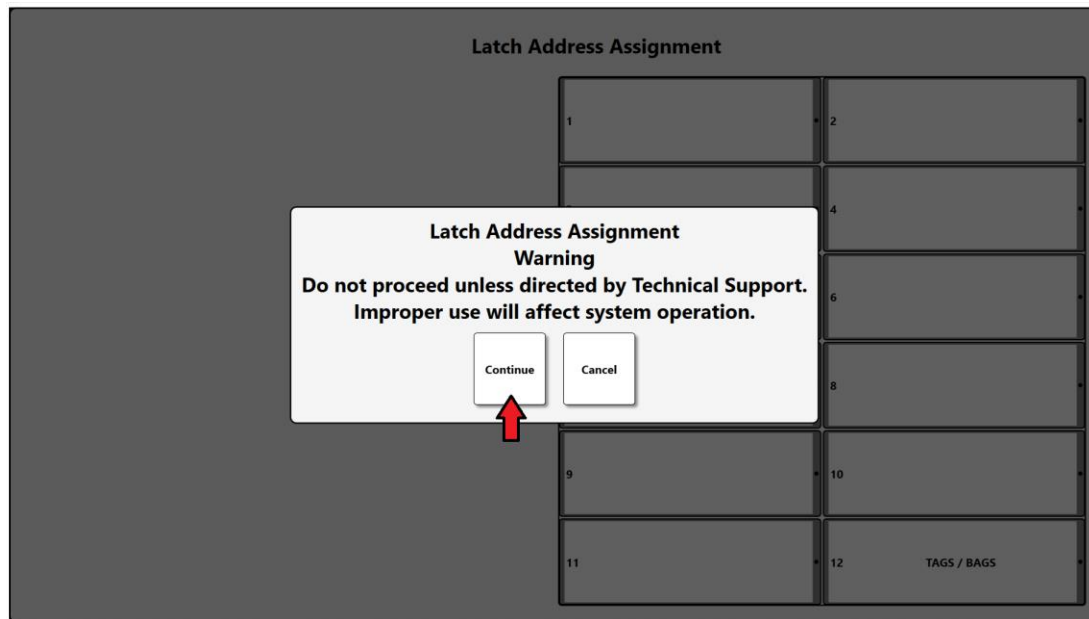
When to use:

1. Initial device setup during manufacturing after frame configuration is completed (device will auto-prompt to perform process at startup if stored layout is not defined)
2. Electronically controlled compartments or latches are physically added, removed, or rearranged in the system.

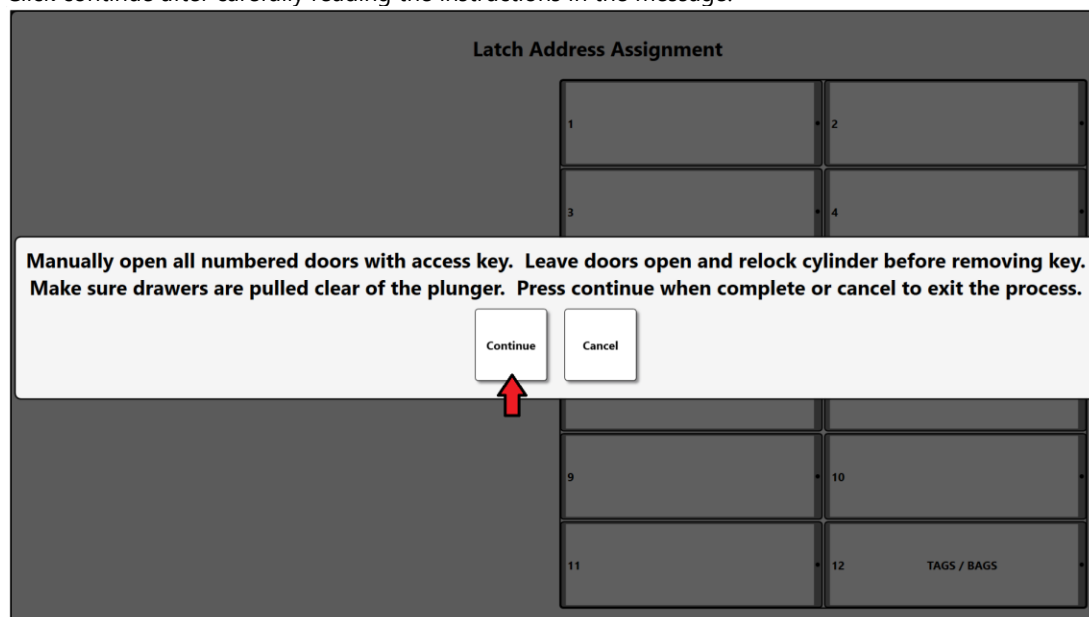
Scan your badge to verify you have authority to perform the procedure.



Click the **Continue** button.

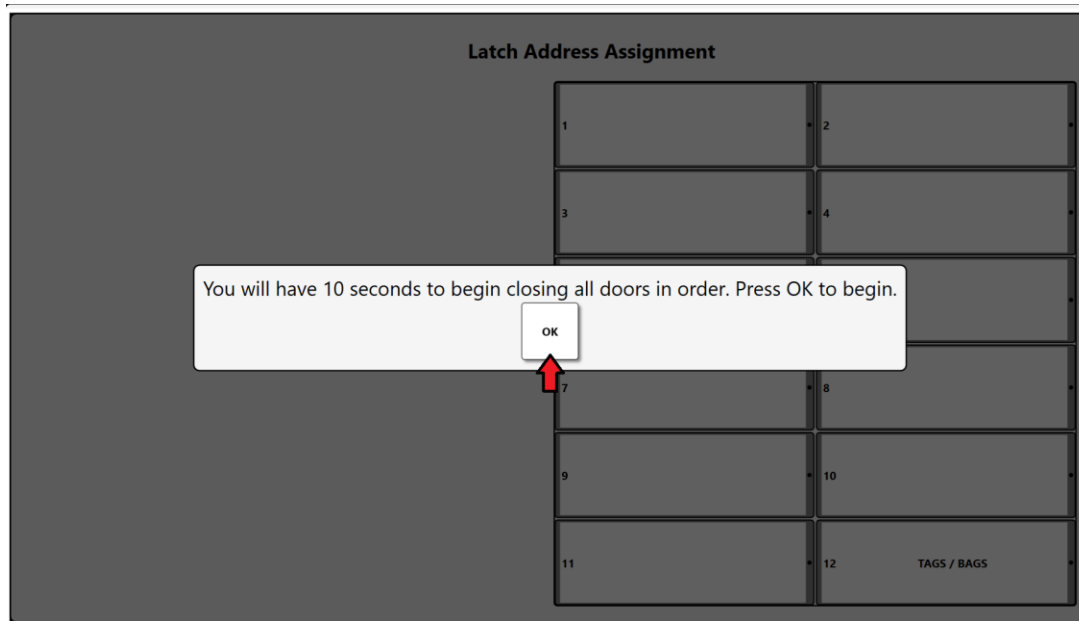


Click continue after carefully reading the instructions in the message.

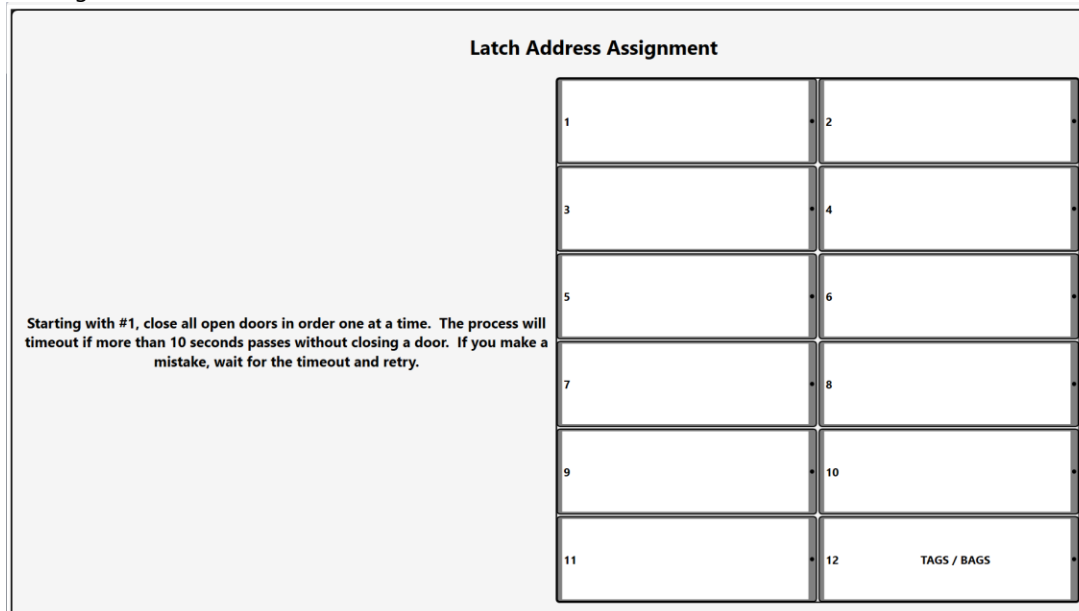


Open each of the doors manually with the key. Be sure to relock the cylinder with the key before removing the key to move to the next door.

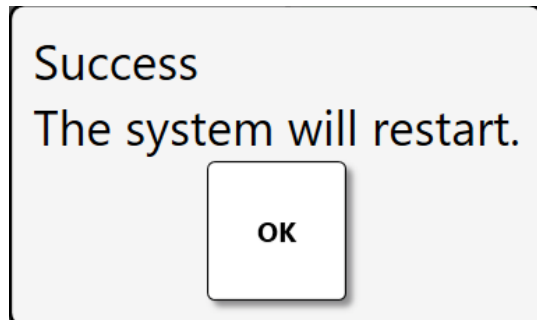
Then click the **OK** button to start the process of closing the doors.



Starting with door number 1, close each door in order, one at a time.



Click the **OK** button when prompted that the system will restart.



After a restart occurs the FlexHub is ready for use.

Edit Compartment

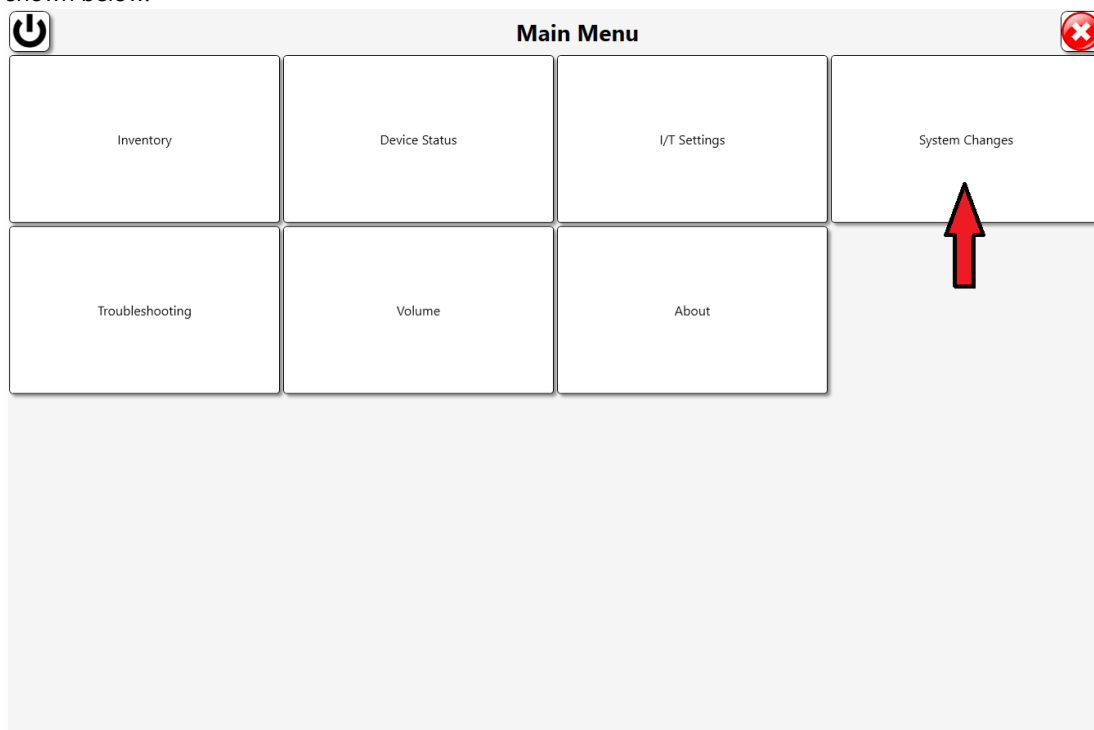
The user may need to edit the use case or inventory of an individual drawer. Follow along with the procedure listed below to navigate to the edit compartment menu. For the sake of this document, we will separate the workflows into three headings: Change Drop-off to Inventory, Change Assigned Inventory, and Change Inventory to Drop-off.

Permission: Device Setup

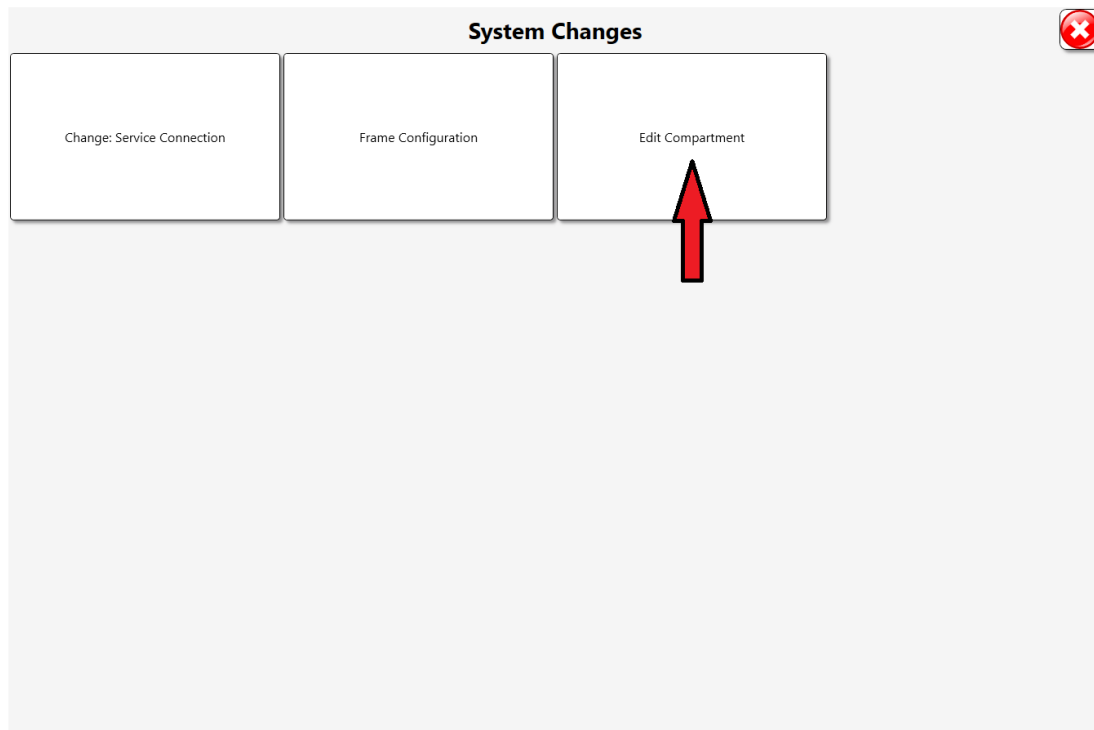
When to use:

1. If the use case for an individual compartment or the entire frame has changed.
2. If the inventory of a compartment has changed.

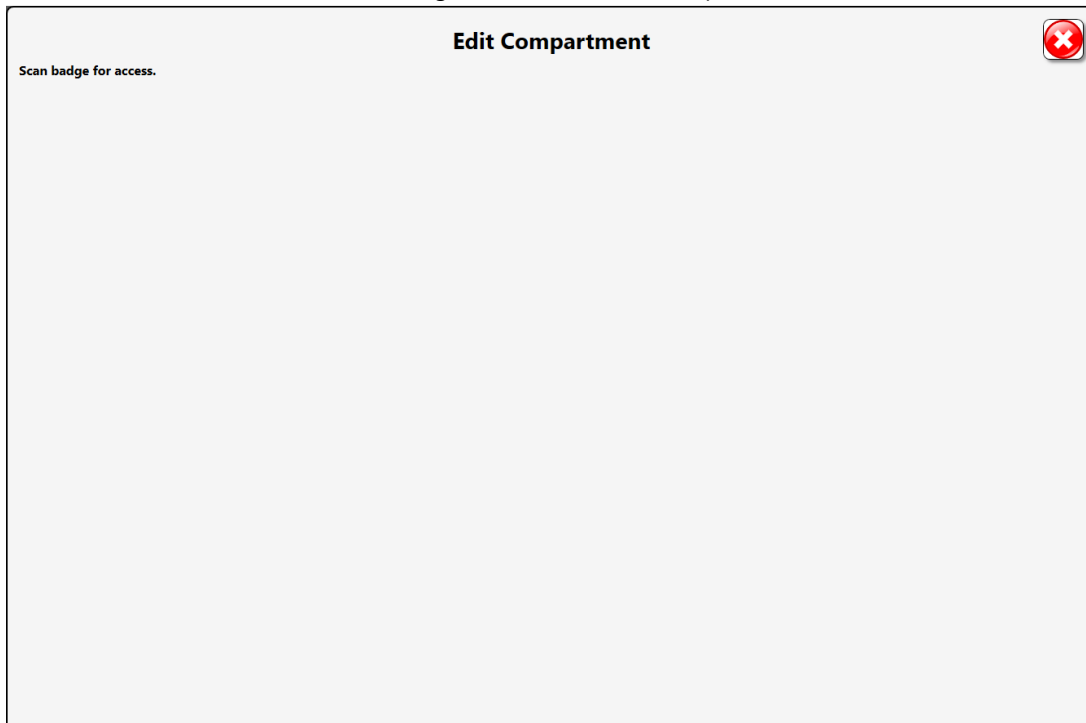
Click on the settings menu in the top right corner. Within the settings menu click on the **System changes** button as shown below.



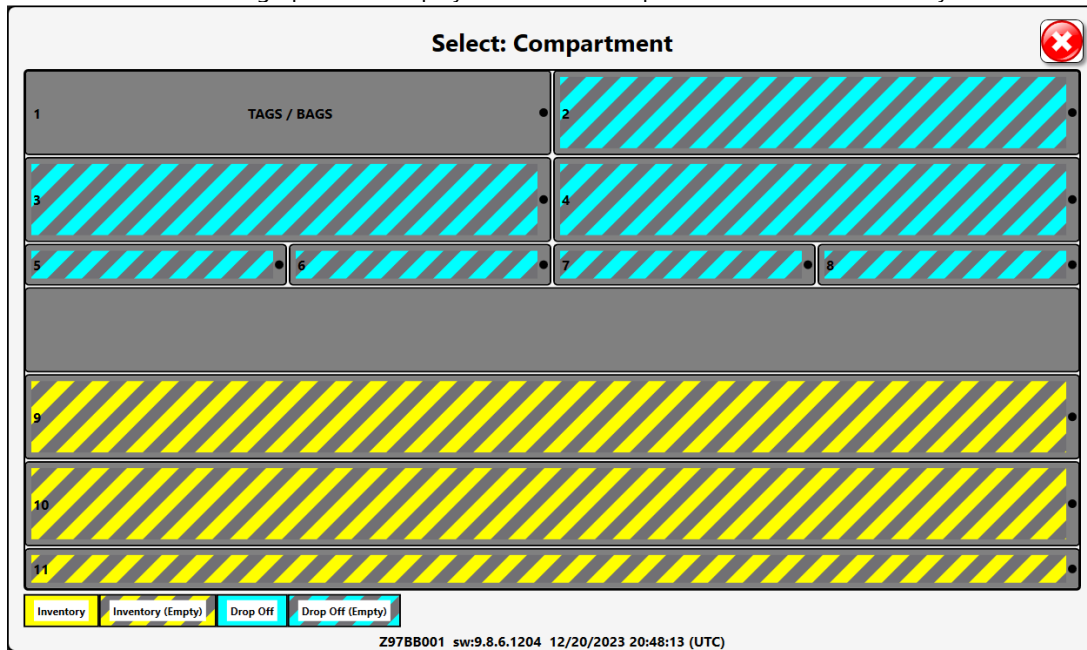
Then click on **Edit Compartment** button.



The user will then need to scan their badge to access the edit compartment sub menu.

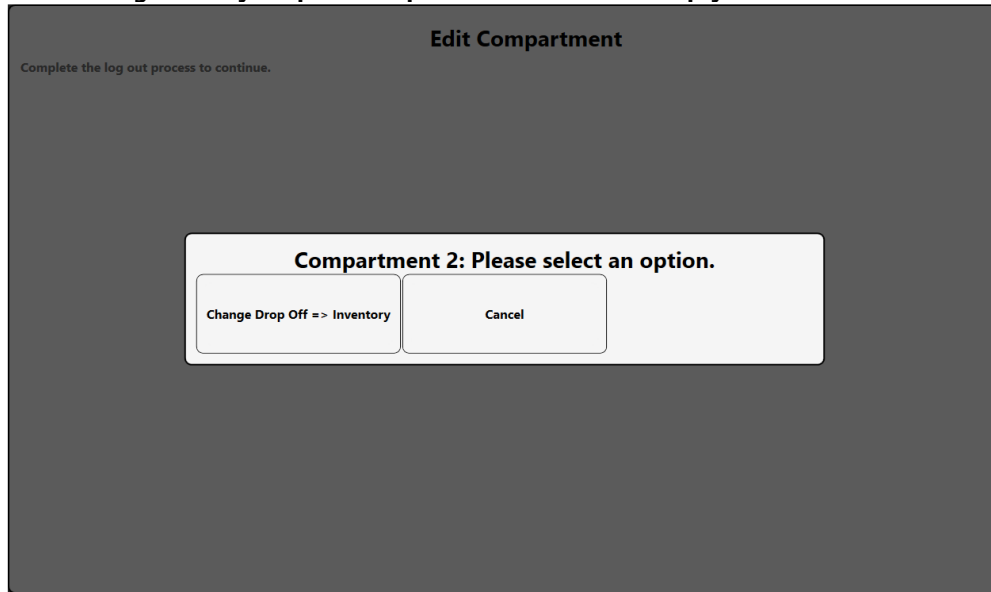


Now the user will see a graphic that displays the device compartments with a colored key in the bottom left.

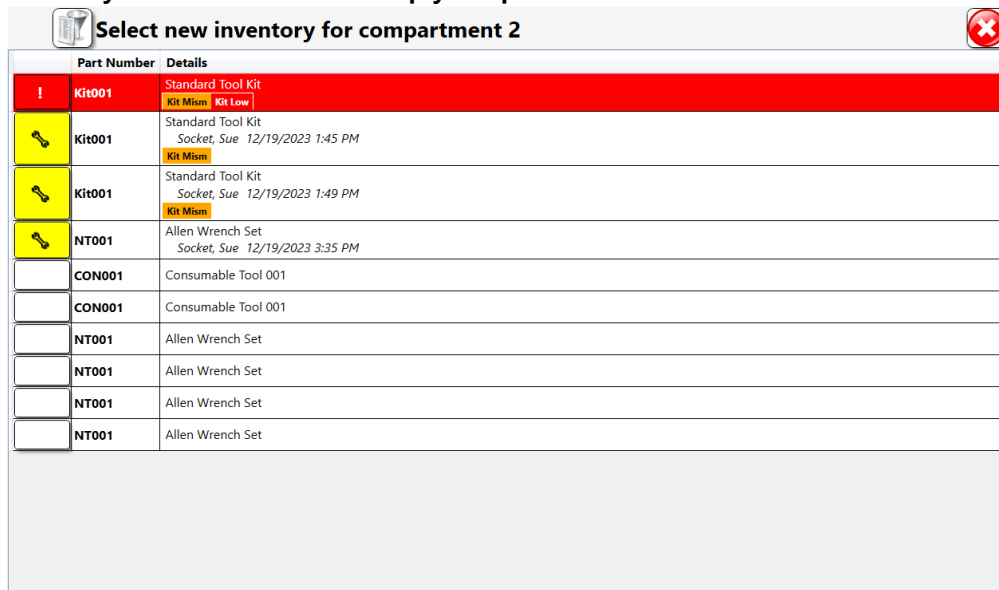


Change Drop-Off to Inventory

- To change Drop-off to inventory, click on one of the compartments with either the blue slanted lines or a filled in blue box. The user will be met with a popup menu with the text **Change Drop Off => Inventory**. **NOTE: The drop off chute and assigned bag/tag compartments cannot be changed to inventory mode, along with any drop off compartment that is NOT empty.**




- Then the user will be asked to select inventory to place within the compartment. **NOTE: This can be skipped by clicking the red X in the top right corner. The compartment will still change its designation to inventory but would show as an empty compartment.**



If inventory for the compartment is selected the user will be shown an additional screen that prompts them

to load the inventory into the open door and close it.



Load new inventory and then close the door. Select Tool Not Available from diagnostics menu to skip this step.

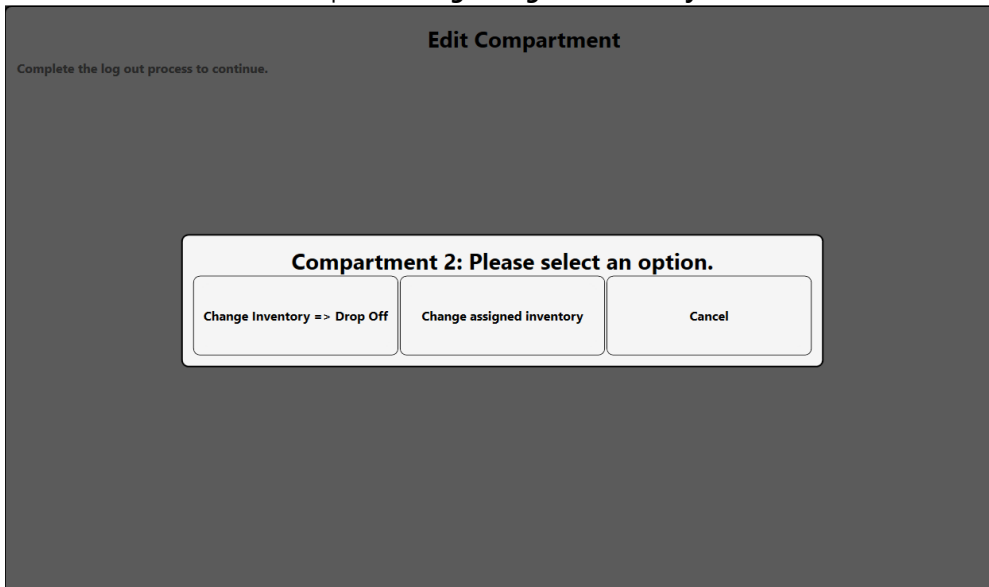
<div style="display: flex; justify-content: space-between; align-items: center;"> 1 TAGS / BAGS </div>	<div style="border: 2px solid blue; height: 30px; width: 100%;"></div>
<div style="border: 1px solid black; height: 30px; width: 100%;"></div>	<div style="border: 1px solid black; height: 30px; width: 100%;"></div>
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; width: 45%; height: 20px;"></div> <div style="border: 1px solid black; width: 45%; height: 20px;"></div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; width: 45%; height: 20px;"></div> <div style="border: 1px solid black; width: 45%; height: 20px;"></div> </div>
<div style="border: 1px solid black; height: 30px; width: 100%;"></div>	
<div style="border: 1px solid black; height: 30px; width: 100%;"></div>	
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	

Z97BB001 sw:9.8.6.1204 12/20/2023 20:51:08 (UTC)

Change Assigned Inventory

NOTE: Inventory can only be assigned to inventory mode compartments.

1. Following a similar procedure as changing drop-off to inventory, the user will click on the graphic of the compartment in which they wish to change the assigned inventory. A similar list of options will be displayed where the user will select the option **Change assigned inventory**.



Complete the log out process to continue.

Edit Compartment

Compartment 2: Please select an option.

Change Inventory => Drop Off Change assigned inventory Cancel

2. Next the user will remove and replace the inventory currently in the compartment.



L5 Connect User Manual

Change Inventory to Drop-off

NOTE: An inventory compartment cannot be changed to drop-off mode unless a bag/tag drawer is defined (100% inventory selections would have to complete the frame configuration process to select a bag/tag drawer)

To change a compartment from Inventory to Drop-off we will follow a similar procedure as listed in **Change Drop-off to Inventory**. Click on one of the compartments labeled inventory drop-off, and the user will see a message **Change Inventory => Drop-off**. If a compartment currently holding inventory is selected the user must remove the inventory before the drawer designation is changed. If assigning inventory from one compartment to another the user must **FIRST** remove the item from the original compartment before being assigned to a new compartment.

Edit Compartment

Complete the log out process to continue.

Compartment 2: Please select an option.

Change Inventory => Drop Off

Change assigned inventory

Cancel

Edit Compartment

Complete the log out process to continue.


Compartment 6: Please select an option.
Currently contains:
NT001
Allen Wrench Set

Change Inventory => Drop Off

Change assigned inventory

Remove assigned inventory

Cancel



Remove the tool. Close the door

1	2	3	4
5	6		
7	8	9	10
11			
12			
13	14 TAGS / BAGS		19
15	16		
17	18		

Z97BB012 sw:9.9.4.0129 1/30/2024 19:46:32 (UTC)



L5 Connect User Manual

ATC FlexHub Workflows

The goal of this article is to document the workflows for the ATC FlexHub. This will cover the workflows of users of the FlexHub as well as Tool Couriers/Tool Administrators.

Door LED Indicators

Each compartment has two LED indicators to the right of the compartment door. The color and the flashing speed indicate device/compartment/tool conditions as described below.

Device Conditions

Device condition indicators apply to the entire ATC FlexHub. All door LEDs will be used to report any detected device conditions. Reporting of individual compartment conditions will be overridden until the device condition is addressed and cleared.

All Good => Green over Green

If any doors have two solid green LEDs, the device has been secured (no logged in user) and has no conditions to report. This condition is synchronized with the "Green Check" that is visible on the device's main screen. All tools that are expected to be present are contained in the device, no tools have alert statuses assigned, no tools are "in process", and the device itself has no alerts. **NOTE: When an issued tool has been assigned a "Managed Out of Box" status, the LED lights for its compartment will be off. This condition is still considered "Good" and will not affect the "All Good" condition for the rest of the device.**

Device Alert => Slow Blink Red over Solid Red

If all doors have a slow blinking red LED over a solid red LED, there is an "alert" status assigned to the device. Examples of device alerts include device offline, hardware error, etc. This condition should be addressed as soon as possible.

Compartment Condition

Compartment condition indicators report the condition of a single compartment. Reporting of these conditions will be overridden by any device condition as described in the section above.

Issued Tool => Amber over Amber

A door with two solid amber LEDs indicates that the assigned tool has been issued. It also indicates that the issued tool has no alerted statuses assigned. **NOTE: This condition will be overridden if a "Managed Out of Box" status has been applied to the tool. In that case, the door LEDs will both be off.**



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Alerted Tool => Red over Fast Blink Red

A door with a solid red LED over a fast-blinking red LED indicates that the tool in the compartment has an alerted status assigned. **NOTE: This condition will be overridden if a "Managed Out of Box" status has been applied to the tool. In that case, the door LEDs will both be off.**

Issued and Alerted Tool => Amber over Fast Blink Red

A door with a solid amber LED over a fast-blinking red LED indicates that the tool normally in the compartment has been issued with an alerted status assigned. **NOTE: This condition will be overridden if a "Managed Out of Box" status has been applied to the tool. In that case, the door LEDs will both be off.**

Tool In Process => Slow Blink Amber over Amber

A door with a slow blinking amber LED over a solid amber LED indicates that the tool in the compartment is "In Process". For example, it could be waiting for a courier to pick up or is being delivered to an employee.

Open Door => Fast Blink Red over Fast Blink Amber

During the workflow, any opened doors will have a fast-blinking red LED over a fast-blinking amber LED to draw the user's attention.

Return Candidates => Slow Blink Amber over Amber

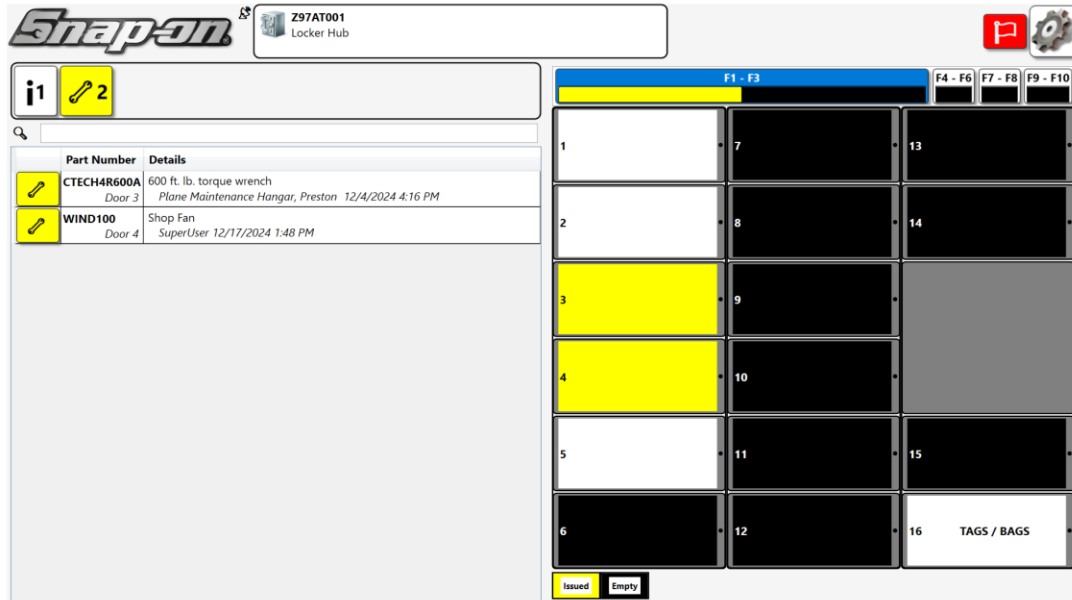
During a return workflow, doors with a slow blinking amber LED over a solid amber LED indicate empty compartments to which the user can return tools.



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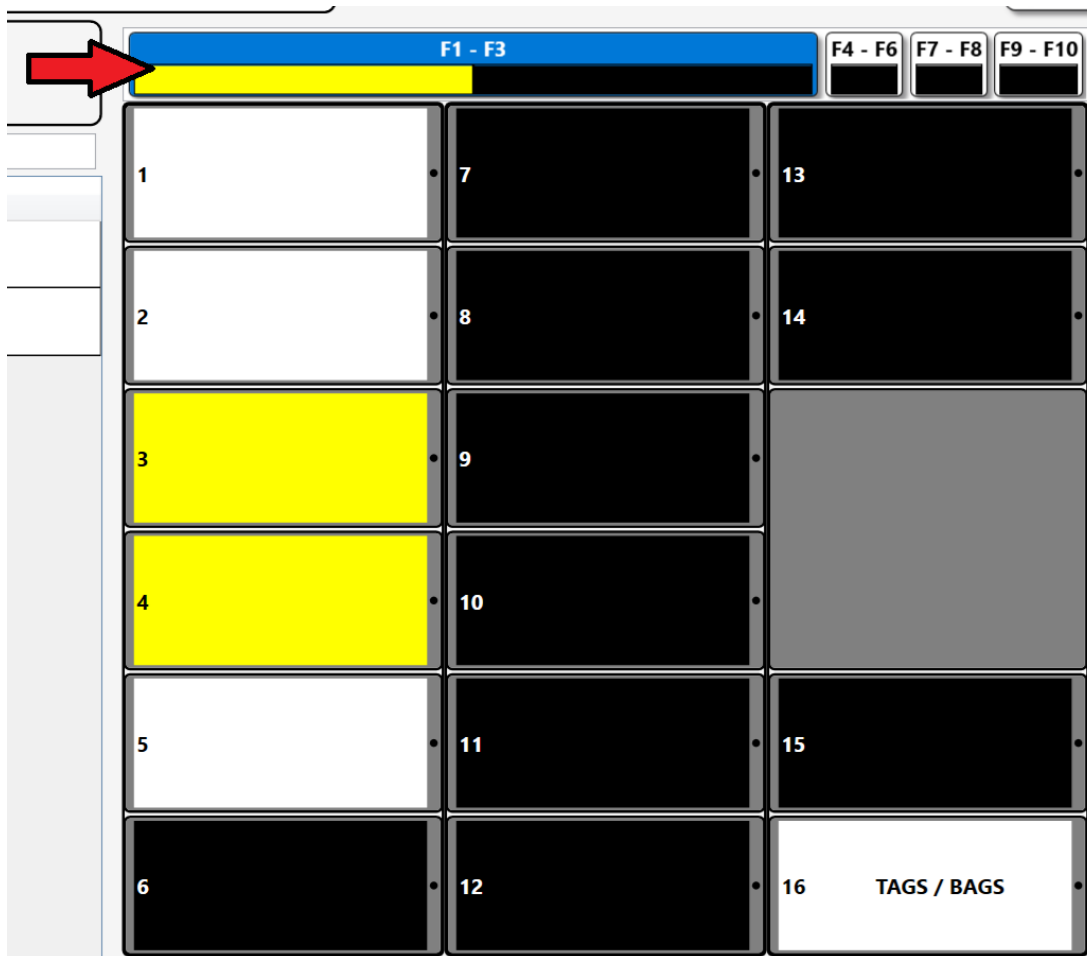
FlexHub Graphical Display

The FlexHub GUI uses a graphical representation of the device's physical layout on multiple screens. This on-screen graphic is used to indicate status and allow door/drawer selection by touch. Each screen contains an explanation of the status colors and/or control use instructions.



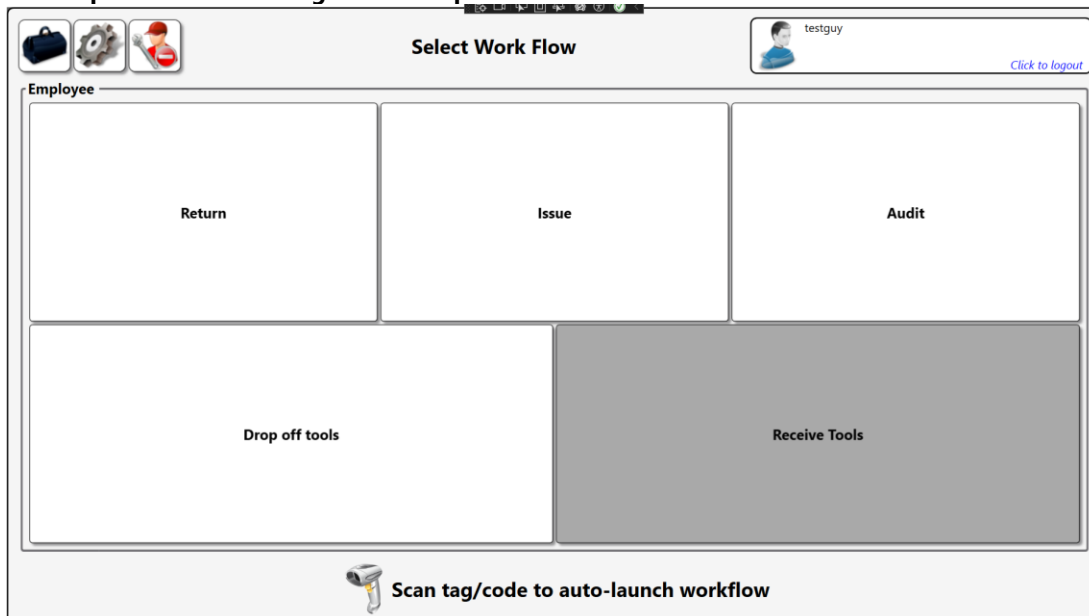
FlexHubs with more than Four Frames

The L5 Connect system supports FlexHub configurations with up to 16 frames. However, if your FlexHub configuration contains more than four frames the GUI will not be able to display them all at once. In this case, the GUI will switch to a tabbed display that allows you to toggle between groups of frames. Here is an example of a ten framed configuration. The frames are divided into groups which can be accessed by selecting the proper button in the row of frame selection buttons above the frame display.



Employee/User Actions

When an employee with device user permissions logs into the FlexHub they will be met with a screen with a variety of options within the bounds of a box labeled "Employee" as shown below. **NOTE: Issue/Return buttons are only shown if at least 1 inventory compartment is defined. Drop Off Tools and Receive tools option is not shown if no compartments are configured as drop off mode.**






When an employee with Admin permissions logs into the FlexHub they will be met with more options than a device user. These workflows are shown below. **NOTE: Issue/Return buttons are only shown if at least 1 inventory compartment is defined. Drop Off Tools and Receive tools options are not shown if no compartments are configured for drop off mode. If no bag/tag drawer is designated the Reload Bags option is not shown. Return other user's tools and drop off other user's tools are not shown if the user doesn't have Tool Return Device Other User Drop Off permissions enabled. The tool courier options will not be shown unless the user has Tool**




L5 Connect User Manual

Courier permissions.



Select Work Flow

 SuperUser [Click to logout](#)

Employee

Return

Return other user tools

Issue

Audit

Drop off tools

Drop off other user tools


Receive Tools

Tool Courier

Pick up tools

Deliver tools

Reload Bags

 Scan tag/code to auto-launch workflow

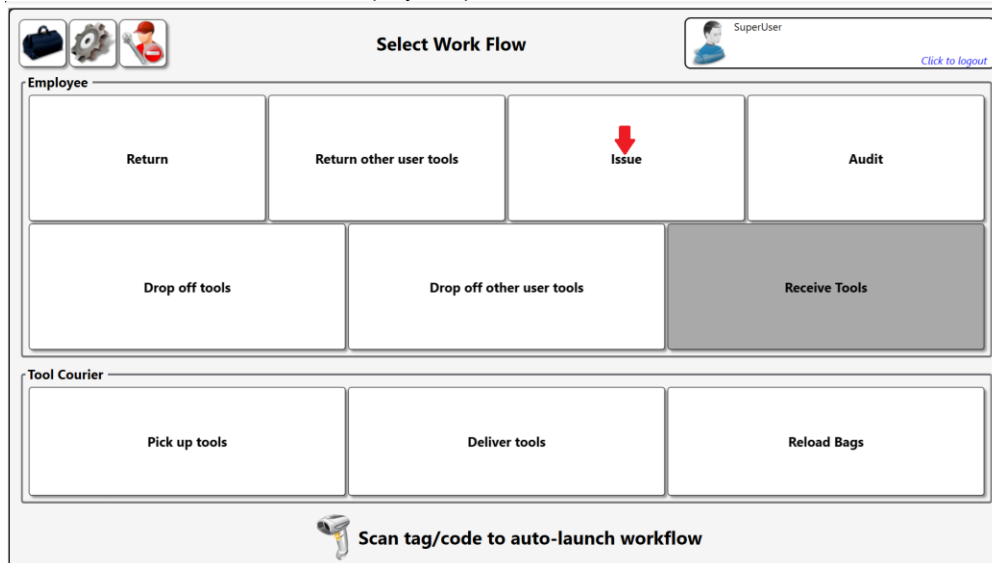
Issue Tool

Tool Issue is one of the primary workflows typical of users of the FlexHub. This workflow option will record the tool number issued along with the employee associated, and the date and time of issue. **NOTE: Issue button is only shown if at least 1 inventory compartment is defined**

Access point(s): FlexHub Dashboard after user sign in

Required Permission: Device User

1. To issue any tools from the FlexHub, the user must first use their ID badge to sign into the FlexHub. Then the user will select **Issue** within the Employee options list.





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2. Once **Issue** is selected, the user will be met with a screen that will display the inventory currently available to issue.

Select tools for issue

Part Number	Details
NT001 Door 3	Allen Wrench Set
NT001 Door 2	Allen Wrench Set
NT001 Door 14	Allen Wrench Set

Issuing

Part Number	Details
-------------	---------

Issue

3. The user can move a tool from the left side of the screen to the right side by either clicking the **Red Arrow** button or by scanning the barcode on the door of the compartment containing the target tool. Click the **Issue** button to start the issue process.

Select tools for issue

Part Number	Details
NT001 Door 2	Allen Wrench Set
NT001 Door 14	Allen Wrench Set

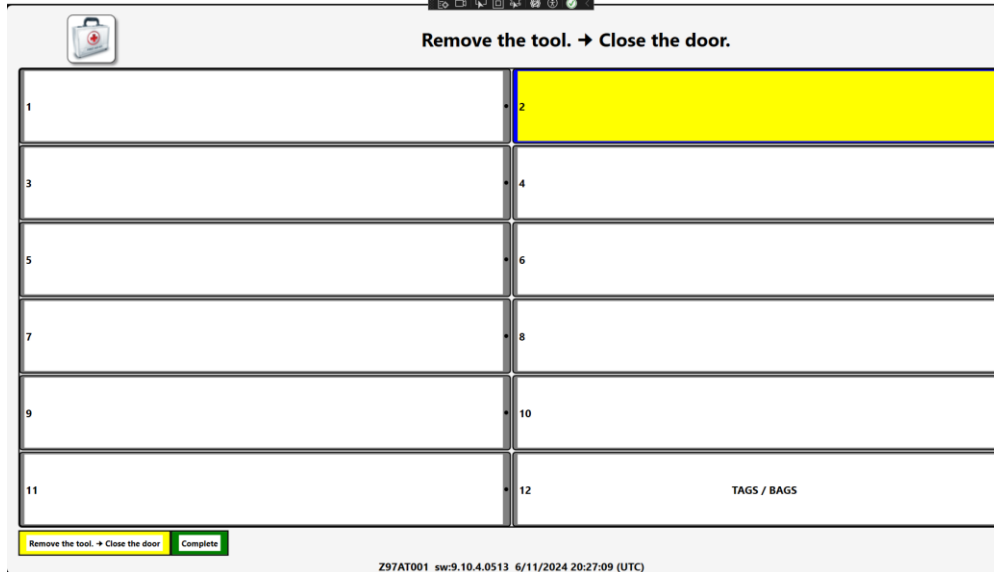
Issuing

Part Number	Details
NT001 Door 3	Allen Wrench Set

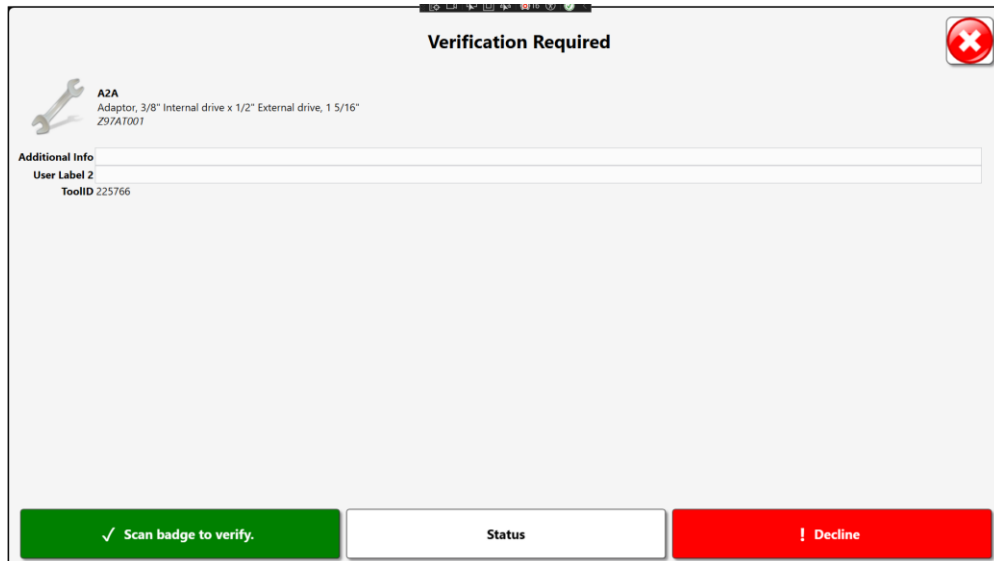
Issue

4. If work locations/work order entry is enabled for the FlexHub, the user will be prompted to select a work location and/or enter a work order number after selecting tools for issue.

- The doors of the compartments will be opened, and the user will be prompted to remove the tools and close the doors.

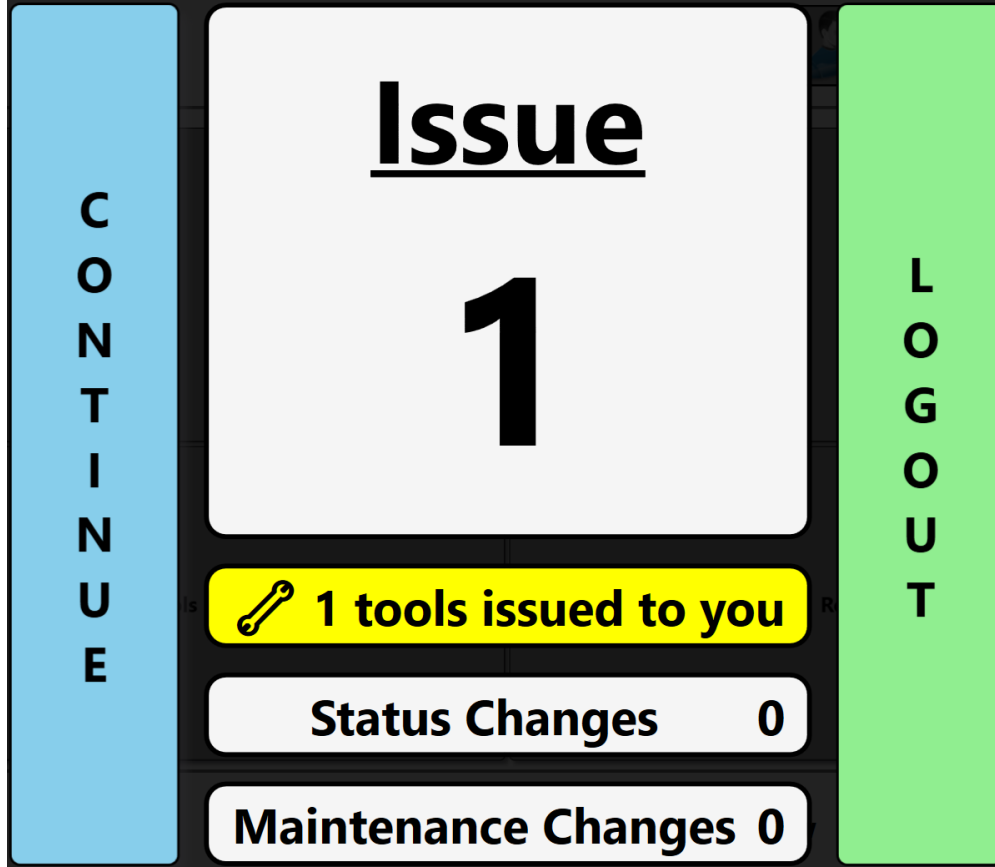


- After closing the door to the compartment, the user will be prompted to verify the tool if required for that tool.



- After Issuing a tool the user can choose to continue with another workflow or logout of the device, shown below. Click logout to end the session or click continue to select a different workflow. **NOTE: If no option is**

selected the user will automatically be logged out after several seconds



Lock Out Tool Issue when Status Is Set

The system can be configured so that when a tool has a specified status, it may not be removed from the FlexHub unless the user has the **Bypass Tool Status Issued Lock Out** permission. For example, if a torque wrench had been tagged with a **Calibration Requested** status, an employee with the **System User** profile would not be able to issue the tool. But someone who is set up to manage tool calibrations, who had the **Bypass Tool Status Issued Lock Out** permission, would be able to issue the tool so that he could take it to be recalibrated.

Configuring the Admin for Lock Out Tool Issue when Status Set Feature

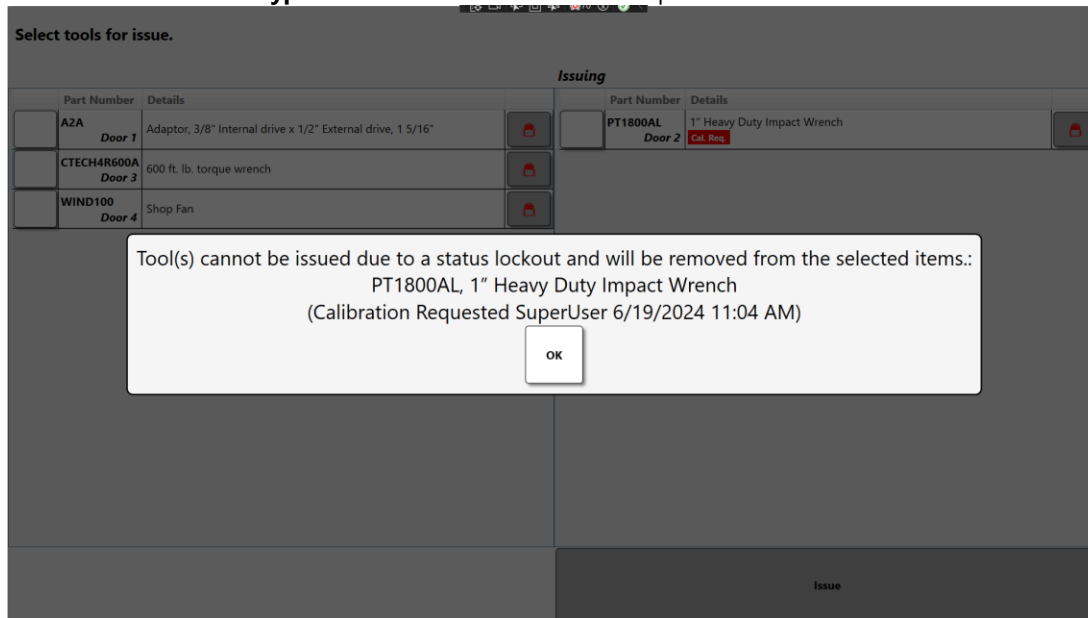
1. Using the admin client, login and navigate to the **Settings** Tab.
2. Select the **System Configuration** item in the list.
3. Click the **Status Types** button.
4. Select the status which should prevent issue when set.
5. Check the **Locker Hub** checkbox for the **Lock out tool issue when set on these devices:** field.
6. Click the save button in the upper right corner to save your change.



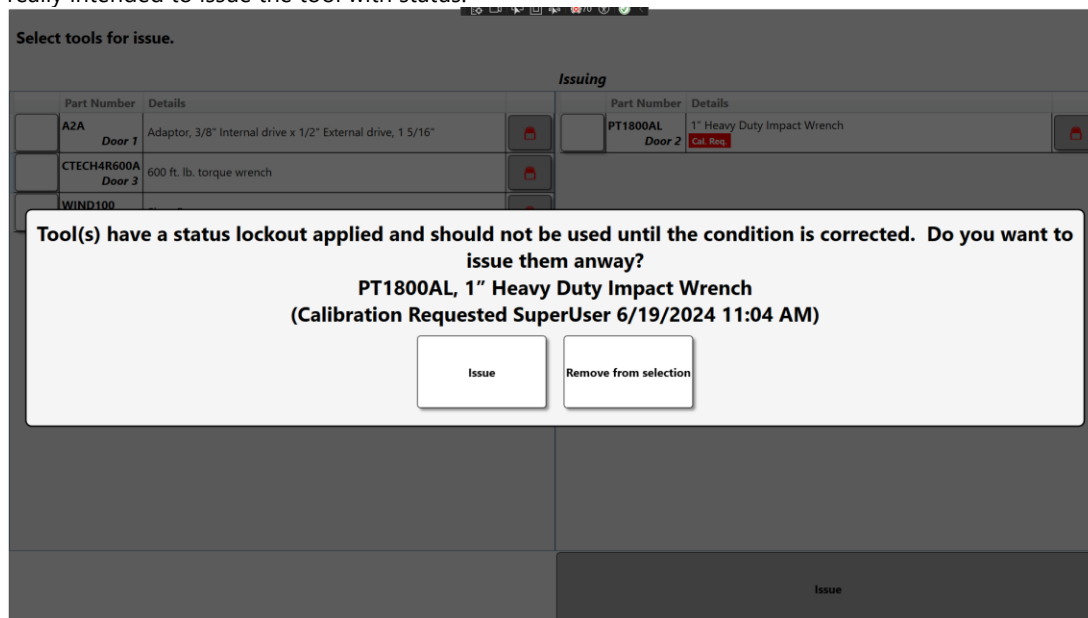
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Lock Out Tool Issue when Status Set Behavior

Attempts to issue a tool with a status set that has been flagged for lock out will produce the following message if the user does not have the **Bypass Tool Status Issued Lock Out** permission.



If the user does have the **Bypass Tool Status Issued Lock Out** permission, they will be prompted to make sure they really intended to issue the tool with status.



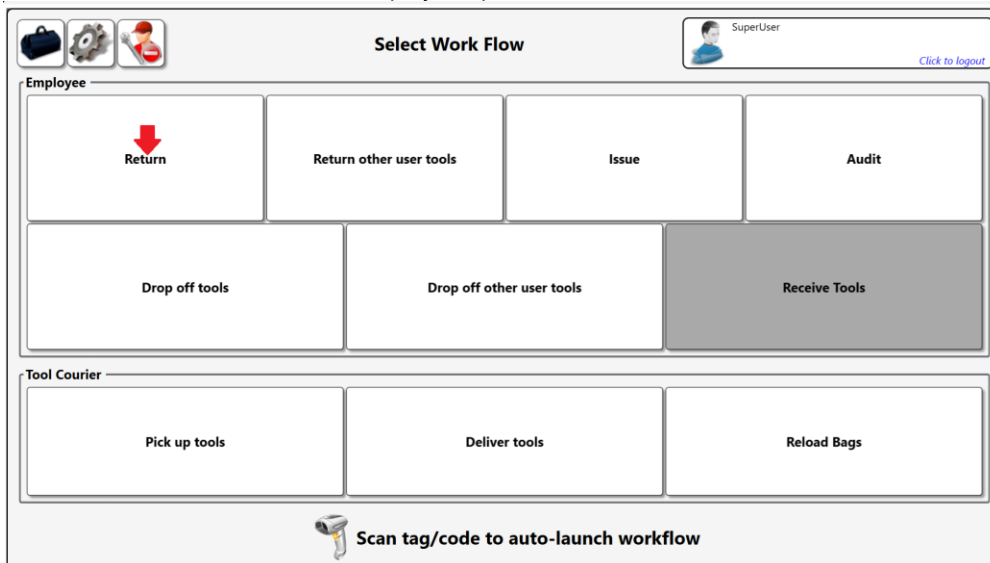
Return Tool

Tool return is one of the primary workflows typical of users of the FlexHub. This workflow option will record the tool number returned along with the employee associated, and the date and time of return. **NOTE: Return button is only shown if at least 1 inventory compartment is defined**

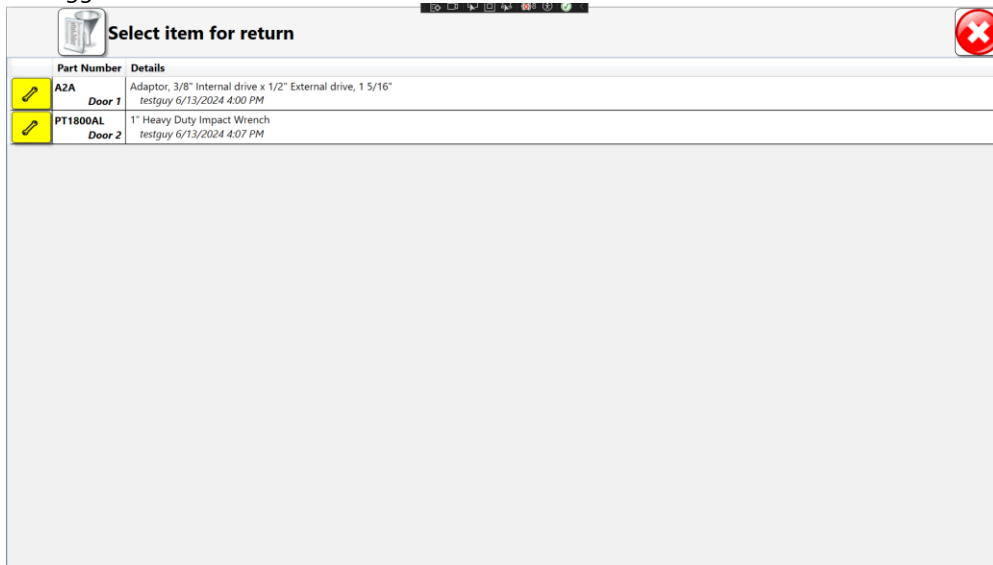
Access point(s): FlexHub Dashboard after user sign in

Required Permission: Device User

1. To return any tools to the FlexHub, the user must first use their ID badge to sign into the FlexHub. Then the user will select **Return** within the Employee options list.

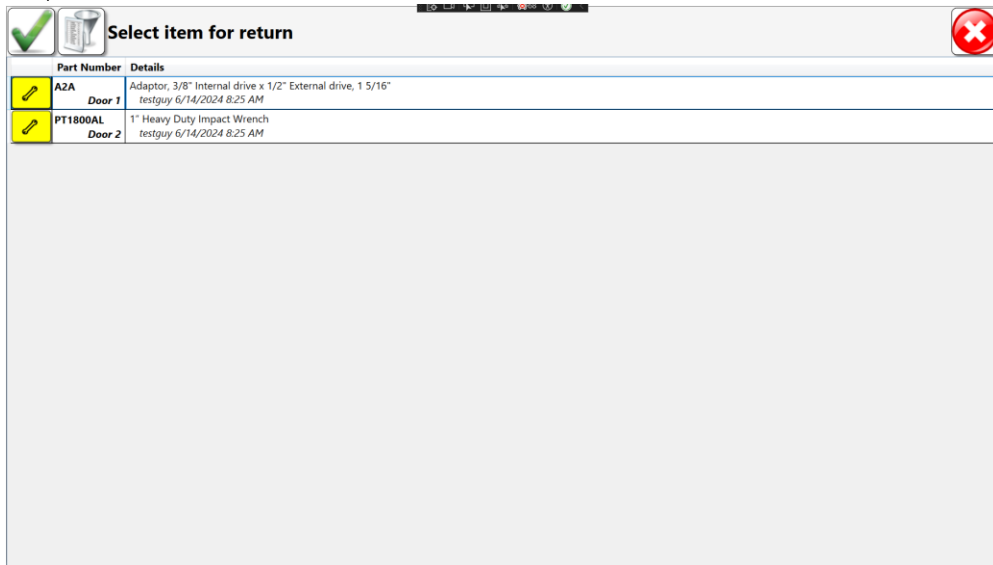


- Once return is selected the user will be met with a screen that will display the inventory currently issued to the logged in user.



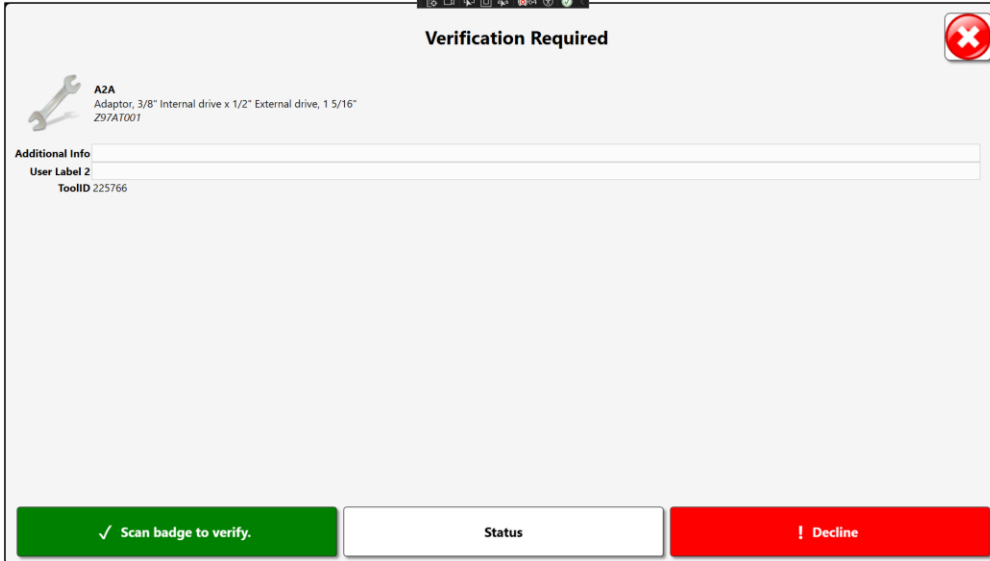
Part Number	Details
A2A Door 1	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" testguy 6/13/2024 4:00 PM
PT1800AL Door 2	1" Heavy Duty Impact Wrench testguy 6/13/2024 4:07 PM

- Select the tool to be returned and then click the **Green Checkmark** button or by scanning the tag on the tool, to initiate the return of the tool.




Part Number	Details
A2A Door 1	Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16" testguy 6/14/2024 8:25 AM
PT1800AL Door 2	1" Heavy Duty Impact Wrench testguy 6/14/2024 8:25 AM

4. The user will be prompted to verify the tool if required for that tool.



Verification Required

 **A2A**
Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"
Z97AT001

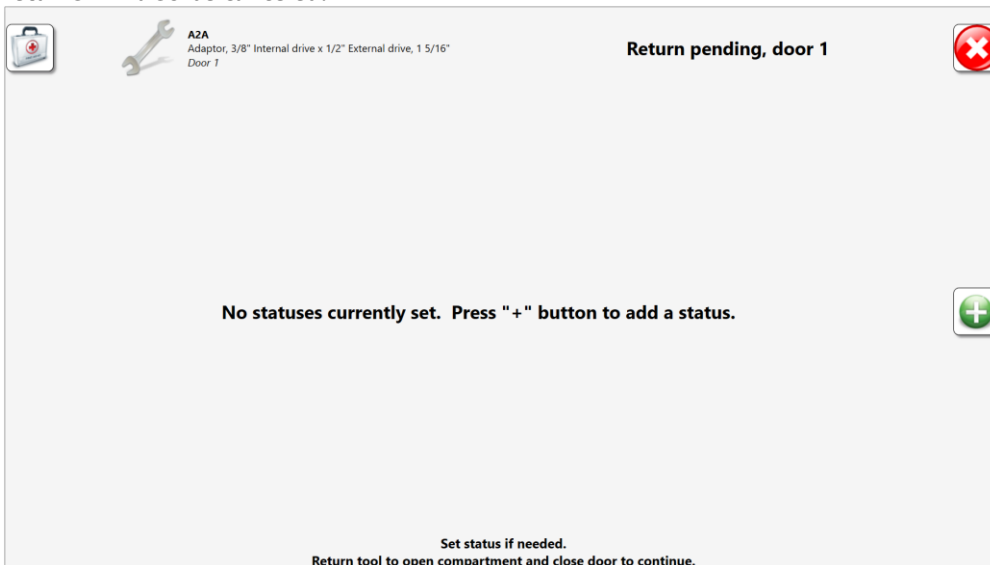
Additional Info



User Label 2

ToolID 225766

✓ Scan badge to verify. Status ! Decline

5. The door assigned to the tool being returned will open and the user will be met with an additional screen where they can attach a status type to the returned tool. Select a status(es) from the right and click the green checkmark, if no status type is required click the green checkmark. **NOTE: If you need to set a status you must do that before closing the door of the compartment after returning the tool. Otherwise, the system will assume you did not want to add a status. You may also cancel the tool return by pressing the Cancel button in the top right corner. If multiple tools are being returned, all remaining tool returns will also be canceled.**



  **A2A**
Adaptor, 3/8" Internal drive x 1/2" External drive, 1 5/16"
Door 1

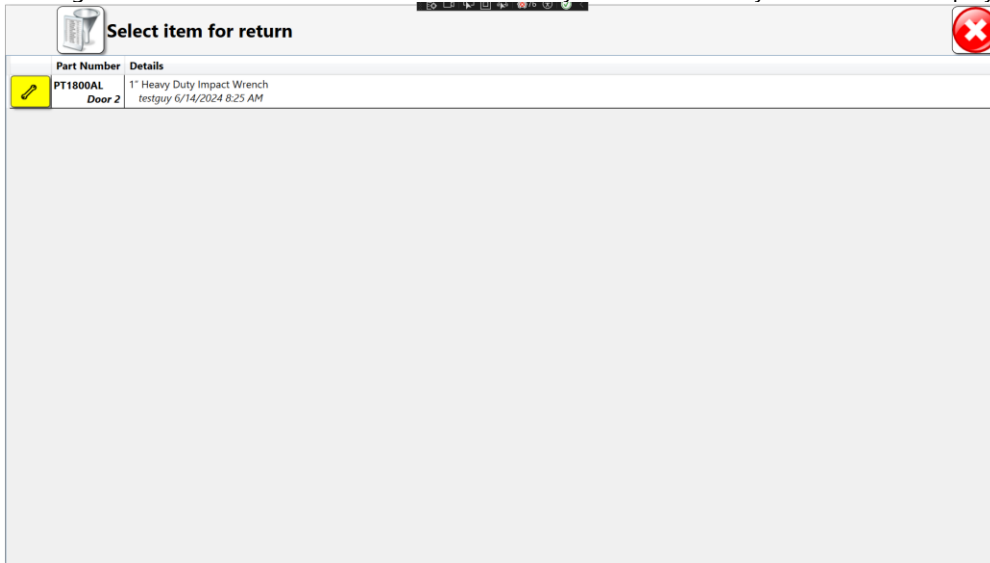
Return pending, door 1

No statuses currently set. Press "+" button to add a status.

Set status if needed.
Return tool to open compartment and close door to continue.

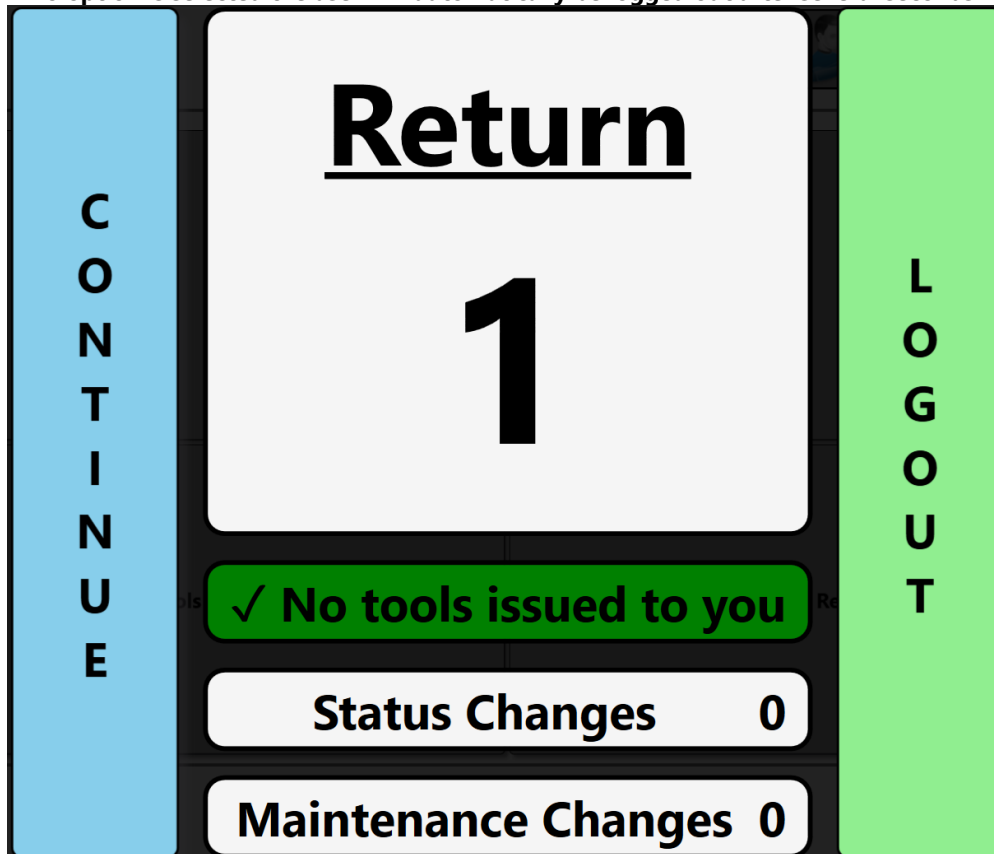
6. The user will return the tool and close the door.
7. The user will then be returned to the screen displaying the list of tools he currently has issued from the FlexHub. He can initiate return of another tool, click the **Red X** button to end the return workflow, or do

nothing and the return flow will end after a brief delay and the summary screen will be displayed.



Part Number	Details
PT1800AL	1" Heavy Duty Impact Wrench
Door 2	testguy 6/14/2024 8:25 AM

- After Issuing/Returning a tool the user can choose to continue with another workflow or logout of the device, shown below. Click logout to end the session or click continue to select a different workflow. **NOTE: If no option is selected the user will automatically be logged out after several seconds**



CONTINUE

Return

1

✓ No tools issued to you

Status Changes
0

Maintenance Changes
0

LOGOUT



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Scan to Start Issue/Return Tool

The system can be configured to allow the issue or return process to be initiated by scanning a tag. This must be configured with the Admin Client.

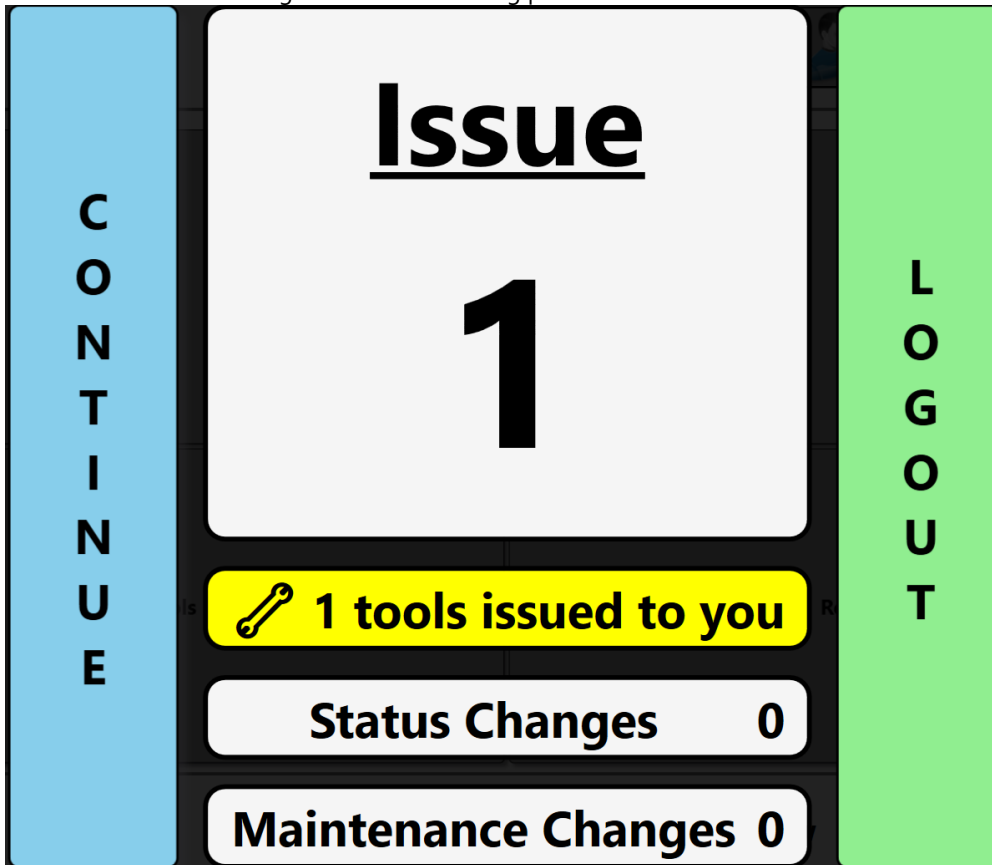
Configuring Admin Client for Scan to Start Issue/Return

1. Login and navigate to the **Locations** tab.
2. Select the FlexHub in which you wish to use scan to start issue/return. Then click on **Options**.
3. Look to see if the Options for this device are inherited from another location. If the options are inherited, you will either need to go to that location to change the options or uncheck the checkbox to inherit options to set them for this location.
4. Click on the checkbox next to **Auto-start Tool Issue Process on Tag Scan** to enable scan auto-start for tool issue.
 - o Since you can't scan a tag on a tool that is in the compartment to issue that tool, you will instead have to scan a tag on the door of the compartment. This will require you to add a set of 2D bar codes to the doors of the compartments of the locker. These can be obtained from the **Pro-Services team**.
5. Click on the checkbox next to **Auto-start Tool Return Process on Tag Scan** to enable scan auto-start for tool return.
6. The user can also configure the system to require a tag scan on tool issue, **Require Tag Scan on Tool Issue**, or tool return, **Require Tag Scan on Tool Return**, if desired.

Scan to Auto-start Tool Issue

1. To issue tools to the FlexHub, the user must first use their ID badge to sign into the FlexHub.
2. Instead of selecting **Issue** within the Employee options list, the user would use the barcode scanner to scan the tag on the door of the compartment containing the tool that they wish to issue.
3. From this point, the issue process would continue as described above in the **Issue Tool** section.

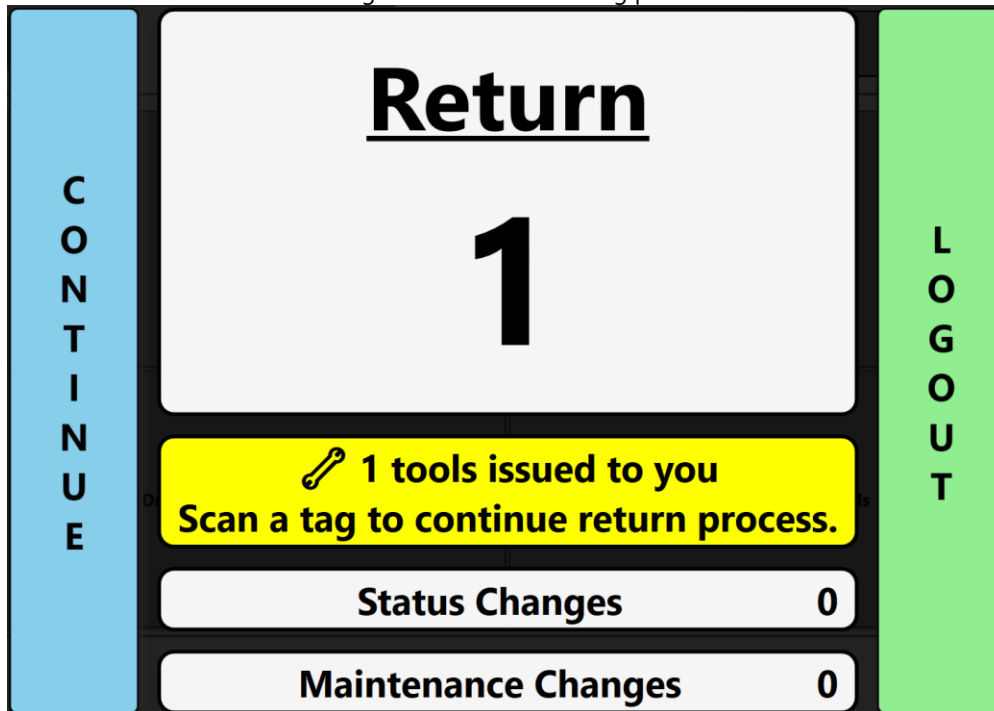
- At the end of the issuing process, the user will then be shown a summary screen. At this point the user could then scan another door tag to initiate the issuing process for another tool.



Scan to Auto-start Tool Return

- To return tools to the FlexHub, the user must first use their ID badge to sign into the FlexHub.
- Instead of selecting **Return** within the Employee options list, the user would use the barcode scanner to scan the tag on the tool that they wish to return.
- From this point, the return process would continue as described above in the **Return Tool** section.

- At the end of the return process, the user will then be shown a summary screen. At this point the user could then scan another issued tool's tag to initiate the returning process for another tool.



The screen displays a summary of the return process. It features a large central area with the word "Return" and the number "1". To the left is a blue vertical bar with the word "CONTINUE" and to the right is a green vertical bar with the word "LOGOUT". Below the central area, a yellow box indicates "1 tools issued to you" and prompts the user to "Scan a tag to continue return process." At the bottom, two white boxes show "Status Changes" and "Maintenance Changes", both with a value of "0".

Scan Required for Tool Issue/Return

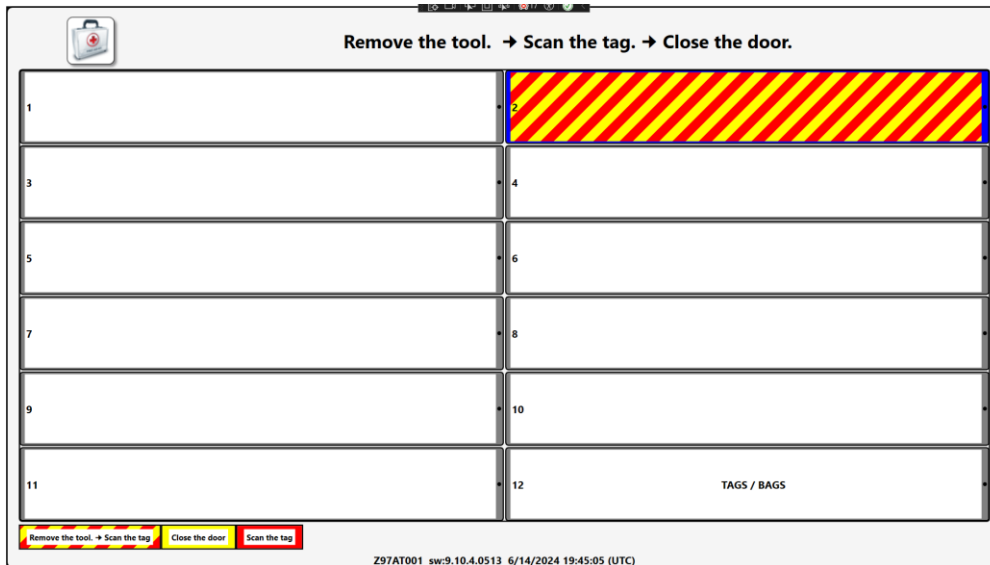
The FlexHub can be configured to require a tag to be scanned for tool issue and/or tool return.

Configuring Scan Required for Tool Issue/Return

- Follow the first three steps of the procedure in **Configuring Admin Client for Scan to Start Issue/Return** to go to the proper place in the admin client.
- Check the **Require Tag Scan on Tool Return** checkbox to require the tool tag to be scanned on tool return.
- Check the **Require Tag Scan on Tool Issue** checkbox to require the tool tag to be scanned on tool issue.
- Click the **blue save disk** button to save your changes.

Tag Scan Required on Tool Issue

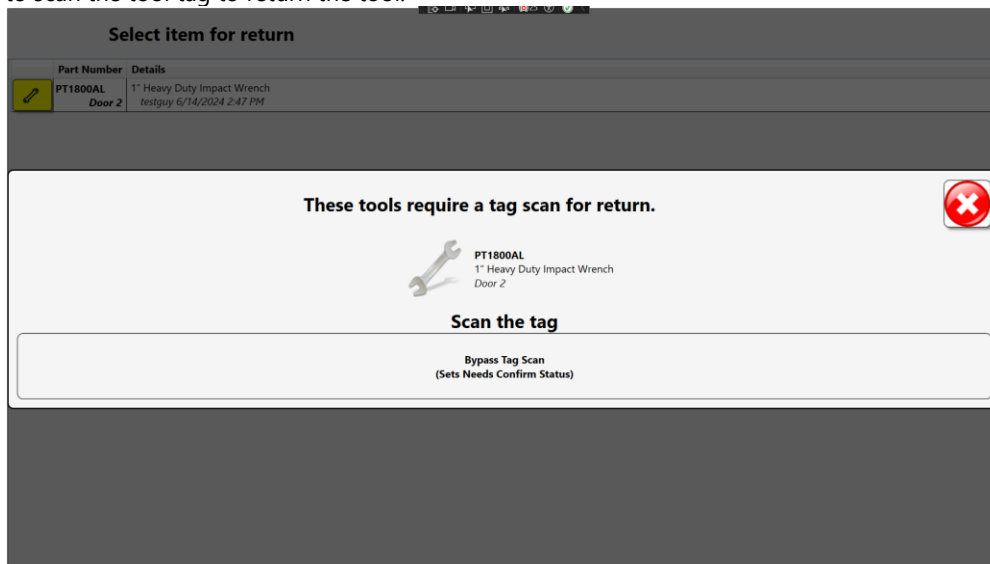
- Start the issue tool process as normal. Once the tool has been selected to issue the user will be prompted to remove the tool, scan the tag, and close the door.



The process won't proceed until the tool tag has been scanned. Otherwise, the issue process will proceed as previously described in the **Issue Tool** section.

Tag Scan Required on Tool Return

1. Start the tool return process as normal. Once the tool has been selected to return the user will be prompted to scan the tool tag to return the tool.



2. Once the tag has been scanned, the tool return process will proceed as previously described in the **Return Tool** section.

Multiple Return

The FlexHub allows the return of multiple tools at once versus the standard one tool at a time. This option can be configured with the L5 Admin Client.



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Configuring Multi-Select Return in Admin Client

1. To set up multiple return we must open the L5 Admin Client.
2. Login and navigate to **Locations** and select the FlexHub in which you wish to have the multi-select return. Then click on **Options**.
3. Look to see if the Options for this device are inherited from another location. If the options are inherited, you will either need to go to that location to change the options or uncheck the checkbox to inherit options to set them for this location.
4. Click on the checkbox next to **Locker Hub Allow Multi-Select Return** to enable multi-select return.

Multi-Select Return Workflow

1. To return multiple tools to the FlexHub, the user must first use their ID badge to sign into the FlexHub. Then the user will select **Return** within the Employee options list.
2. You will see a list of tools issued to the currently logged in user on the left. Either scan the barcode for the tool or click the **red arrow** for that tool to move the tools you wish to return into the **Returning** column.

Select tools for return.

⌄

Returning

⌄

Part Number Serial Number	Details		Part Number Serial Number	Details
NT001 Serial# Door 4	Allen Wrench Set Mechanic, Mike 3/20/2024 3:06 PM			
CTECH4R600A Serial#TW-0001 Door 6	600 ft. lb. torque wrench Mechanic, Mike 3/20/2024 3:06 PM			
434HDC Serial#434HDC-1 Door 11	3/4" DR SET w/CASE & FOAM Mechanic, Mike 3/20/2024 3:06 PM			

Return



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Select tools for return.

⇒ Returning ⇐

Part Number	Serial Number	Details
	NT001 Serial#	Allen Wrench Set Mechanic, Mike 3/20/2024 3:06 PM
	Door 4	
	CTECH4R600A Serial#TW-0001	600 ft. lb. torque wrench Mechanic, Mike 3/20/2024 3:06 PM
	Door 6	
	434HDC Serial#434HDC-1	3/4" DR SET w/CASE & FOAM Mechanic, Mike 3/20/2024 3:06 PM
	Door 11	

Return

- Click the **Return** button to initiate the return of the tools.
- At this point the process will continue as described for a single tool return flow serially for each of the tools selected for return.

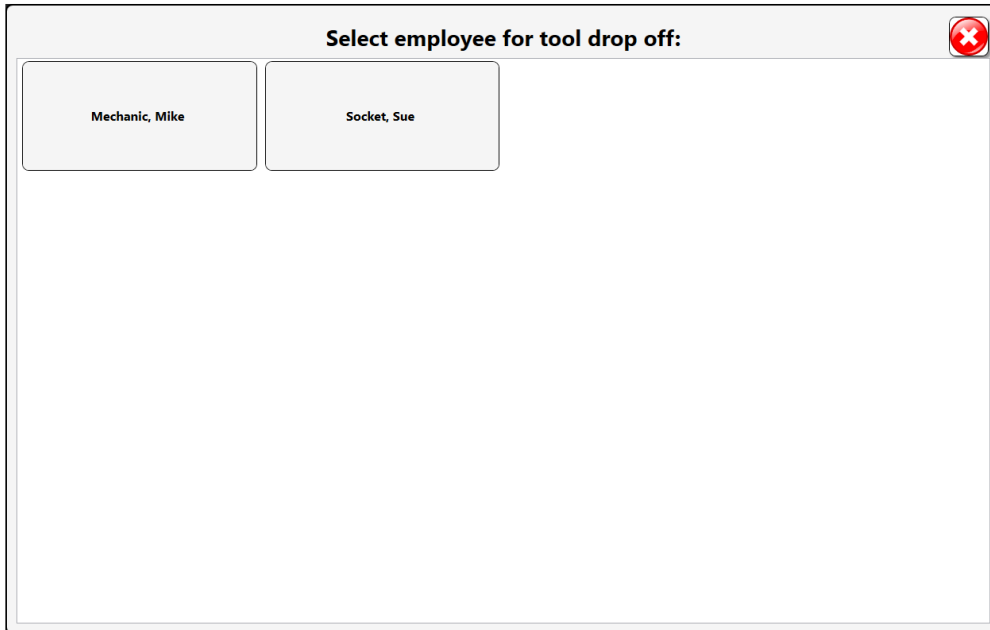
Return Other User Tool(s)

The FlexHub allows a permissioned user to return tools for others within their organization that have been issued from the FlexHub's inventory.

Access point(s): FlexHub Dashboard after permissioned user sign in

Required Permission: Tool Return Other User Device Drop Off.

1. To return another's tools click on the Return other users' tools box within the select workflow screen. Then the user will select which employee they are returning tools for.



2. After an employee's name is selected, a list of all the tools the user has issued from the FlexHub are visible.
NOTE: Only tools the user has issued from the FlexHub show in this list.
3. Select the tool(s) for return and then follow the normal return procedure.

Error Recovery Support

The system has support for when things might not go quite as expected during one of the flows. There is a button with a first aid icon that the user can click to use this error recovery support.



There are buttons to

- **Cancel process** if you want to stop in the middle of a flow
- **Reopen Doors** if you accidentally put the wrong tool and need to reopen the door to put the proper tool in, for instance
- **Door won't close** to alert the system that the door is not closing properly
- **Doors are closed** if the door did not open when it should have



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Drop-off Tools

The FlexHub also allows a user to drop off any tools currently issued to them from any device within the L5 Connect system. Tools will be assigned a "Waiting for courier" status when dropped off at the FlexHub. **NOTE: This option is not shown if no compartments are configured as drop-off mode.**

Access point(s): FlexHub Dashboard after user sign in

Required Permission: Device User

1. Select **Drop-off Tools** from the FlexHub main screen. **NOTE: If drop off for other user's tools is selected with an admin employee an additional screen will be displayed where the user picks which user they are dropping off for, similar to Return other users tools**
2. Select a tool from the list of issued tool(s) from the left. **NOTE: multiple items can be selected if they are all contained within the same bag. The drop off process must be repeated if the tools should be held in a separate bag.** Once item(s) are selected press the **Drop Off** button and attach a status if necessary. **NOTE: This list shows tools issued to the user from any device within the L5 Connect system.**

Select Tools To Drop Off For Mechanic, Mike



Current Issued Tools		Dropping Off Tools	
Part Number	Details	Part Number	Details
<input type="checkbox"/>	ATI429A-2 MICROSHAVER SKIRT-3/8 Z99LS001 12/19/2023 2:55 PM	<input type="checkbox"/>	
<input type="checkbox"/>	ATI429A-3 MICROSHAVER SKIRT-7/16 Z99LS001 12/19/2023 2:55 PM	<input type="checkbox"/>	
<input type="checkbox"/>	NYZ001 Blade NYROC 1" Z99LS001 12/19/2023 2:55 PM	<input type="checkbox"/>	
<input type="checkbox"/>	NT001 Allen Wrench Set Z99LS001 12/19/2023 2:55 PM	<input type="checkbox"/>	

Create: Personal Tool

Drop Off



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Select Tools To Drop Off For Mechanic, Mike

Current Issued Tools

Part Number	Details	
AT1429A-3	MICROSHAVER SKIRT-7/16 Z99LS001 12/19/2023 2:55 PM	+
NYZ001	Blade NYROC 1" Z99LS001 12/19/2023 2:55 PM	+
NT001	Allen Wrench Set Z99LS001 12/19/2023 2:55 PM	+

Dropping Off Tools

Part Number	Details	
AT1429A-2	MICROSHAVER SKIRT-3/8 Z99LS001 12/19/2023 2:55 PM	+

Create: Personal Tool

Drop Off

3. Select an open drop-off compartment. These compartments show white if empty and solid grey compartments if full/not assigned for drop-off. After a drop-off compartment is selected, the bag/tag storage compartment will open, and the user will be prompted to take a bag/tag from the compartment and close the door. Then scan the new tag or barcode.

Select: Drop Off Compartment

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

TAGS / BAGS

Z97BB001 sw:9.8.6.1204 12/19/2023 20:57:35 (UTC)

4. Place tagged tool or bag in the opened compartment and then close the door.

Create Personal Tool


If you have a personal tool, not in the L5 Connect™ system, you can still place it in the FlexHub if you need some maintenance. The process of dropping off a personal tool is very similar to the standard procedure.

Access point(s): Under Tool drop off workflow after user sign in

Required Permission: Device User

1. When you select Drop off Tools from the Workflow page, you are presented with the Tool Selection page. At the bottom of the page, tap Create: Personal Tool.

Select Tools To Drop Off For Socket, Sue




Current Issued Tools

Part Number	Details	
ATI590L	Kit - Rivet shaver SN: ATI590L-01 Z99LS001 12/19/2023 2:04 PM	→
ATI429B-1	MICROSHAVER CUTTER-CARB-5/16 Z99LS001 12/19/2023 2:04 PM	→
ATI429B2	MICROSHAVER CUTTER-CARB-3/8 Z99LS001 12/19/2023 2:04 PM	→
L52B	T-BAR HEAD Z99LS001 12/19/2023 2:04 PM	→
LDH262	3/4DR 12PT 13/16" SHL SKT Z99LS001 12/19/2023 2:04 PM	→
NT001	Allen Wrench Set Z988B001 1/17/2024 10:51 AM Cal. Req.	→

Dropping Off Tools

Part Number	Details	

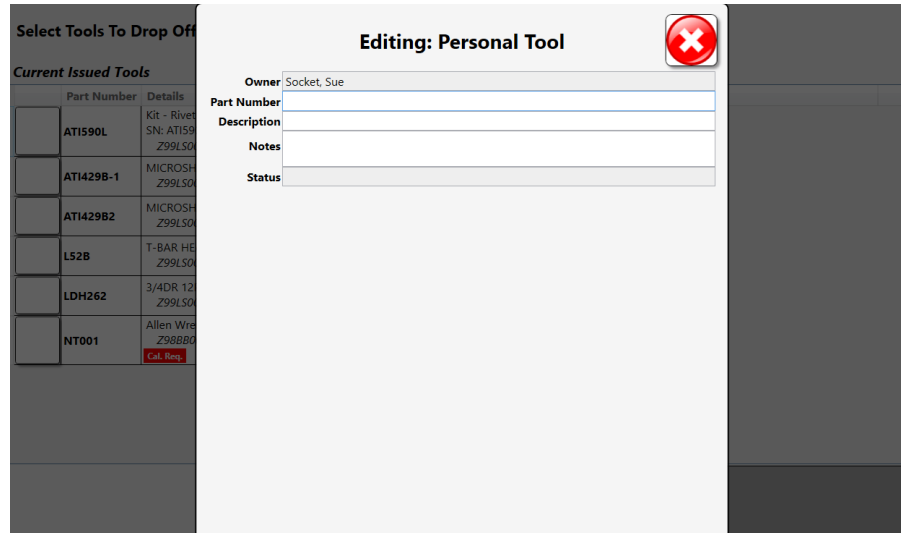


Create: Personal Tool

Drop Off

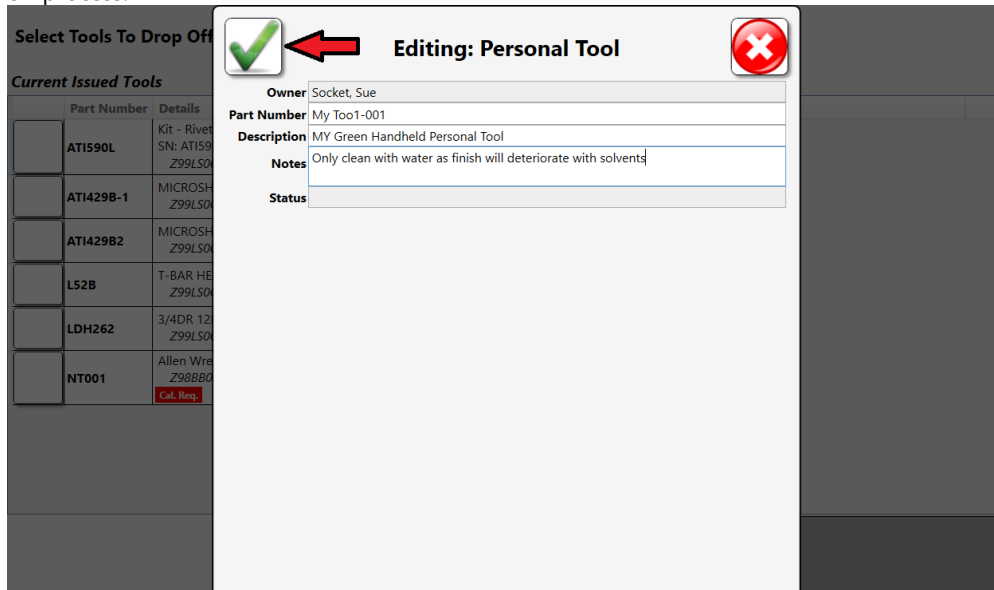
2. The FlexHub will display the Personal Tool creation screen. From this page, you can input the details of the tool:
 - Owner: The Employee that created the tool in the ATR.
 - Part Number: A Number to represent the tool in the L5 Connect™ system.
 - Description: A short description of what the tool is.
 - Notes: Explanation of why you are placing the tool in the ATR and any special instructions.

- Status: The status of the Tool.



Part Number	Details
AT1590L	Kit - Rivet SN: AT159 Z99LS0
AT1429B-1	MICROSH Z99LS0
AT1429B2	MICROSH Z99LS0
L52B	T-BAR HE Z99LS0
LDH262	3/4DR 12 Z99LS0
NT001	Allen Wre Z988B0 Cal. Req.

- Then, tap the ✓ button in the upper left to continue. The rest of the process is identical to the normal Drop-off process.



Part Number	Details
AT1590L	Kit - Rivet SN: AT159 Z99LS0
AT1429B-1	MICROSH Z99LS0
AT1429B2	MICROSH Z99LS0
L52B	T-BAR HE Z99LS0
LDH262	3/4DR 12 Z99LS0
NT001	Allen Wre Z988B0 Cal. Req.

Receive Tools

For a user to receive tools they must first be dropped off by a courier, this information must be initiated within the L5 Connect Admin Client. **NOTE: This option is not shown if no compartments are configured as drop off mode.**

Access point(s): FlexHub Dashboard after user signs in.

Required Permission: Device user (also requires tools delivered off by courier)



L5 Connect User Manual

1. Select the **Receive Tools** box from the FlexHub main menu. **NOTE: If the user has no tools to receive the box will be greyed out.** This will bring up a list of tools that have been addressed to the user directly. Select the items from the list and click **Receive Tools**.

Select Tools to Receive

Waiting for Employee

Door	Details
15	NT001/Allen Wrench Set

Tools To Receive

Door	Details
15	NT001/Allen Wrench Set

Receive Tools

Select Tools to Receive

Waiting for Employee

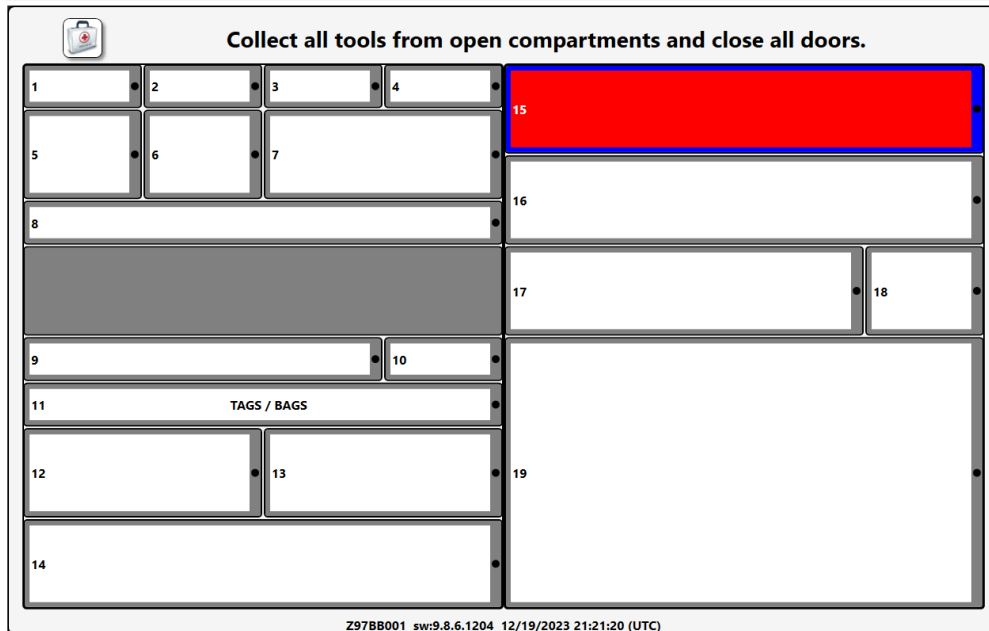
Door	Details
15	NT001/Allen Wrench Set

Tools To Receive

Door	Details
15	NT001/Allen Wrench Set

Receive Tools

Collect all tools from open compartments and close all doors.



Tool Courier Actions

NOTE: The device must have an active connection to the L5 Connect Service for Courier functions (drop off/pick up/etc).

Pick up Tools

A Tool Courier uses this workflow to pick up tools previously dropped off by other users at the FlexHub. Picked up tools will be assigned the "In transit" status and assigned to the courier until they are scanned as received at a Tool Crib."

Access point(s): FlexHub Dashboard after courier user sign in

Required Permission: Tool Courier login

1. Log in to FlexHub using the RFID Badge Scanner, then select **Pickup Tools** from the **Tool Courier** menu options. **NOTE: Only tools that have been dropped off can be picked up a courier.** The courier will then see a list of tool bags waiting for pickup. Click the red arrow to move a bag over from **Tool bags waiting** to



L5 Connect User Manual

Picking up bags, then click **Pickup**.

Select items for pickup

Tool bags waiting

Door	Details
#16 (444555)	1 Tools Mechanic, Mike

Picking up bags

Door	Details
#15 (12154451)	1 Tools Socket, Sue

Pickup

- Remove the tool/bag, close the door, and scan the tag.

Remove the tool. → Close the door. → Scan the tag.

1

2

3

4

5

6

7

8

9

10

11

TAGS / BAGS

12

13

14

15

16

17

18

19

Remove the tool. → Close the door

Scan the tag

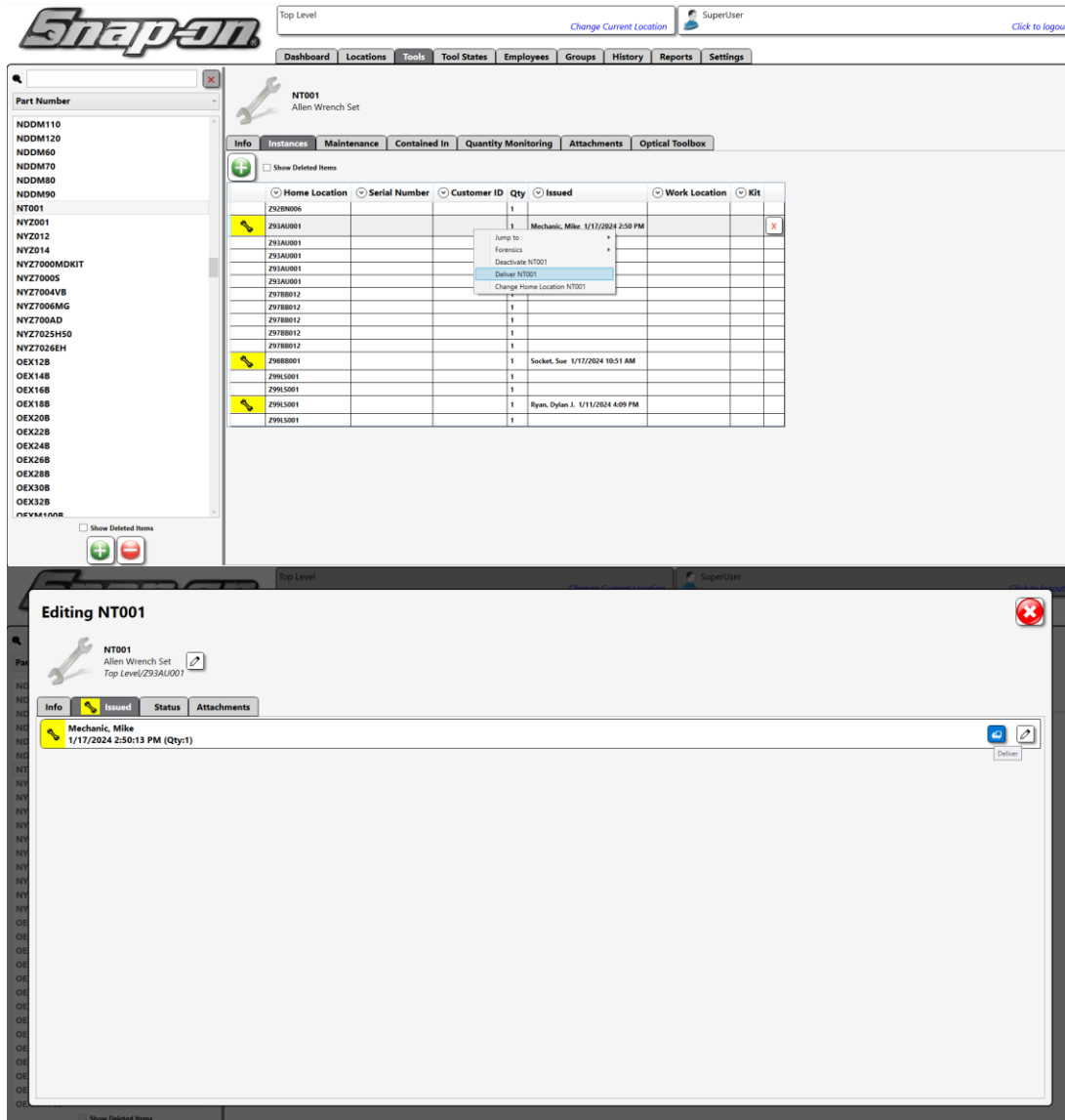
Close the door

Complete

Z97BB001 sw:9.8.6.1204 12/19/2023 21:07:49 (UTC)

Deliver Tools

A courier can deliver tools to a specific user of the FlexHub. Tools must be marked for delivery using the admin client/tool crib. This is done by navigating to an instance of a tool, under the **Tools** tab. Then the user can either right click on the instance of a tool, or double click on the instance of the tool and click the **Deliver** button in the **Issued** tab. Both instances are shown below.



Access point(s): FlexHub Dashboard after courier user sign in

Required Permission: Tool Courier login.

When to use:

- Returning maintained/repaired tools to a user.
 - Replacing a broken/missing tool for a user.
1. Log in to the FlexHub and select **Deliver Tools** within the **Tool Courier** workflows. The user will be prompted to select which user they are delivering tools for. Select the user to whom to deliver tools. This will bring up a similar screen as seen before in other workflows with tools pending delivery on the left and the tools to deliver on the right. Click the red arrow to move any **delivery pending tools** to **tools to deliver**.



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Select Employee For Tool Delivery

Socket, Sue

NT001 / Allen Wrench Set

Select Tools To Deliver To Socket, Sue

Delivery Pending

Part Number	Details
 NT001	Allen Wrench Set Z97BB001 12/19/2023 3:13 PM In Trans

Tools to Deliver

Part Number	Details
-------------	---------

+

Deliver

Select Tools To Deliver To Socket, Sue

Delivery Pending

Tools to Deliver

Part Number	Details
NT001	Allen Wrench Set Z97BB001 12/19/2023 3:13 PM In Trans

Deliver

- Next the user will select a delivery compartment, with any empty compartments displaying a white box within its borders as shown below. **NOTE: Only the compartments designated for drop-off can be selected**

Select: Delivery Compartment

1

2

3

4

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6

7

8

9

10

11

TAGS / BAGS

12

13

14

15

16

17

18

19

Z97BB001 sw:9.8.6.1204 12/19/2023 21:16:20 (UTC)

Place the tools to deliver in the open compartment and close the door.

Reload Bags

The **Reload Bags** button allows the user to easily add bags/tags to the compartment designated for bags/tags. For this task the user must first scan their badge, then click on the **Reload Bags** button within the **Tool Courier** options



L5 Connect User Manual

box. The compartment will open, allowing the user to load additional bags/tags. Once completed close the compartment.

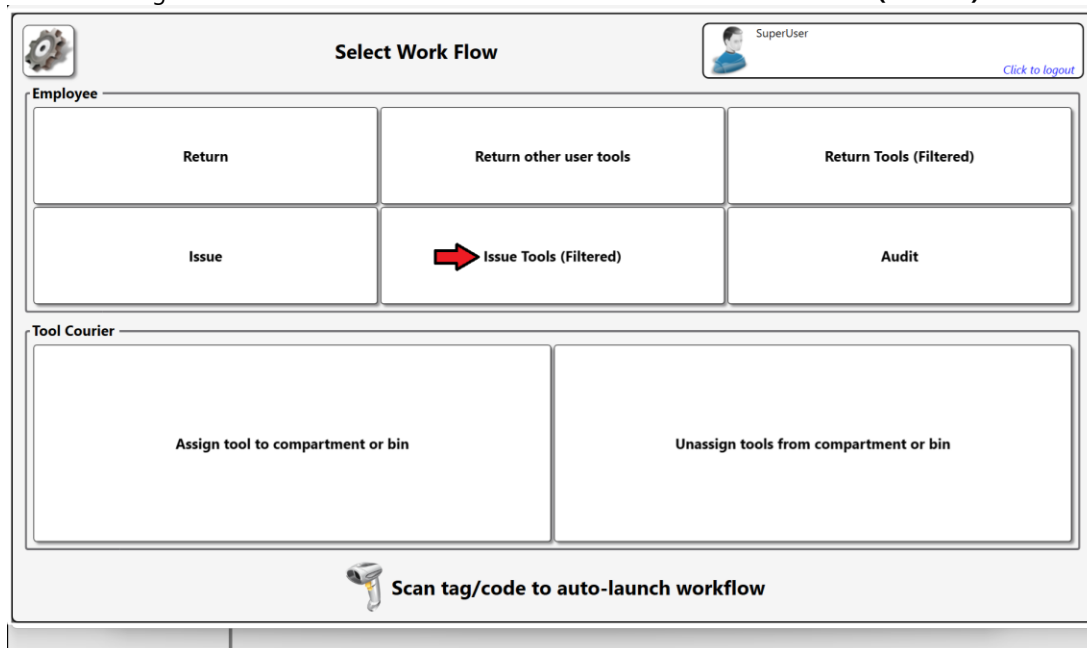
Access point(s): FlexHub Dashboard after courier user sign in

Required Permission: Tool Courier login.



Issue Tools(Filtered)





A courier can use the **Issue Tools (Filtered)** button to issue tools that a normal user would not have access to. For instance, if the courier needed to pick up tools that were marked with a calibration requested status, that would be done in this way.

The courier logs into the FlexHub and from the main screen clicks the **Issue Tools (Filtered)** button.





Then use the filtering to find the desired tool. In this example we will filter by status. Click the **Status** filter button.


***Select tools to issue with filters**



 Alerts
  Mingdi Out
  Status
  Assigned Tools

Part Number	Details
434HDC <small>Door 12</small>	3/4" DR SET w/CASE & FOAM <small>Cal. Req.</small>
ATI429A-1	MICROSHAVER SKIRT-5/16
ATI429A-2	MICROSHAVER SKIRT-3/8
ATI429A-3	MICROSHAVER SKIRT-7/16
ATI429A-4	MICROSHAVER SKIRT-1/2
ATI429A-5	MICROSHAVER SKIRT-9/16
ATI429A-6	MICROSHAVER SKIRT-5/8
ATI429A-7	MICROSHAVER SKIRT-3/4
ATI429B-1	MICROSHAVER CUTTER-CARB-5/16
ATI429B2	MICROSHAVER CUTTER-CARB-3/8
ATI429B-3	MICROSHAVER CUTTER-CARB-7/16
ATI429B-4	MICROSHAVER CUTTER-CARB-1/2

Click the **Calibration Requested** button and then click the **OK** button that looks like a green checkmark.



Filter by: Status

Calibration Requested



Select All

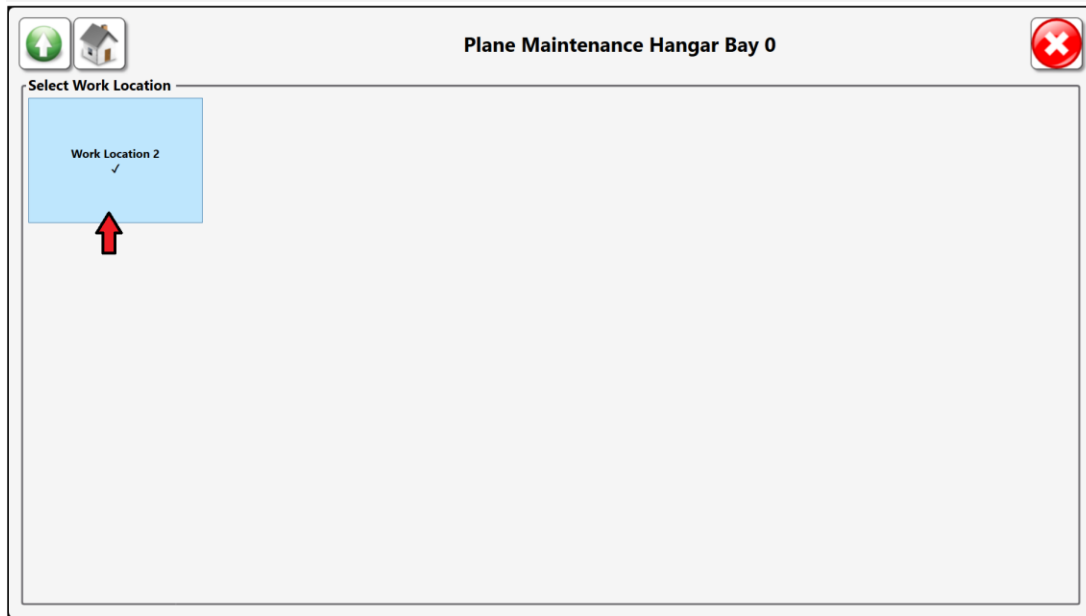
Clear All



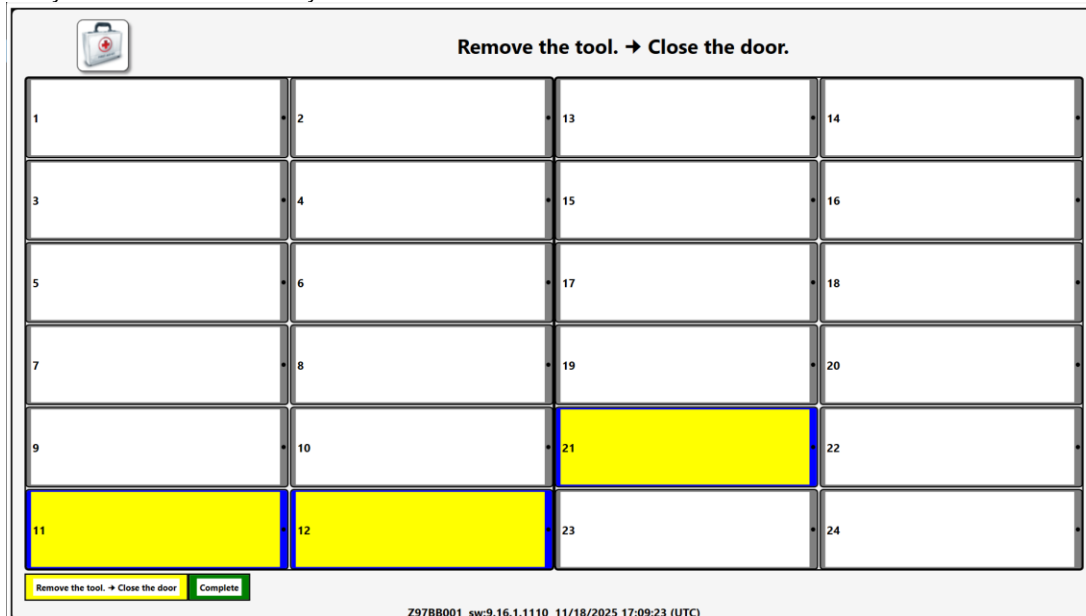
L5 Connect User Manual

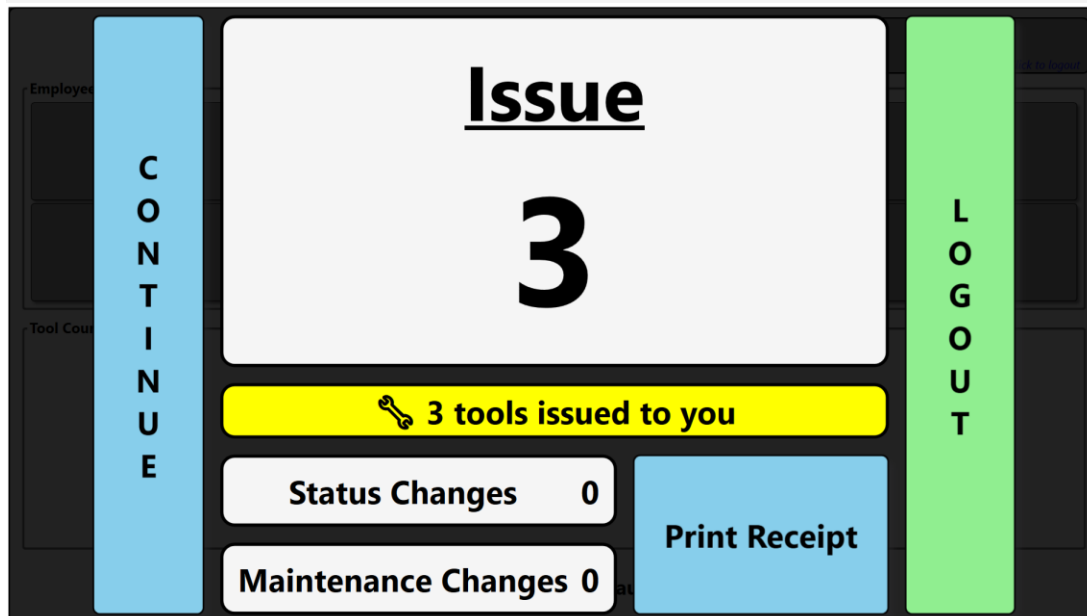
This will filter the screen to show the tools with the selected status available to issue. Click the **OK** button that looks like a green checkmark.

If prompted, select the work location to where you wish to issue the tool.



Then you will be prompted to remove the tool and close the door. Once you close the door the tool will be issued and you will see the summary screen.





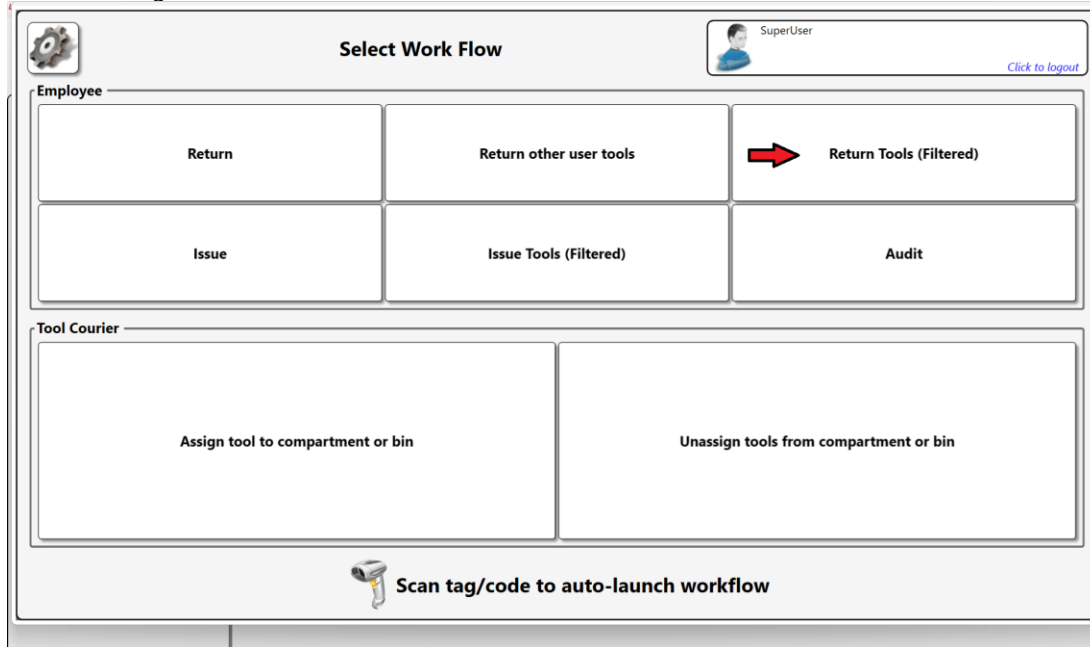
Access point(s): FlexHub Dashboard after courier user sign in

Required Permission: Tool Courier login.

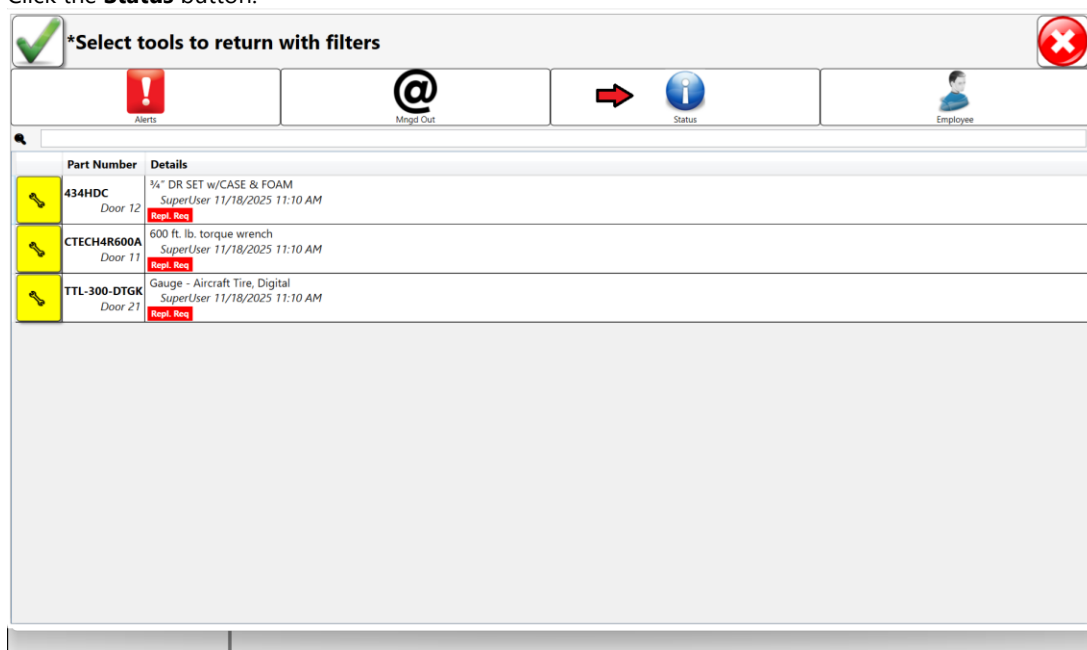
Return Tools(Filtered)

A courier can use the **Return Tools (Filtered)** button to return tools that a normal user would not have access to. Suppose the courier has replacements for several tools that have a replacement requested status.

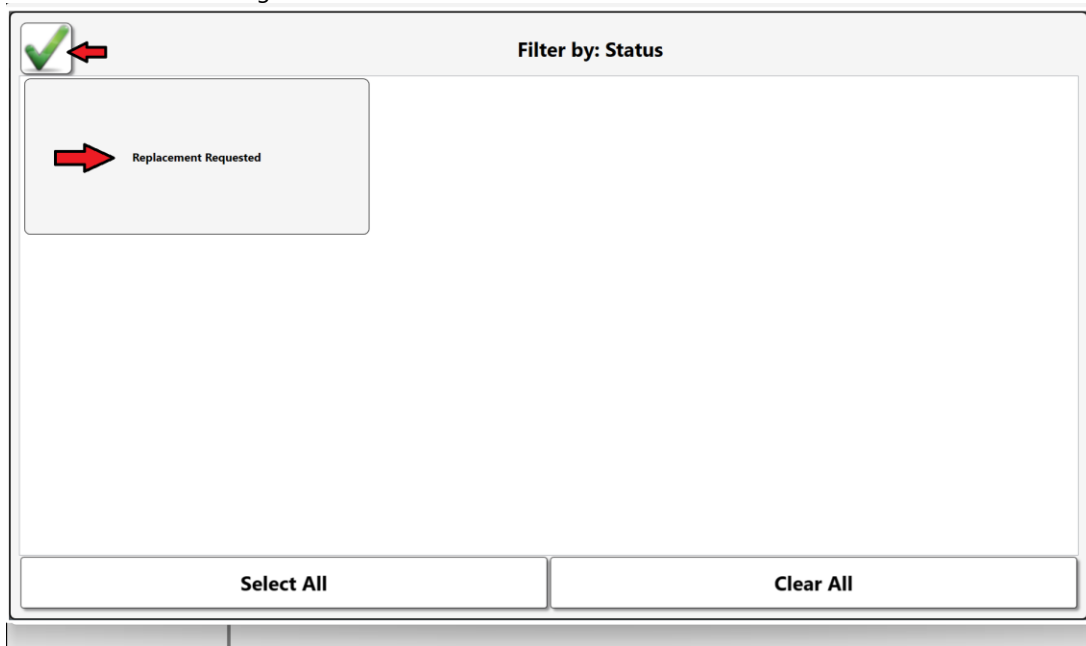
The courier logs into the FlexHub and from the main screen clicks the **Return Tools (Filtered)** button.



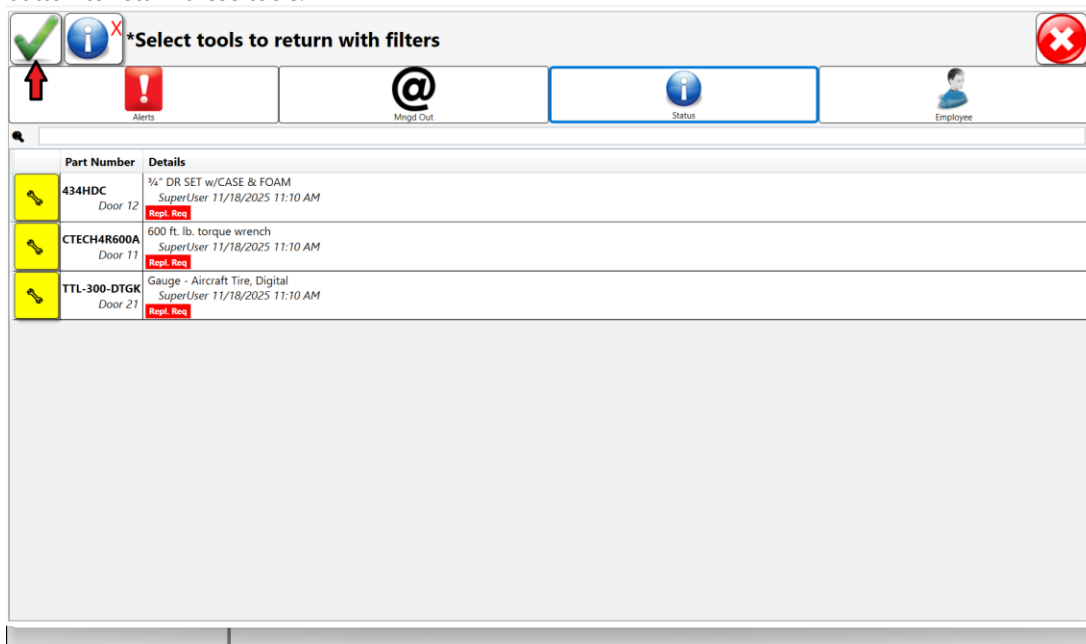
Click the **Status** button.



He will now be prompted to choose a status type. He clicks the **Replacement Requested** button and then the **OK** button that looks like a green checkmark.

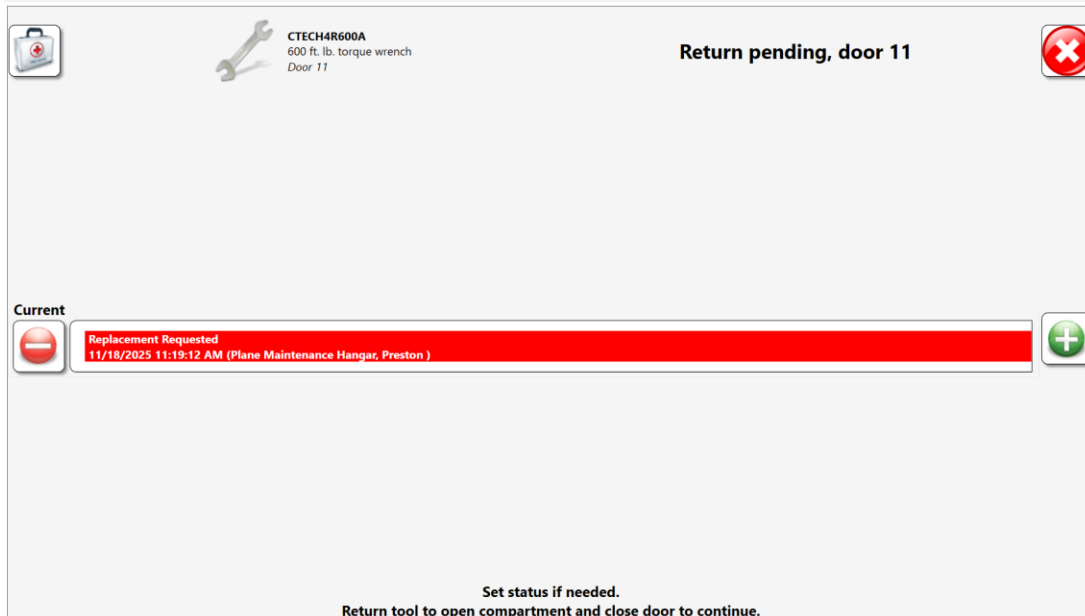


The screen will now be filtered to show all the issued tools with the **Replacement Requested** status. He clicks the **OK** button to return these tools.



Part Number	Details
434HDC Door 12	1/4" DR SET w/CASE & FOAM SuperUser 11/18/2025 11:10 AM Repl. Req.
CTECH4R600A Door 11	600 ft. lb. torque wrench SuperUser 11/18/2025 11:10 AM Repl. Req.
TTL-300-DTGM Door 21	Gauge - Aircraft Tire, Digital SuperUser 11/18/2025 11:10 AM Repl. Req.

He is now prompted to return the tools and close the compartment doors.



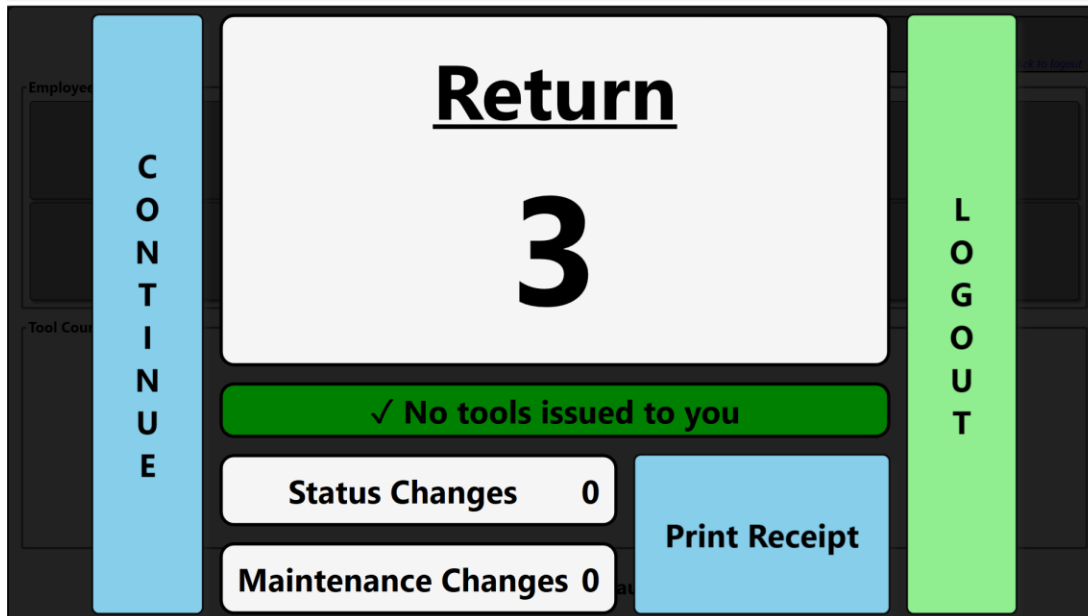
Return pending, door 11

CTECH4R600A
600 ft. lb. torque wrench
Door 11

Current

Replacement Requested
11/18/2025 11:19:12 AM (Plane Maintenance Hangar, Preston)

Set status if needed.
Return tool to open compartment and close door to continue.



Return

3

✓ No tools issued to you

Status Changes 0

Maintenance Changes 0

Print Receipt

CONTINUE

LOGOUT

Access point(s): FlexHub Dashboard after courier user sign in

Required Permission: Tool Courier login.



L5 Connect User Manual

Advanced Features

ZoomID

Which tools require tags?

It is not necessary or even desirable to attach Snap-on color stripe tool ID tags to every tool in a toolbox. A tag should be applied to only those tools which require serialized tracking. A list of reasons for tagging your tools should include:

- Calibrated tools
- Inspected tools
- Specialty or Critical tools which require serial identification

Allowed Number of Tags

Assuming that all of the rules and guidelines of this document are followed, the "practical" limit of the number of tagged tools will be less than the "technical" limit of tagged tools. In other words, there is not enough area in a toolbox to hold enough tagged tools to reach the technical limit for tags.

Tag Reuse

A specific ZoomID tag number can only be used once per L5 Connect system. Every tool must have a unique tag number. To avoid accidental tag duplication, a customer should never order the same tag catalog part number twice.

Tag application

Orientation



BEST



OK WITH LIMITS



NOT OK

- BEST - Tag color stripes parallel to motion of drawer
- OK WITH LIMITS - Tag color stripes perpendicular to motion of drawer

- NOT OK - Any application where the color stripes are neither parallel nor perpendicular with the motion of the drawer

Area

The visible area of the ZoomID tag on the tool should be maximized. In other words, the more of the tag that can be seen by the cameras, the higher the detection reliability. There are some minimums to keep in mind.



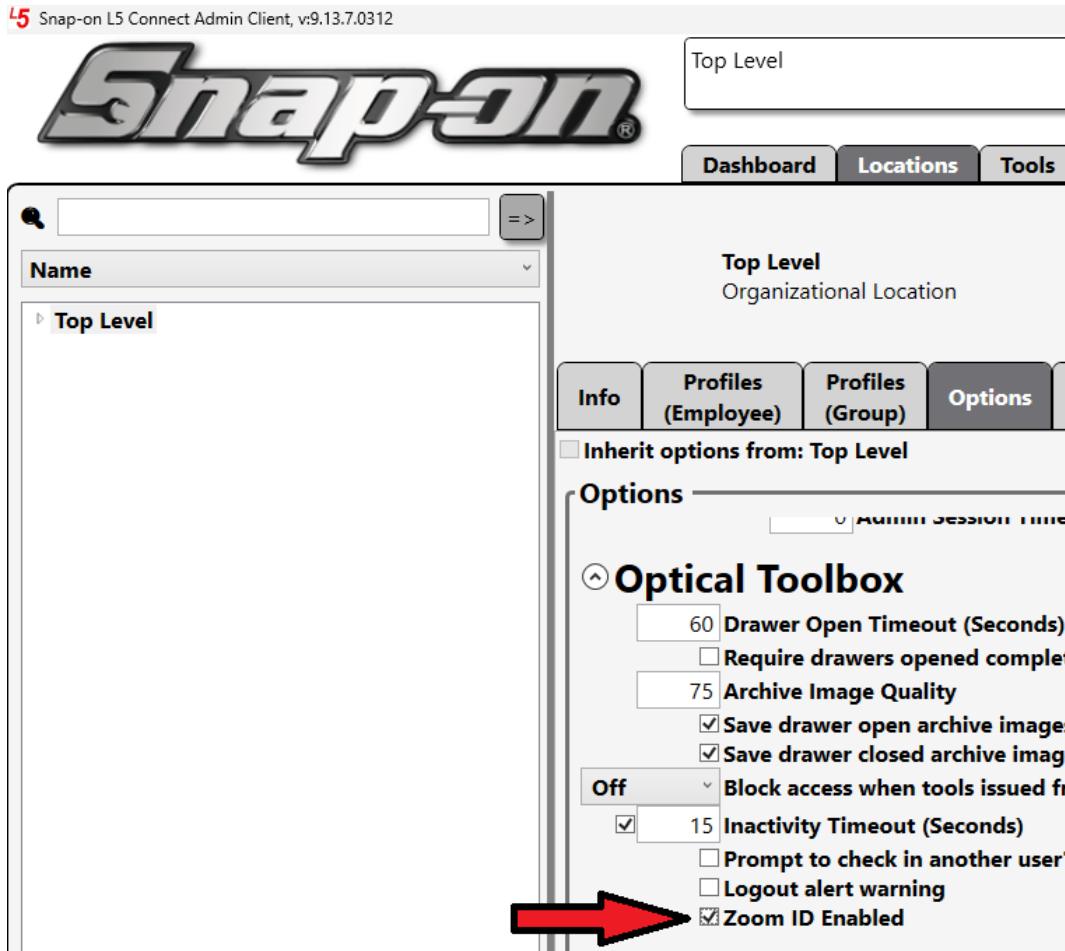
- Top drawers
 - MIN = 0.5"
- Middle Drawers
 - MIN = 1"
- Bottom Drawers
 - MIN = 2"

Selecting appropriate tag type

- Large Tags (Preferred)
 - Should be the first choice for all ZoomID tagged tools
 - Can be used in all drawers when applied in the "BEST" application configuration
 - Can be used in the top two drawers when in the "OK WITH LIMITS" application configuration
- Medium Tags
 - Should only be used if large tag cannot be applied
 - "BEST" application configuration only
 - Top and middle drawers only (no lower drawers)
- Small Tags
 - Should only be used if large or medium tags cannot be applied
 - "BEST" application configuration only
 - Top two drawers only

ZoomID Enabled Option

- Originally, toolboxes would automatically look for ZoomID tags on tools when a drawer was closed. However, this is now a configurable option in the system. By default, the system will look for ZoomID tags. If a situation arises where you would prefer to turn this feature off, this can be done in the Admin application. See the Editing Optical Toolbox Options section of the L5 Connect™ Locations document for more information on device options.



Setup Instructions

Contact Snap-on Industrial Pro-Services for setup instructions.



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Supported Accessories



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Printers



L5 Connect User Manual

Setting up the Label Printer in L5 CONNECT™ TRUE CRIB™ and Administration App

The goal of this document is to describe the configuration of TRUE-CRIB™ and the L5 Connect Administration application to setup a label printer.

Configure the Label Printer Hardware

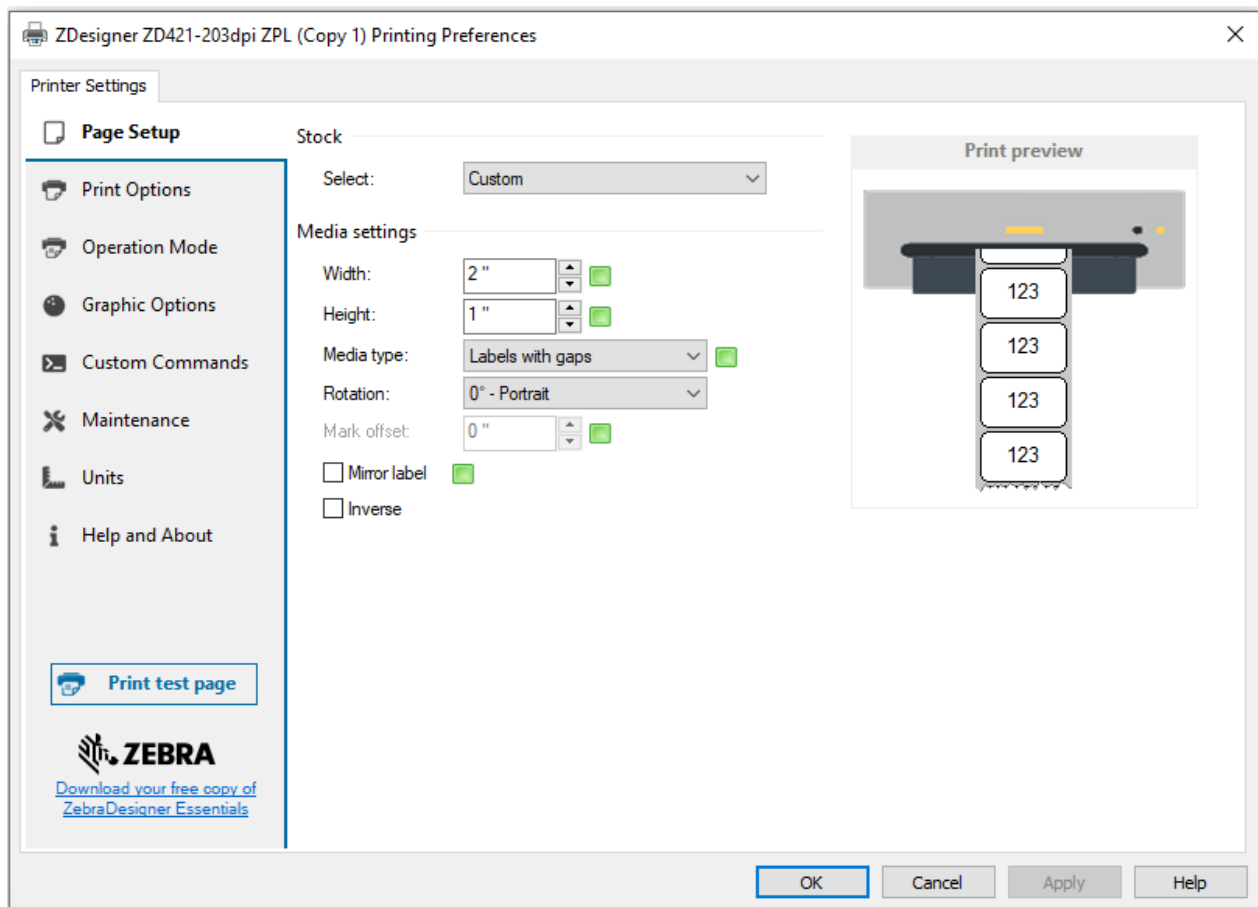
L5 Connect™ supports the following label printers, transfer ribbon, and labels:

Product	Details	Status
Label Printer	L5W2672073 LABEL PRINTER, Model: Zebra GK420t (203dpi, thermal transfer)	Obsolete
Label Printer	L5W6480135 LABEL PRINTER, Model: Zebra ZD421t (203dpi, thermal transfer)	Active
Ribbon	L5W3111044 Thermal transfer ribbon	Active
Labels	L5W3424726 2" x 1"	Active

To install the label printer, follow the instructions included with the device to calibrate the printer, install the ribbon, and setup the labels.

Setting the Label Size

1. After setting up the printer, you will need to set the label size.
2. Open **Windows settings** -> **Devices** -> **Printers & Scanners**.
3. Find the Zebra Printer in the list, click on it and then click **manage**.
4. Click on **Printer Preferences**, and in the **Page Setup** Tab, under Size, set the **Width** to 2 and the **Height** to 1.

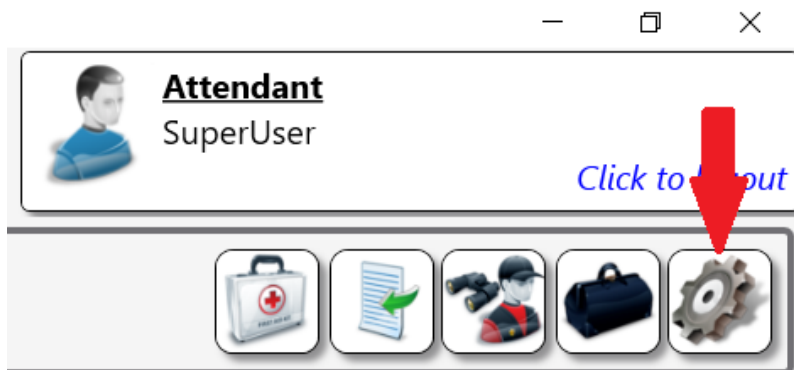


5. Finally, a test print is necessary to verify that the labels will print correctly. Click on the **Print test page** button within the printer preferences window. **NOTE: This step is required to ensure everything is printed within the margins of the label. If this step is skipped labels will NOT print correctly**

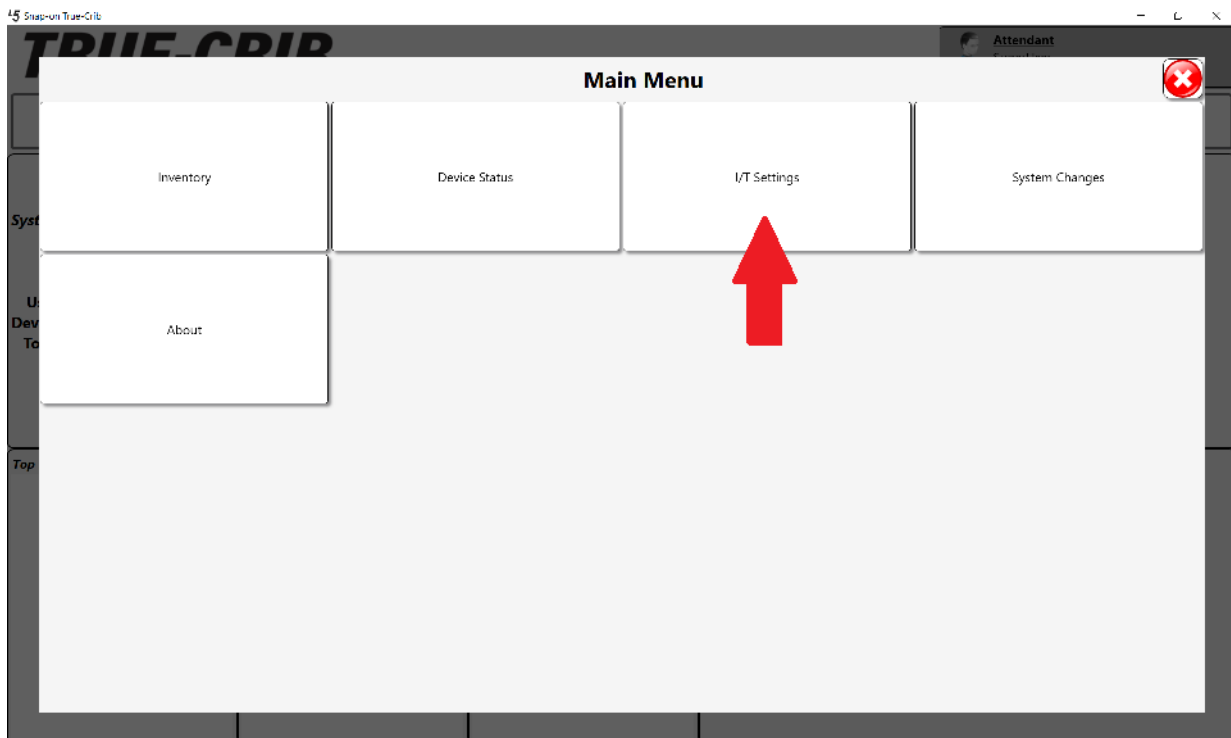
Setting True-Crib™ to use the Label Printer

After setting the label size, you will need to associate the printer with the True-Crib™ software.

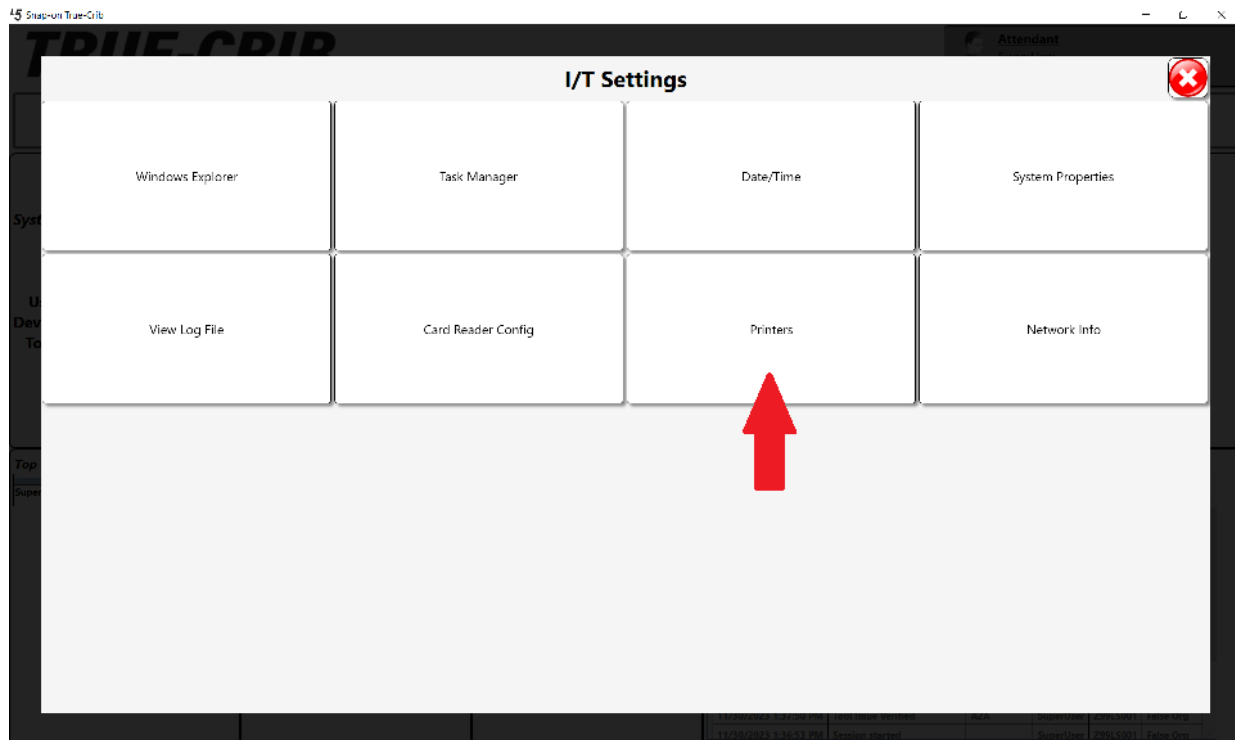
1. Start True-Crib™, log into the system as an attendant and click the **settings gear** icon. NOTE: You will need to log in with a user that has the **Network Settings** permission to be able to modify the printer setup. The only built in profile that has this setting is the **SuperUser** profile, so any user with the **SuperUser** profile will work.



2. Click the **IT Settings** button.



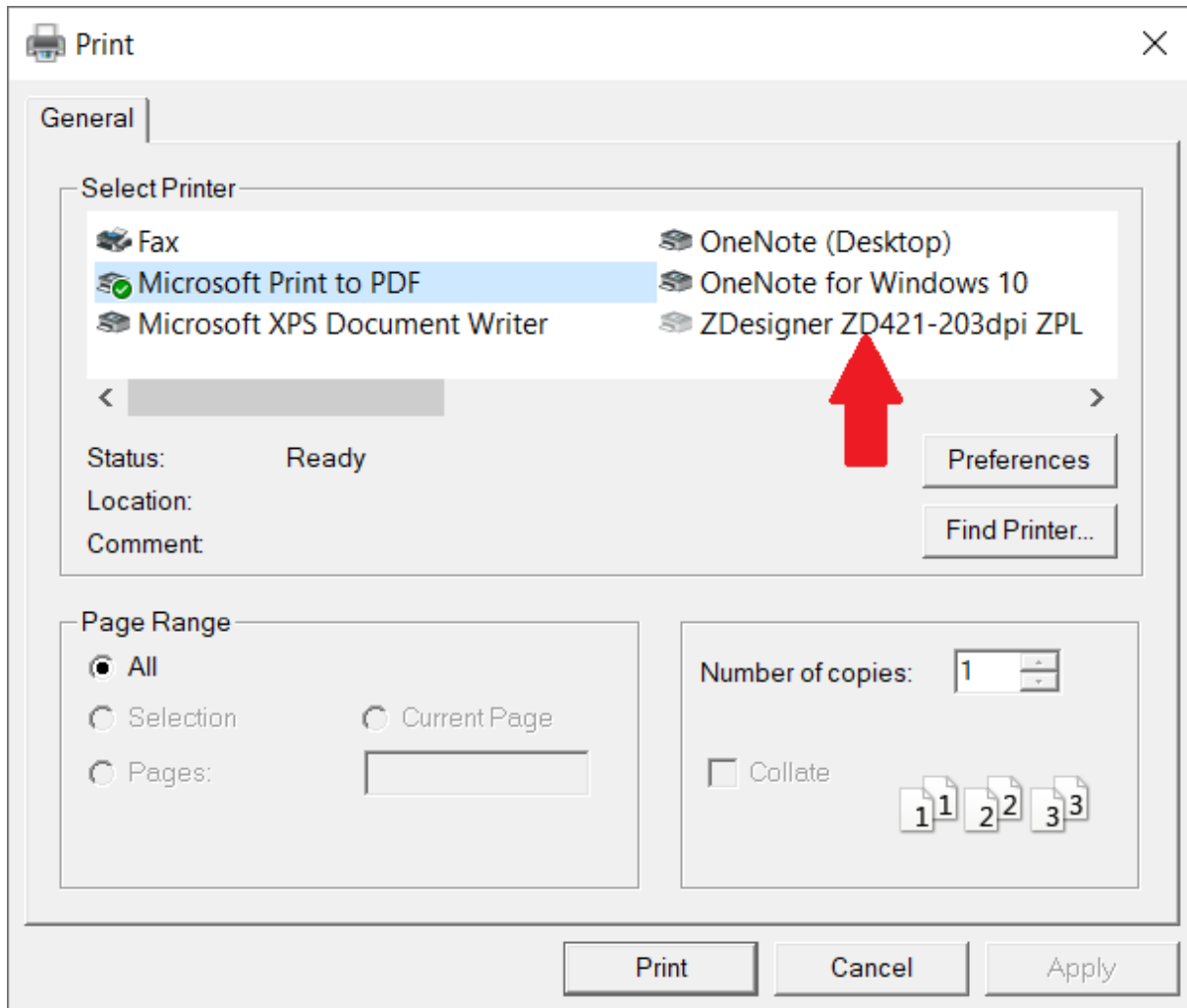
3. Click the **Printers** button.



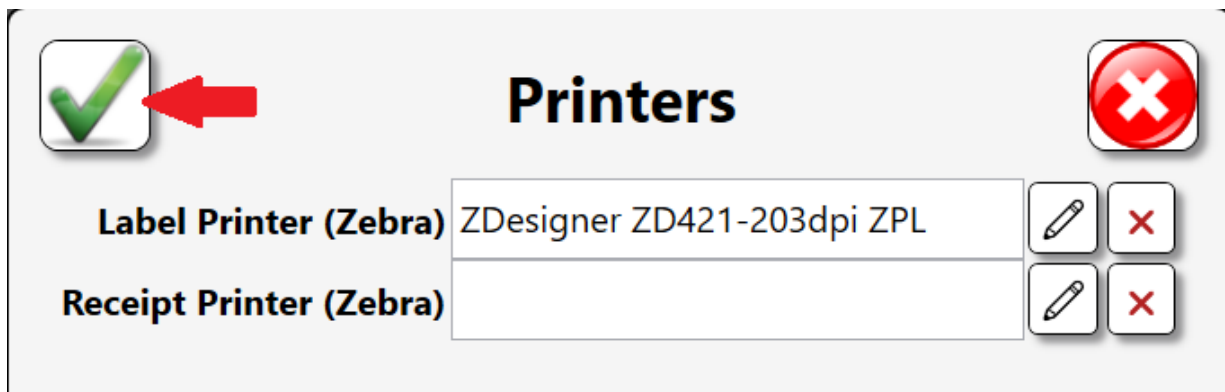
4. Once on the Printers Settings page, click the **pencil** button to the right of **Label Printer**.



5. Select the Zebra Label printer from the list and click Print.



6. The Printer name will display in the textbox. Click the green ✓ button to save.



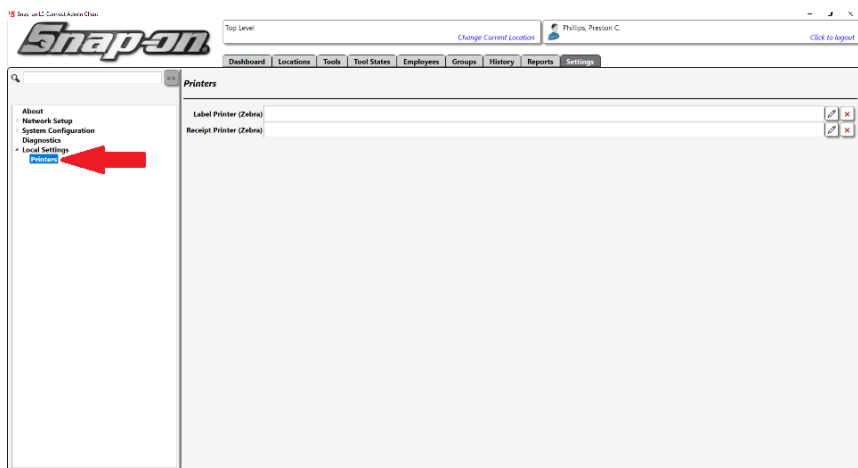
True-Crib™ should now be configured to print labels!

Setting the L5 Connect Administration App to use the Label Printer

1. Start the Admin, then log into the system as a user that has the **Network Settings** permission so you will be able to modify the printer setup. The only built in profile that has this setting is the SuperUser profile, so any user with the SuperUser profile will work.
2. Switch to the **Settings** tab, then expand the Local Settings.



3. Click the **Printers** setting.



4. Now follow the procedure in the previous section from step 4 to the end.

Your Admin App should now be able to print labels!



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Barcode / RFID Tag Scanners

Setting up a Zebra DS2208 Wired & DS3678 Wireless Bar Code Scanner in L5 CONNECT™

The goal of this document is to describe the setup of the Zebra DS2208 wired and DS3678 wireless barcode scanners for use with L5Connect software and devices.

Setting Up the Hardware for DS2208

1. Connect the scanner cable to the base of the scanner.
2. Connect the other end of the cable to a USB port on the PC of the device on which it will be used.

Setting Up the Hardware for DS3678

1. Connect the hardware cabling as shown in the accompanying **Quick Start Guide** documentation that comes with the scanner, starting with the cradle cable connection. Note that it may take some force to get the cable in all the way so that the latch can properly lock in place.
2. Connect the cradle to power and the PC with the USB version diagram of the **Connect Host Interface step** in the documentation.

Configuring the Scanner

1. Scan the bar code below to return the scanner to factory defaults. You may have to find this barcode in the quick start guide to get it to scan properly.



RETURN TO FACTORY DEFAULTS

2. **For the DS3678 scanner only**, pair the scanner to the cradle by either inserting the scanner into the cradle or by scanning the bar code in on the cradle.
3. Scan the bar code below to set the host interface type. You may have to find this barcode in the quick start guide to get it to scan properly. This will cause the bar code scanner to be configured to scan and report bar

codes in the desired format.



IBM HAND-HELD USB

4. Scan the bar code below to add a (Carriage Return/Line Feed) to the end of the bar code when sent from the scanner. You may have to find this barcode in the quick start guide to get it to scan properly.



ADD AN ENTER KEY (CARRIAGE RETURN/LINE FEED)

You should now be able to use your new bar code scanner to input tags for tools or to select a tool to issue/return.

Useful Links

[DS2208 Quick Start Guide](#)

[DS3678 Quick Start Guide](#)

[DS3678 Operators Manual](#)



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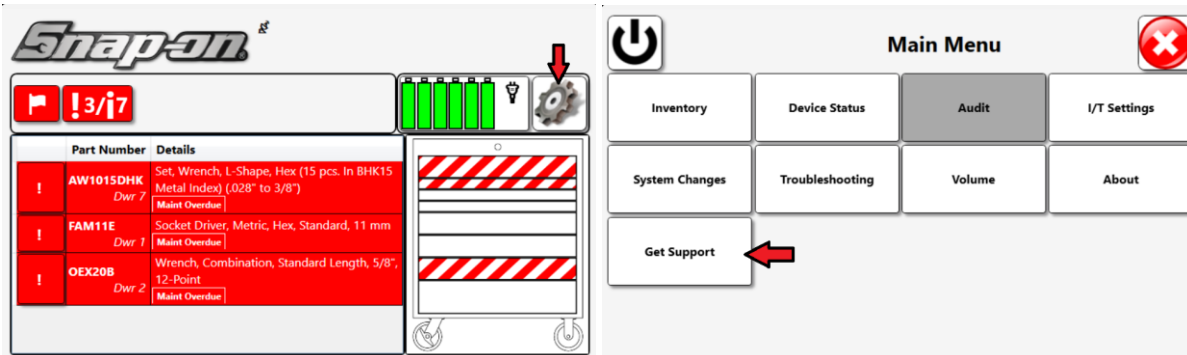
Industrial Pro-Services

Get Support

- Email: INDPROSERVICES@snapon.com
- Phone: 1-800-940-2397
- Customer Portal: <https://l5atc.myportallogin.com>

L5 Connect devices have a **Get Support** button that will provide a QR code that can be scanned to take you to the Pro-Services support portal.

From the main screen of the device, click the **Main Menu** button, which looks like a gear. Then click the **Get Support** button.



Then you can scan the barcode with your phone to open a webpage to login to the Pro-Services help portal. (You could also scan the barcode in the image below.)



Retrieving Diagnostic Log Files

The purpose of this wiki is to document the process for retrieving diagnostic log files, sometimes referred to as log files, from the L5 Connect system. This will include how to get admin and service log files and how to get the log files from a device.

Retrieving Admin/Service Log Files

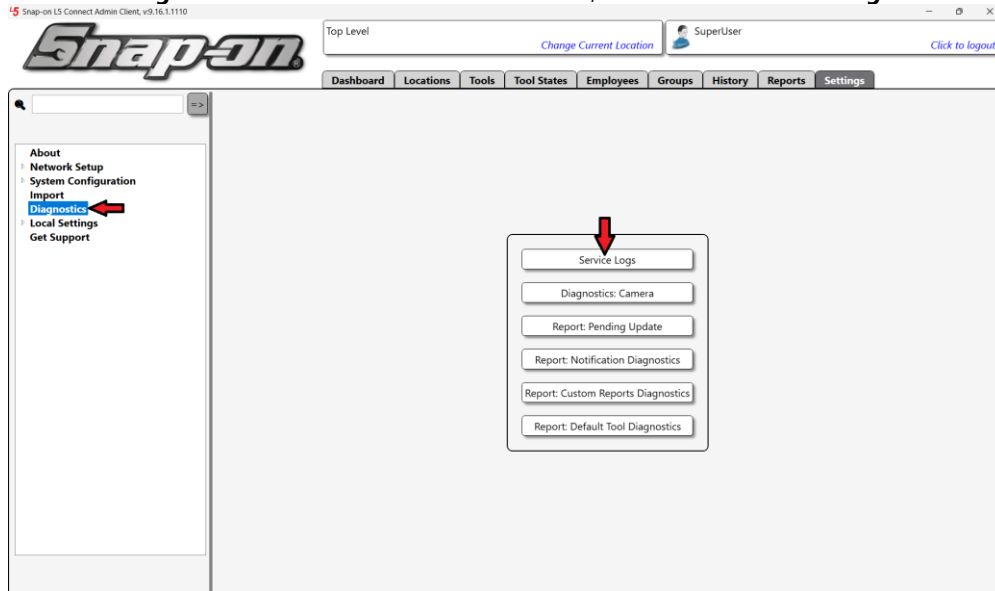
If you only need to get Admin or Service log files this can be done through the Admin application.

Note: These files can also be pulled when pulling the log files for a device. This will be described in the device log file section of this document.

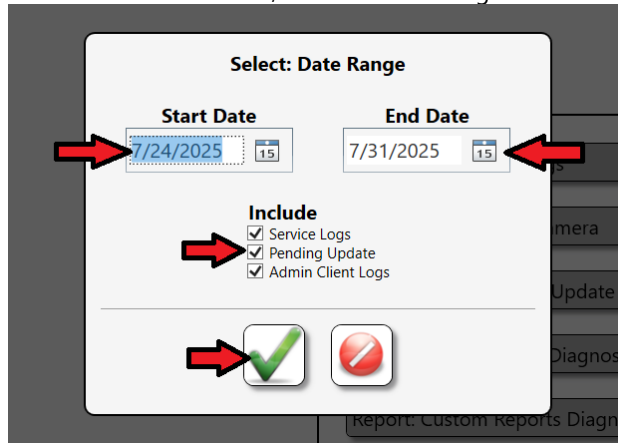
1. Start the Admin application and click the **Settings** tab. **Note: If you are trying to get log files for the admin app, be sure to start the admin on the computer for which you wish to pull admin logs.**



2. Select the **Diagnostics** item from the listbox on the left, then click the **Service Logs** button.

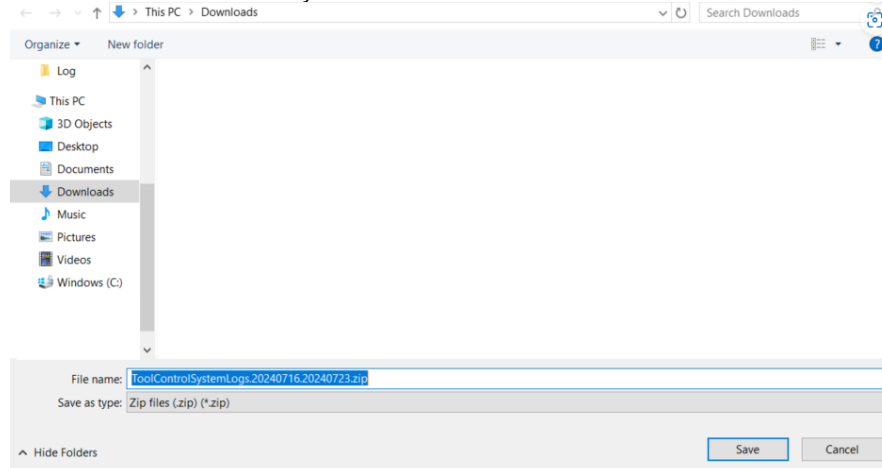


3. Use the date pickers to set the **Start Date** and **End Date** to cover the timeframe for which you would like to recover logs, then select the appropriate checkboxes in the **Include** list for the type of logs you wish to pull. Then click the **OK** button, which looks like a green checkmark.



4. You will then see a file dialog window prompting you to select the directory where you would like to save the zip file of logs. You can set the directory or use the default value. You can also either change the filename or

use the default value. Once you have these values set, click the **Save** button.

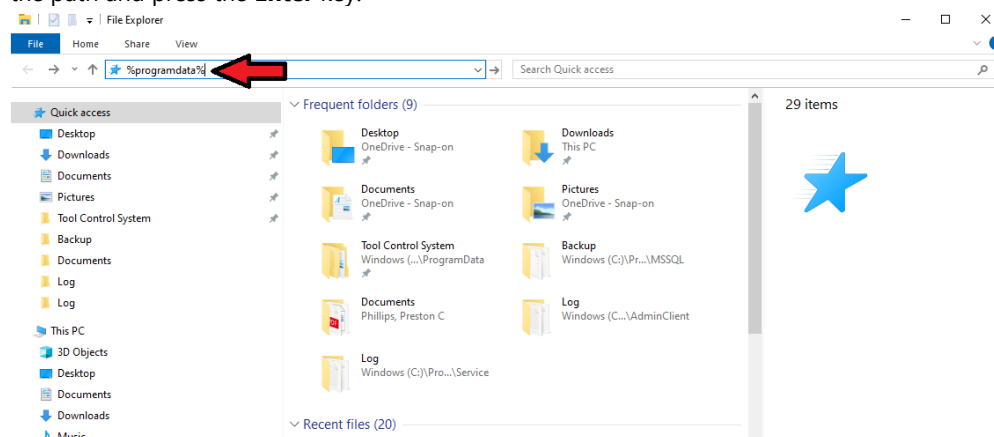


5. You will now have a zip file saved containing the desired log files.
6. Be sure to verify the zip file contains all the appropriate files. See the Verify Zip File section for more details.

Retrieving Admin Files Manually.

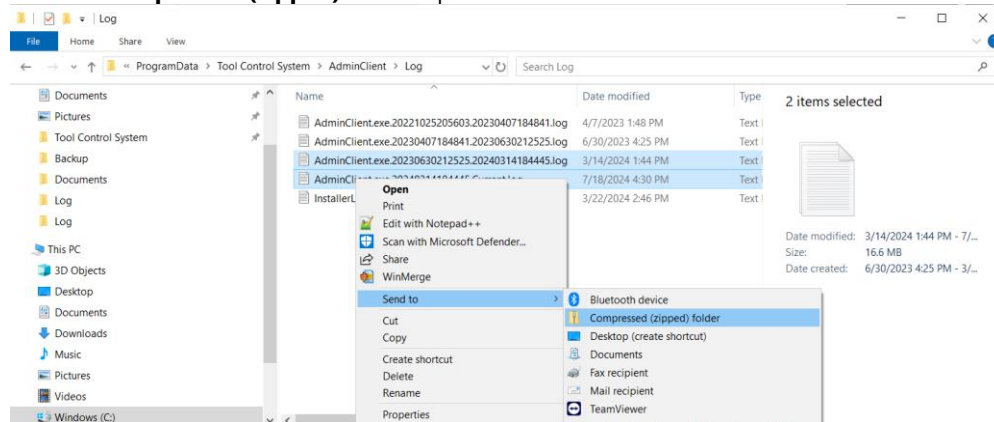
Sometimes you may not be able to get the Admin application or the Service application to start properly. This is one of the prime times you would want to collect log files, but the method described above would not be available. In this case you would need to use the following method to collect these log files manually.

1. Go to the computer of the admin client and open a **File Explorer** window, then type **%programdata%** in as the path and press the **Enter** key.

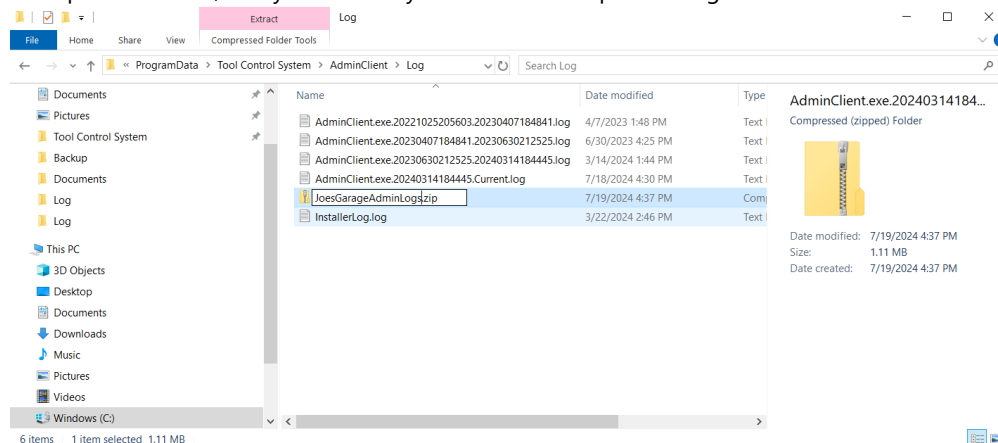


2. Find the **Tool Control System** directory and double click it to move into that directory.
3. In this directory you should see an **AdminClient** directory. Double click the directory to move into it and then double click the **Log** directory to move into that one. At this point you will see a list of log files. They are in the form of ApplicationName.FromDateTime.ToDateTime.log. Select the group of log files that cover the time range of interest, then right click on one of them, hover to expand the **Send to** menu, and finally

click the **Compressed (zipped) folder** option.



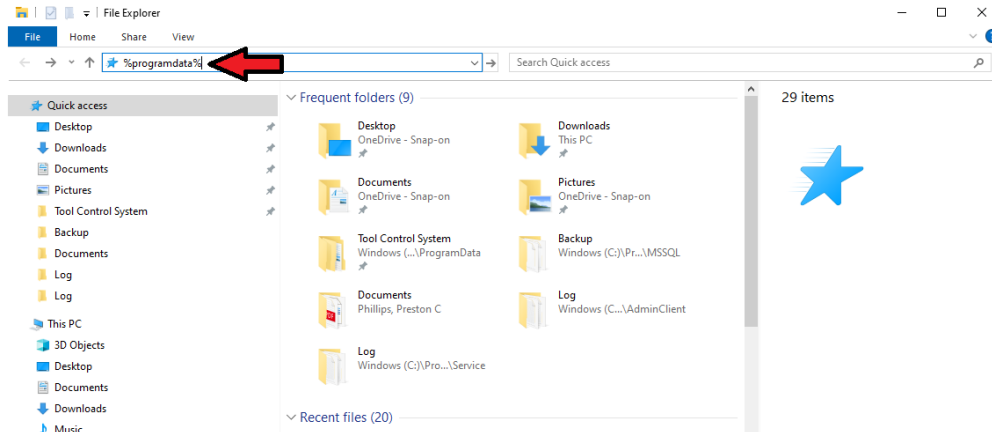
- You should have a freshly created zip file with the name highlighted so that you can give it a more specific name than the default directory name. Either take the default or make the name more descriptive of what the zip file contains, and you are ready to forward the zip file of logs.



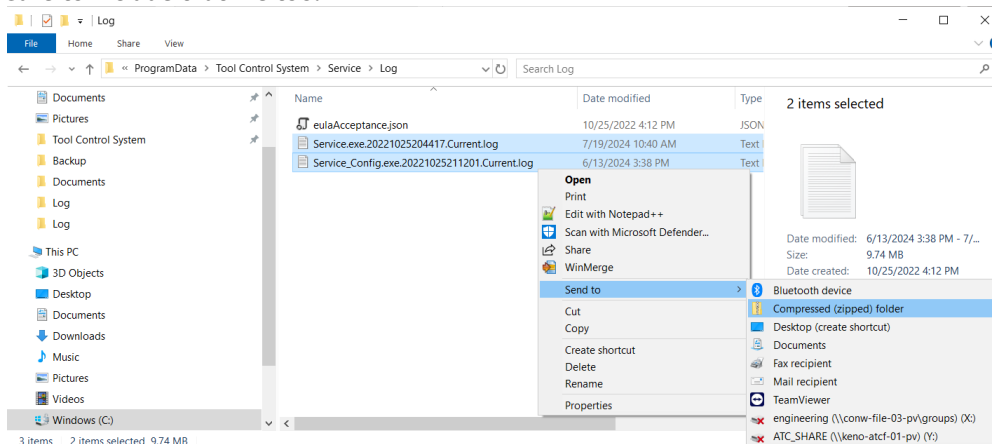
- Be sure to verify the zip file contains all the appropriate files. See the Verify Zip File section for more details.

Retrieving Service Files Manually.

1. Go to the computer of the service application and open a **File Explorer** window, then type **%programdata%** in as the path and press the **Enter** key.



2. Find the **Tool Control System** directory and double click it to move into that directory.
3. In this directory you should see a **Service** directory. Double click the directory to move into it and then double click the **Log** directory to move into that one. At this point you will see a list of log files. They are in the form of ApplicationName.FromDateTime.ToDateTime.log. Select the group of log files that cover the time range of interest, then right click on one of them, hover to expand the **Send to** menu, and finally click the **Compressed (zipped) folder** option. **NOTE: There will also be a Service_Config log file here as well. Be sure to include that file too.**

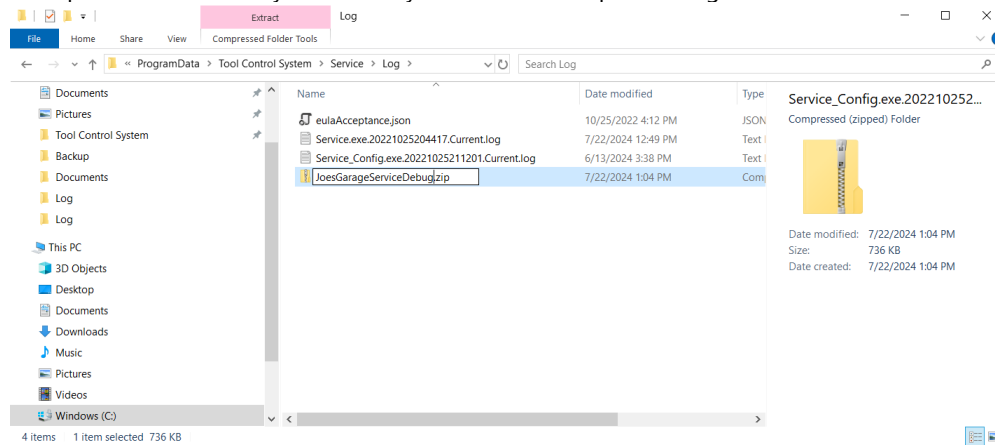


4. You should have a freshly created zip file with the name highlighted so that you can give it a more specific name than the default directory name. Either take the default or make the name more descriptive of what



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the zip file contains, and you are ready to forward the zip file of logs.

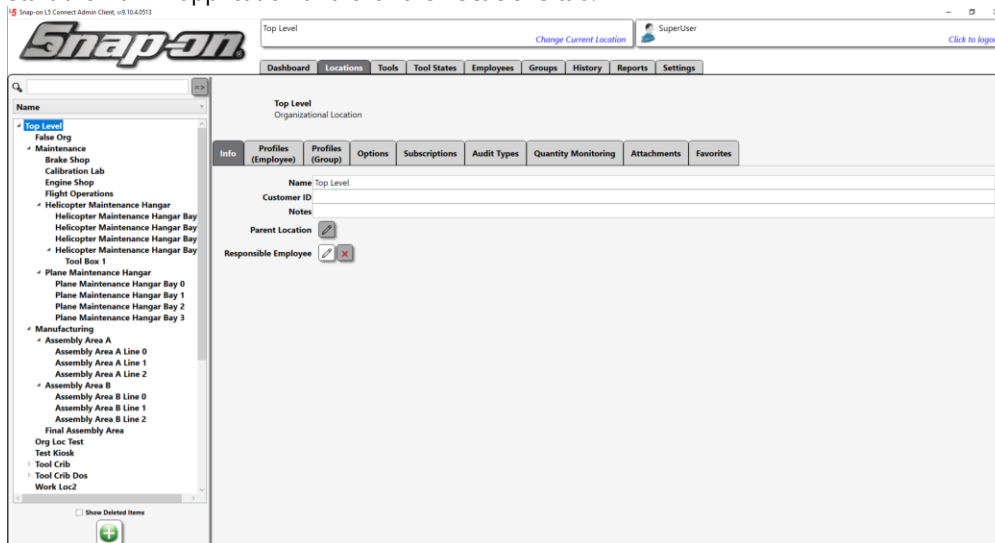


5. Be sure to verify the zip file contains all the appropriate files. See the Verify Zip File section for more details.

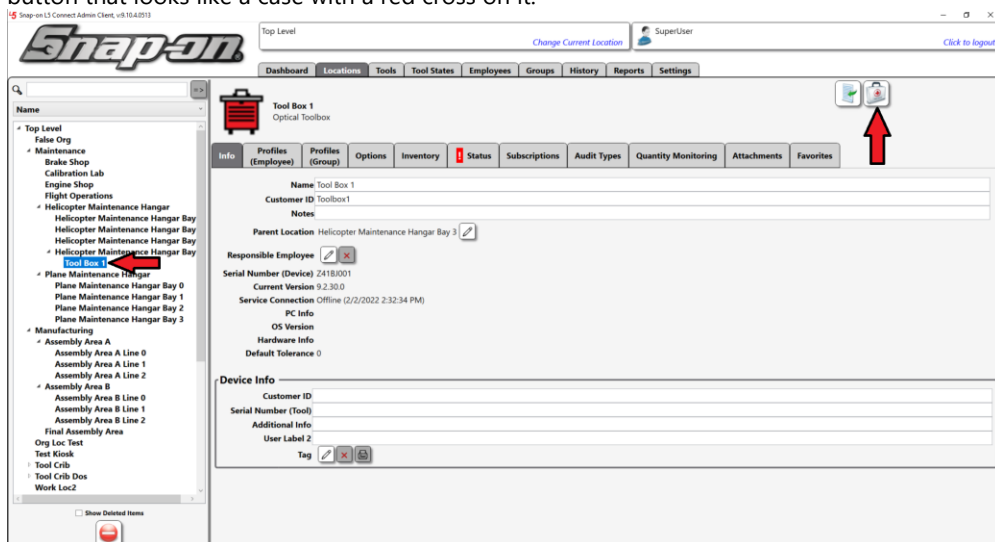
Retrieving Device Log Files

Device log files will be retrieved through the Admin application as well. **NOTE: It is important to remember that the device will need to be connected to the service for this procedure to work.**

1. Start the Admin application and click the **Locations** tab.

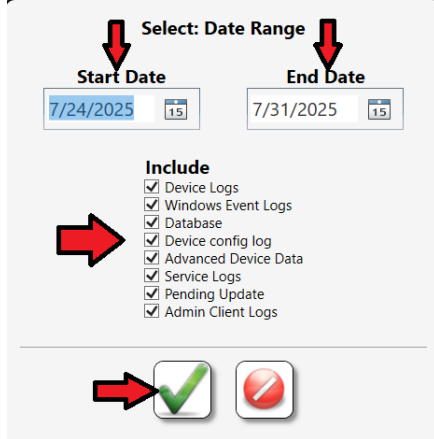


2. Select the device location for which you would like to collect debug data and then click the **Diagnostics** button that looks like a case with a red cross on it.

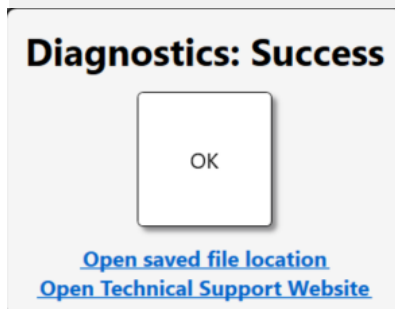
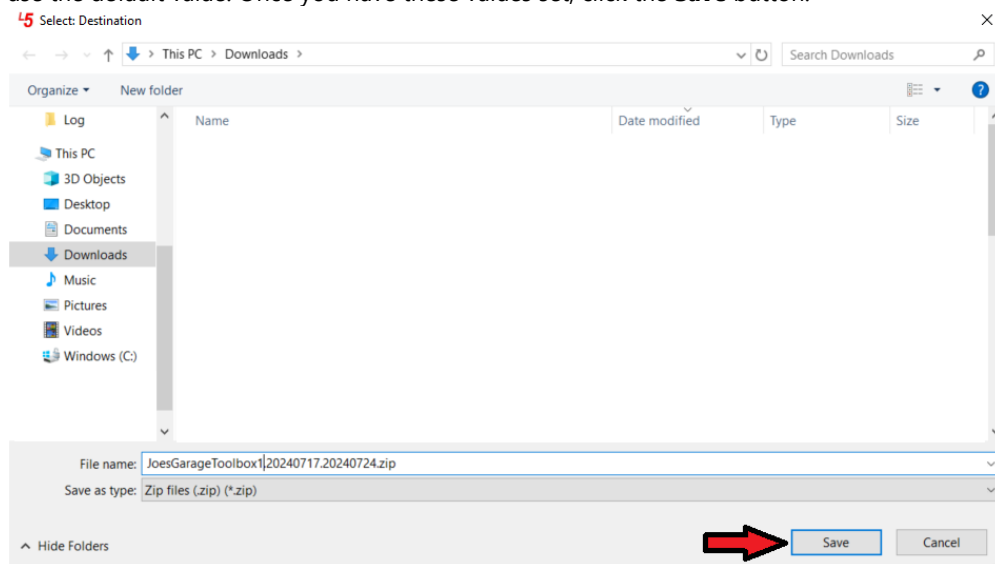


3. Use the date pickers to set the **Start Date** and **End Date** to cover the timeframe for which you would like to recover logs, then select the appropriate checkboxes in the **Include** list for the type of logs you wish to pull.

Then click the **OK** button, which looks like a green checkmark.



4. You will then see a file dialog window prompting you to select the directory where you would like to save the zip file of logs. You can set the directory or use the default value. You can also either change the filename or use the default value. Once you have these values set, click the **Save** button.



5. Be sure to verify the zip file contains all the appropriate files. See the Verify Zip File section for more details.

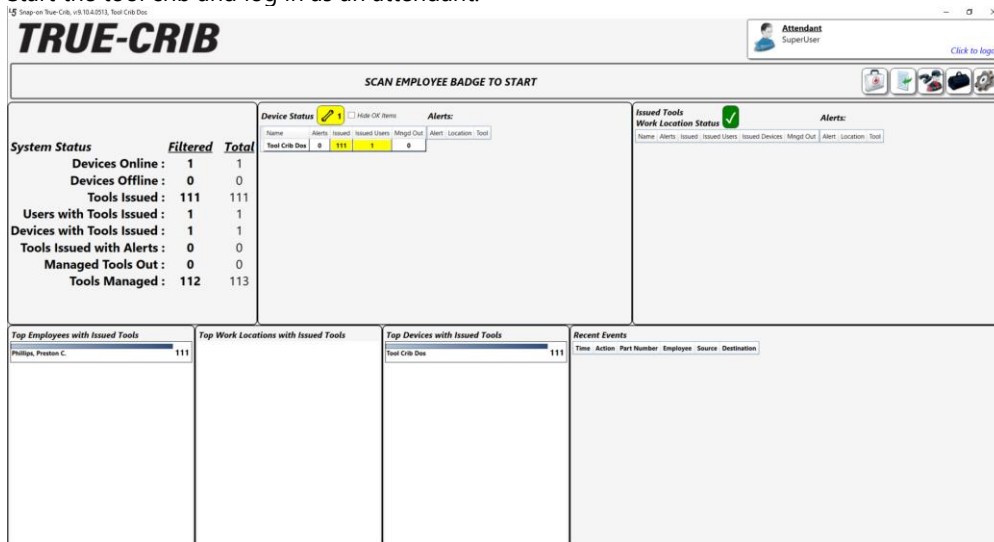


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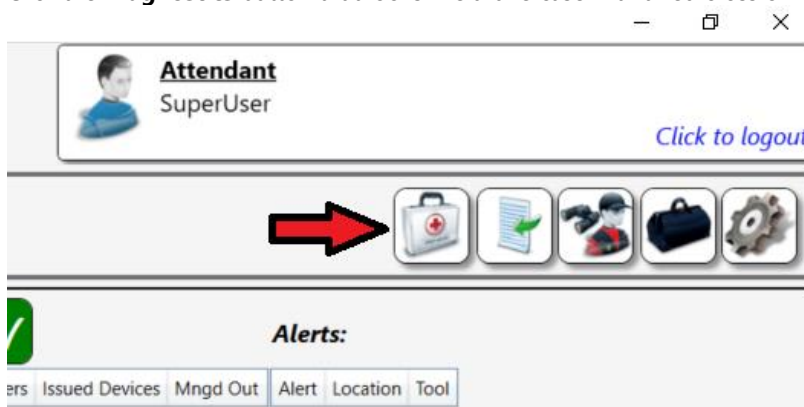
Alternate Method for Retrieving Log Files from a True-Crib Device

While the log files can be pulled from a True-Crib device with the procedure described above, they can also be pulled directly from the tool crib itself.

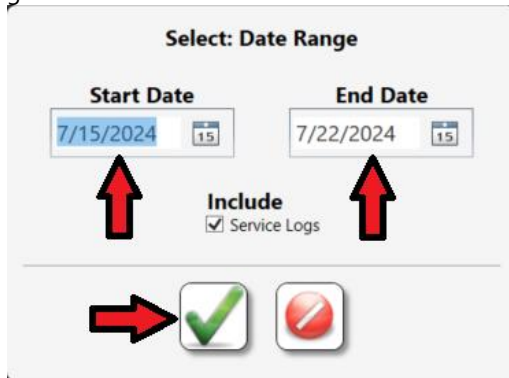
1. Start the tool crib and log in as an attendant.



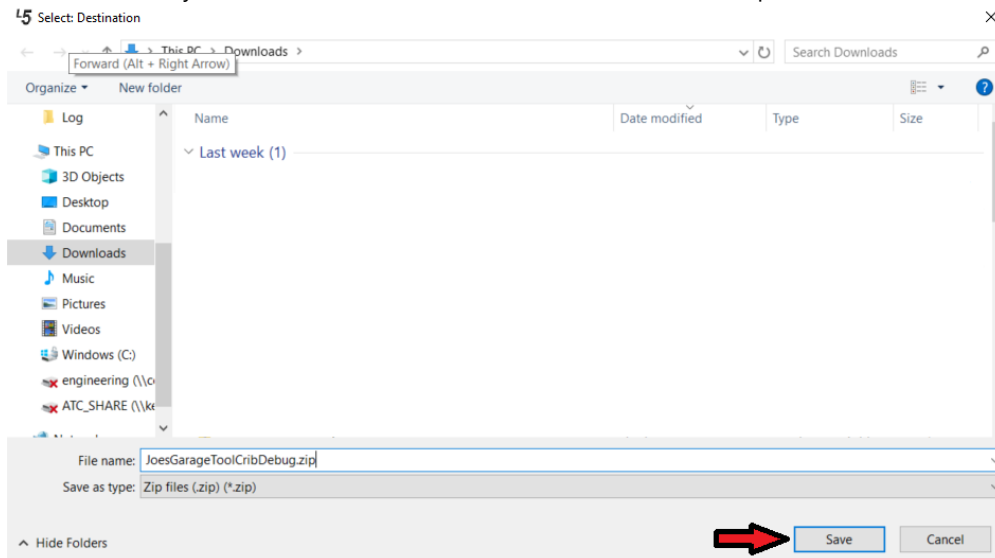
2. Click the **Diagnostics** button that looks like a briefcase with a red cross on it in the top right corner.



- Set the date range for which you wish to collect the device log, then click the **OK** button that looks like a green checkmark.



- This will open a file save dialog box. Make sure the directory where you wish to save the file and the name of the file are what you want and then click the **Save** button to save the zip file.



- Be sure to verify the zip file contains all the appropriate files. See the Verify Zip File section for more details.

Retrieving Device Log Files Manually

File Locations

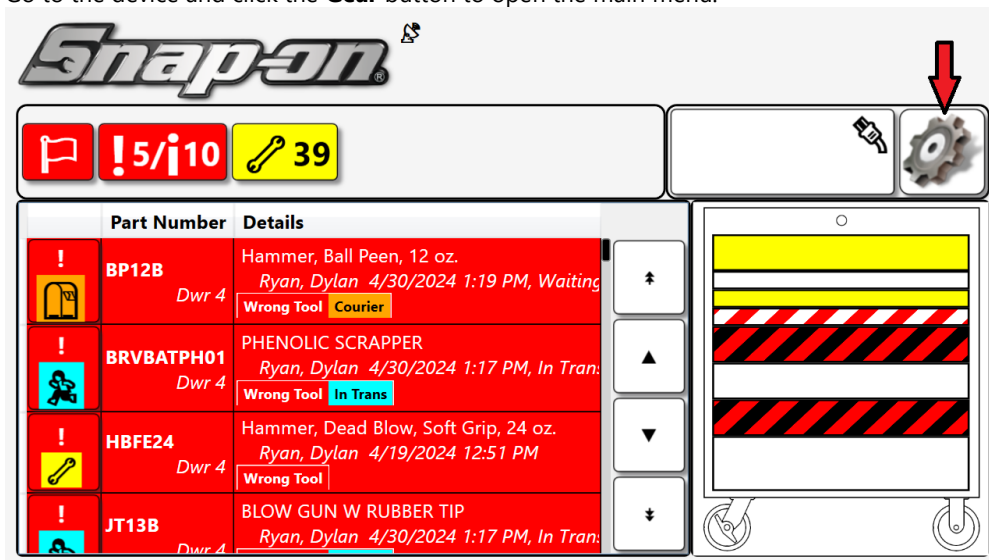
In some cases, you may need to retrieve diagnostic data from a device that can't connect to the service. This section will explain where to find each type of diagnostic file for each of the devices in the L5 Connect System. All the diagnostic information can be found in a program data directory that is in a different location for specific devices. Here is a table that shows the location of the diagnostic data for the different devices in the L5 Connect system.

Device	Diagnostic Data Location
Windows 10 Optical Toolbox	E:\V9\Tool Control System\SmartDevice

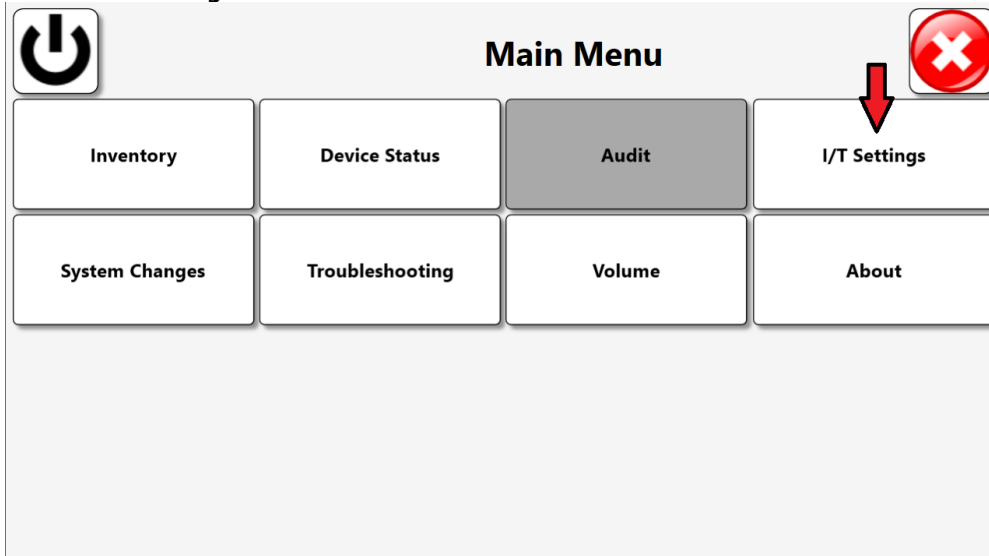
Device	Diagnostic Data Location
Windows 11 Optical Toolbox	C:\ProgramData\Tool Control System\SmartDevice
Windows 10 RFID Cabinet	E:\V9\Tool Control System\SmartDevice
Windows 11 RFID Cabinet	C:\ProgramData\Tool Control System\SmartDevice
Tool Crib	C:\ProgramData\Tool Control System\ToolCrib
Portal - Win10	C:\ProgramData\Tool Control System\Portal
Portal - Win11	C:\ProgramData\Tool Control System\ToolKiosk
FlexHub	C:\ProgramData\Tool Control System\ToolKiosk

How to Access the File Location

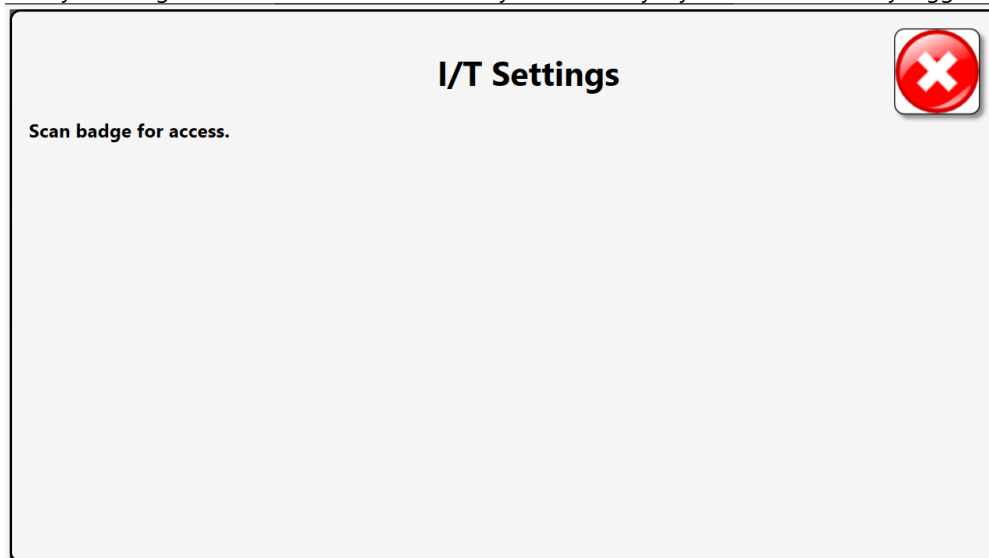
1. Go to the device and click the **Gear** button to open the main menu.



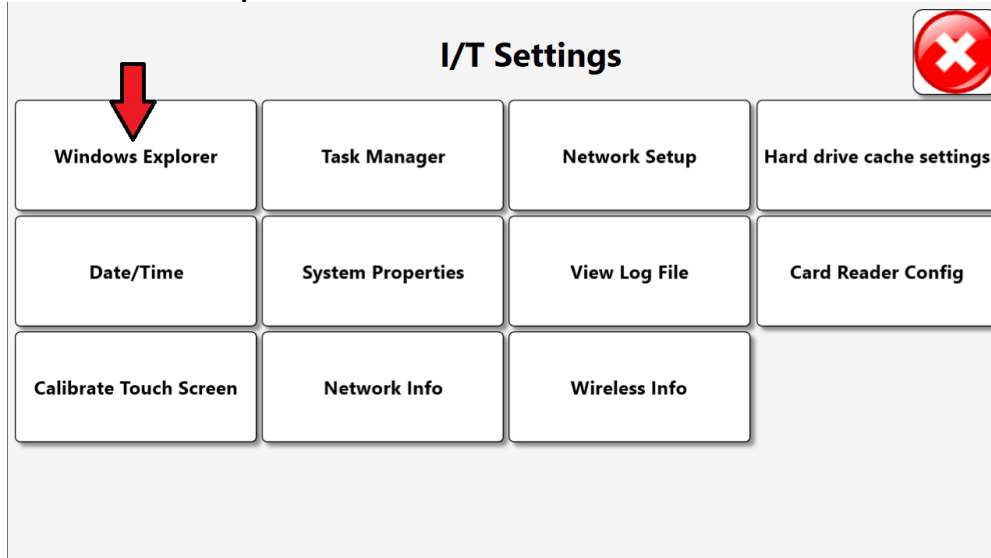
2. Click the **I/T Settings** button.



3. Scan your badge for access. NOTE: This will only be necessary if you are not currently logged into the device.





4. Click the **Windows Explorer** button.



5. Navigate to the directory specified in the table above for the proper device.
6. Collect the required files from the lists below.

Device Log Files

Device log files contain a great deal of diagnostic information produced by the L5 Connect device application while it is running. They are very useful to helping Snap-on service and engineering personnel the cause of an issue. They will be located in the **Log** directory. These files have the format ExecutableName.FromDateTime.ToDateTime.log. Here is an example of this format for a toolbox or locker.

 SmartDevice.exe.20230112220714.20230719141555.log	7/19/2023 9:15 AM	Text
 SmartDevice.exe.20230719141555.Current.log	7/17/2024 1:48 PM	Text

You will either need to pull the latest log file or a range of log files to make sure you capture the time period of the event in question.

Windows Event Log Files

Windows event log files can sometimes provide insight into errors that occur closer to the operating system level where the device logs might not have any useful information. These files are also located in the **Log** directory. There are typically three different Windows event log files.

- ..\Log\SerialNumber_WindowsLog_Application.evtx
- ..\Log\SerialNumber_WindowsLog_System.evtx
- ..\Log\SerialNumber_WindowsLog_Security.evtx

Database File

The database file for the device will be located in the base program data directory for that device type.



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- ..\Device.db

Device Config Log

The device config log is a file used by the software to help it configure the device operating system to work properly. This file will be found in the **Log** directory.

- ..\Log\DeviceConfig.log

Advanced Device Data Files

Advanced device data files are for additional files that might be useful in diagnosing a problem with the device. This list varies depending on the type of device but all these files are located in the DeviceData directory so you can just pull that entire directory.

- ..\DeviceData

At this point you will have all the device specific diagnostic files collected. It should be noted that the automated version of this also provides the option to get the admin and service logs. Those details are listed in the above sections.

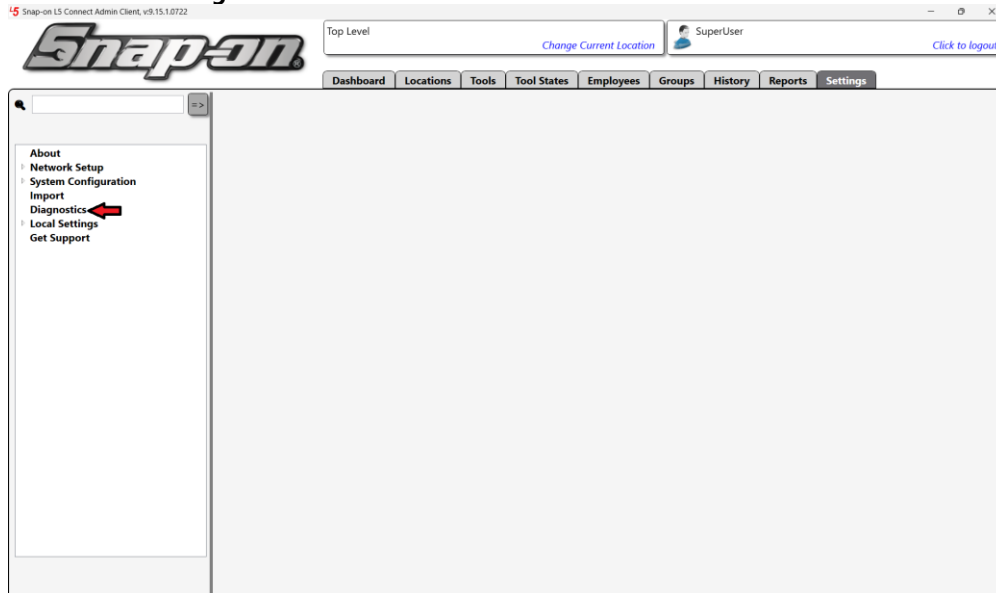
Be sure to verify the zip file contains all the appropriate files. See the Verify Zip File section for more details.

Running Diagnostic Reports

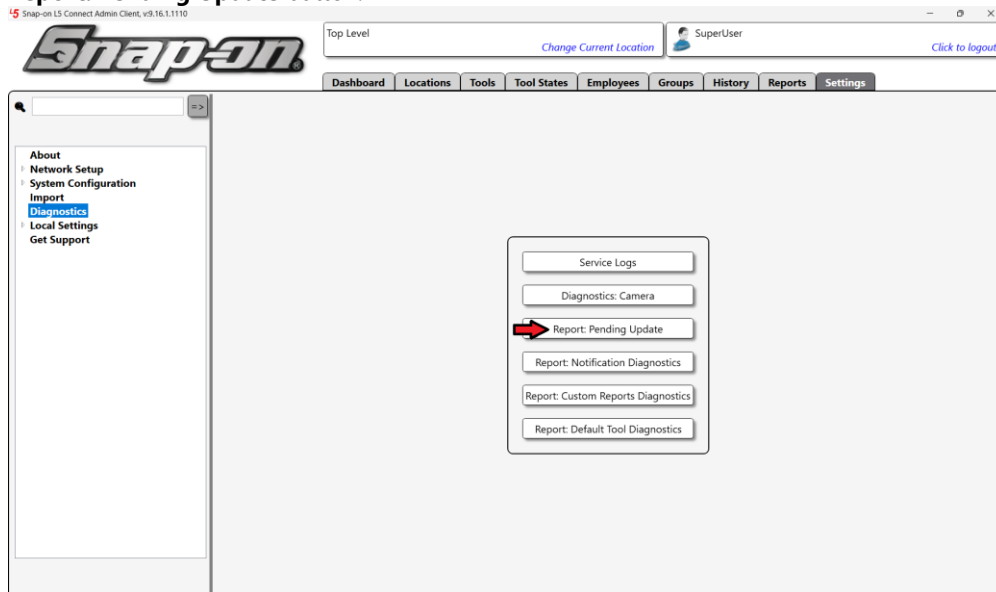
There are several special diagnostic reports that do not show up in the reports tab of the Admin application. You may be requested to provide the results of one or more of these reports with your diagnostic data. The process for running any of the reports is the same so we will cover that process for one of the reports here. Here is a list of the diagnostic reports.

- Pending Updates
 - Notification Diagnostics
 - Custom Reports Diagnostics
1. To run diagnostic reports, open the Admin application and go to the **Settings** tab.

- Then select the **Diagnostics** item from the list.



- Click the button for the report you wish to run. In this case we will run the pending update report so click the **Report: Pending Update** button.



- Once the report completes you will see results in the report display window. To save this report, click the **Export** button, which looks like a blue disk.

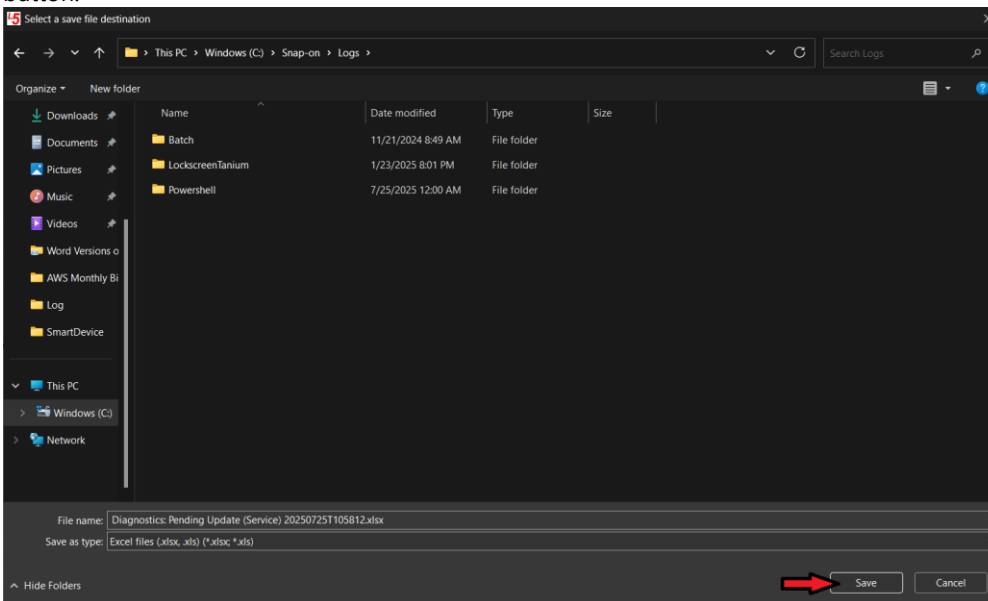
Diagnostics: Pending Update (Service)

Filtering
Sticky Filters: Location = Top Level
Run Time: 7/25/2025 10:53 AM : Central Standard Time

Auto-Refresh Xlsx

ID	Update Type	Update ID	Secondary ID	Tool ID	Time Updated	Device Serial Number	Device Name	Device Customer ID
4372	Device	47	0	0	5/1/2022 2:23:44 PM	Z418J001	Tool Box 1	Toolbox1
4375	Device	48	0	0	8/29/2022 4:40:30 PM	Z418J001	Tool Box 1	Toolbox1
4381	Employee	62	0	0	9/6/2024 1:17:34 PM	Z418J001	Tool Box 1	Toolbox1
4384	Location	47	0	0	6/9/2025 2:43:00 PM	Z418J001	Tool Box 1	Toolbox1
4405	Employee	4	0	0	10/20/2024 2:28:29 PM	Z418J001	Tool Box 1	Toolbox1
4409	Group	1	0	0	8/27/2024 8:34:11 PM	Z418J001	Tool Box 1	Toolbox1
4413	Group	2	0	0	2/4/2022 2:34:40 PM	Z418J001	Tool Box 1	Toolbox1
4419	Parameters	0	0	0	3/26/2024 3:41:57 PM	Z418J001	Tool Box 1	Toolbox1
4456	Employee	48	0	0	9/6/2024 1:27:22 PM	Z418J001	Tool Box 1	Toolbox1
4460	Device	41	0	0	4/30/2024 4:27:32 PM	Z418J001	Tool Box 1	Toolbox1
4479	MasterTool	100152	0	0	3/8/2022 3:13:48 PM	Z418J001	Tool Box 1	Toolbox1
4483	MasterTool	100058	0	0	3/8/2022 3:16:45 PM	Z418J001	Tool Box 1	Toolbox1
4517	StatusType	34	0	0	3/10/2022 4:21:59 PM	Z418J001	Tool Box 1	Toolbox1
4554	StatusType	12	0	0	3/15/2022 1:37:51 PM	Z418J001	Tool Box 1	Toolbox1
4558	StatusType	3	0	0	6/15/2022 9:55:07 AM	Z418J001	Tool Box 1	Toolbox1
4603	MasterToolParentChild	100055	0	0	3/22/2022 2:04:44 PM	Z418J001	Tool Box 1	Toolbox1
4607	MasterTool	100055	0	0	3/22/2022 2:04:44 PM	Z418J001	Tool Box 1	Toolbox1
4615	MasterToolParentChild	100347	0	0	3/25/2022 9:11:07 AM	Z418J001	Tool Box 1	Toolbox1
4619	MasterTool	100347	0	0	3/25/2022 9:11:07 AM	Z418J001	Tool Box 1	Toolbox1
4655	Device	58	0	0	9/21/2022 9:32:57 AM	Z418J001	Tool Box 1	Toolbox1
4666	MasterTool	100346	0	0	3/25/2022 8:56:36 AM	Z418J001	Tool Box 1	Toolbox1
4671	MasterToolParentChild	100346	0	0	3/25/2022 8:56:36 AM	Z418J001	Tool Box 1	Toolbox1
4688	MasterTool	100349	0	0	4/11/2022 10:06:22 AM	Z418J001	Tool Box 1	Toolbox1
4696	DefaultTool	100348	0	0	4/11/2022 10:07:53 AM	Z418J001	Tool Box 1	Toolbox1
4768	Employee	5	0	0	9/6/2024 1:18:14 PM	Z418J001	Tool Box 1	Toolbox1
4775	MasterTool	100138	0	0	5/18/2022 9:28:26 AM	Z418J001	Tool Box 1	Toolbox1
4780	MasterTool	100122	0	0	5/18/2022 10:26:16 AM	Z418J001	Tool Box 1	Toolbox1
4785	Verification	1	0	0	5/18/2022 10:27:09 AM	Z418J001	Tool Box 1	Toolbox1
4790	MasterTool	100350	0	0	5/18/2022 11:07:12 AM	Z418J001	Tool Box 1	Toolbox1
4795	MasterToolParentChild	100350	0	0	5/18/2022 11:07:12 AM	Z418J001	Tool Box 1	Toolbox1
4847	Employee	63	0	0	9/6/2024 1:27:19 PM	Z418J001	Tool Box 1	Toolbox1

- A file dialog window will open. Set the directory in which you wish to save the report and then click the **Save** button.



- Run any other diagnostic reports that were requested in the same way and then package these report files with any other diagnostic data for sending to the appropriate personnel.

Verify Zip File

Once you have created your zip file, be sure to open it and verify that all the pieces of diagnostic information are present. Especially when manually collecting device diagnostics, it is very easy to miss something that could cause delays in getting to a solution to your problem. Below is a list of the files that would be collected in the automated methods for comparison. All files are referenced from the "Tool Control System" directory.



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Admin Debug Zip File Contents

..\AdminClient\Log\list of AdminClient.exe log files that capture the date/time of the period of interest.

Service Debug Zip File Contents

..\Service\Log\list of Service.exe log files that captures the date/time of the period of interest.

..\Service\Log\list of Service_Config.exe files that captures the date/time of the period of interest.

Device Debug Zip File Contents

DeviceName	Value
Optical Tool Box	SmartDevice
RFID Cabinet	SmartDevice
True-Crib	ToolCrib
Portal - Win 10	Portal
Portal - Win 11	ToolKiosk
FlexHub	ToolKiosk

..\DeviceName\Log\list of DeviceName log files that captures the date/time of the period of interest.

..\DeviceName\Log\SerialNumber_WindowsLog_Application.evtx

..\DeviceName\Log\SerialNumber_WindowsLog_System.evtx

..\DeviceName\Log\SerialNumber_WindowsLog_Security.evtx

..\DeviceName\Log\DeviceConfig.log

..\DeviceName\Device.db

..\DeviceName\DeviceData (the whole directory)