Snap-on

L5 Connect™ ATC Portal Operation Guide

Version 1.0

Cody Houston
8-8-2023

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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!!

WARNING!

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 105ºC, 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

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Introduction

Thank you for the purchase of your new L5 Connect™ ATC PORTAL. This guide will help you in getting to know your new product. In no time, you will become an expert in utilizing and maintaining your new Device.

Your new L5 Connect™ ATC PORTAL is one component of larger Snap-on Automated Tool Control system. To fully utilize your new product, it needs to be connected to an L5 Connect™ Service. Information about L5 Connect™ products can be found in the **L5 Connect™ Administration Guide**.

This guide's first section introduces you to your device and provides essential operation tips to keep your Device in working order for many years to come.

The following sections will cover how to set up and use your ATC PORTAL for the first time, as well as an in-depth look into the interface, functions, and features of your ATC PORTAL.

Although this is guide provides a detailed walkthrough of the L5 Connect™ ATC System software, we understand you may have questions. If you feel lost or don't understand the content at any time, please get in touch with Snap-on® Technical Support.

Phone: **1-800-272-2033**

E-mail: **TECHSUPPE@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.

NOTE: This Guide was written with software version 9.6.6.0 and some screens and features described in this guide may appear differently than in the version you may be using.

ATC Portal Overview

The Snap-on L5 Connect™ ATC PORTAL using RFID technology provides the perfect inventory control solution for high volume tool crib applications including transactions with large and bulky items.

The ATC PORTAL is a turnkey system using RFID readers mounted in an enclosed structure designed to track movement of RFID tagged items into and out of a controlled inventory management area. It can be easily adapted to existing storerooms and tool cribs.

Features and Benefits

- Uses the Snap-on L5CONNECT Software and Service as its foundation and seamlessly integrates into the L5CONNECT system.
- State-of-the-art RFID technology tracks workplace assets in real-time.
- Intuitive user interface
- Audible voice confirmation of user's actions and tool issue and return
- Audio feedback on messages and alerts
- Hardware – 64-bit processors with 8GB RAM
- Uninterruptable power supply – backup power to shut system down safely.
- Automatic locking exterior doors
- Delivers the lowest cost per managed item in high-volume environments.
- Excellent for high traffic tool cribs.
- Eliminates lines at tool crib counter by allowing simultaneous use by multiple employees.
- Tracks a large number of managed items.
- Track serialized items like torque wrenches, multi-meters, micrometers, and more.
- Networking through Ethernet

Specifications

- RFID Reader & 3 RF antennas
    - Class 1 Gen 2 RFID technology
- Photo beam sensors
- High-resolution 19" (48cm) touch display
- Receipt printer
- Electronically controlled gateway
- Multilingual: English, German, Spanish, Italian, French, Japanese, Korean, Portuguese, Chinese
- Emergency door release

Warranty

- One year Manufacturer's warranty
- One, Two, and Three-year Manufacturers Contracts Available
- Unlimited number of assigned users

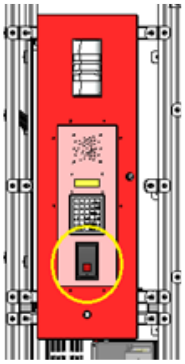
Basic Operation Issue/Return Tools

ATC Devices, including the ATC Portal, are designed for ease of use and quick response. The devices truly "***Work at the Speed of Work***." The following is a standard flow of how to issue and return tools from an ATC Portal:

1. Enter Portal
2. Terminal session to return tools (optional)
3. Enter Tool Storage area to return and/or take tools.
4. Terminal session to leave portal.
5. Exit Portal

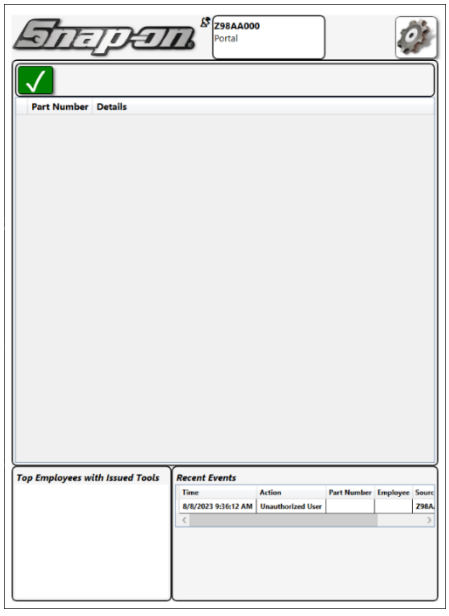
Issue Items

Scan your badge on the Proximity card reader located on the access panel outside of Portal. If you have appropriate permission, the ATC Portal grants access and unlocks the outer door.



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.

Enter the Portal and close the outer door. The door will lock in 10 seconds. Verify that no other user is logged into the device, the screen inside the Portal should look like this:



NOTE: This screen can be customized a process described later in this guide. The image shown is the default view of the Dashboard.

Enter the Tool Storage area and retrieve desired items. Once you have your items, re-enter the ATC Portal from the Tool Storage Area. Be sure the door closes completely behind you.

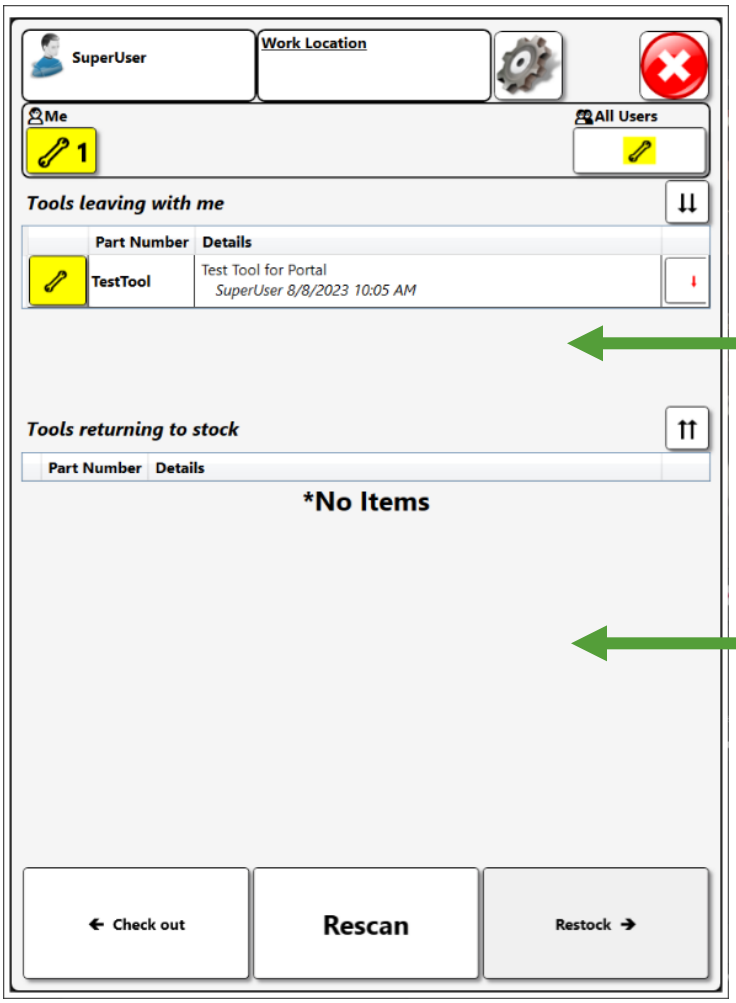
For regular tools you can carry them in your hands (do not cover the tags). For larger tools you may load them on a non-metal cart and push that into the Portal with you. For smaller tools, please place them on the shelf within the Portal. This is to provide the best possible reading of the RFID tags on the tools.

Scan your badge on the Proximity card reader located on the display panel housing.

The Portal will scan for RFID tags within the enclosure. The Portal will play the following audio:

"**Review Scanned Tools and Select Action"**

The "Check out/return: screen will appear on the display. The top half of the screen will show tools detected that will be issued to you. The bottom half shows tools that have been detected that were already issued and will be returned.

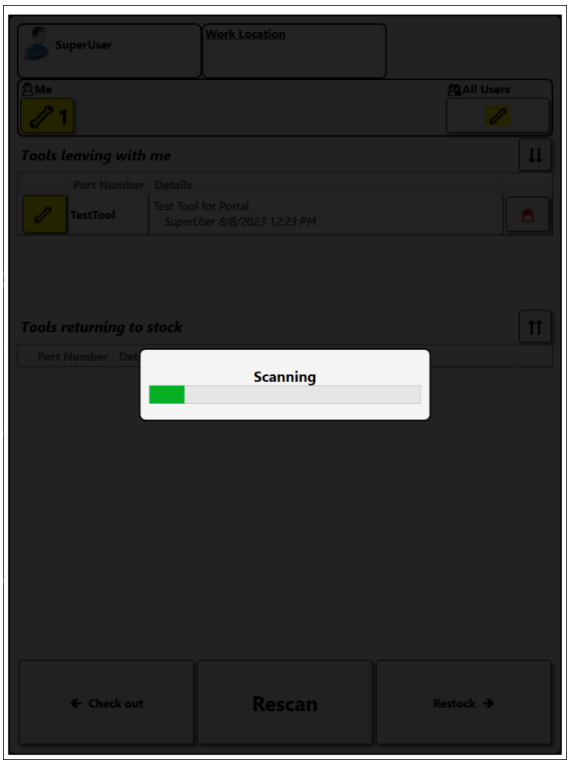


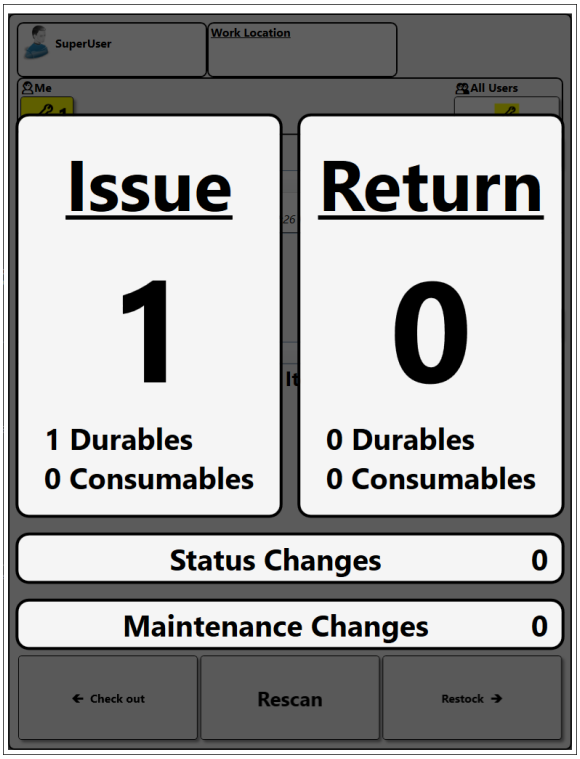
Tools Being Issued

Tools Being Returned

NOTE: If the Portal doesn't detect the tools you wish to issue/return, you can tap the Rescan button to scan again. This will only add new tools and not remove tools that have already been detected.

Once you have confirmed that the system has detected the correct tools, you issue the selected items by tapping on the **Check Out** button at the bottom of the screen. The system will run a final scan to verify the tools and then present you with a summary screen of the transaction.





Following successful logout, a summary screen will appear on the display showing total number of tools issued/returned and # of tools with status or maintenace changes applied during the transaction.

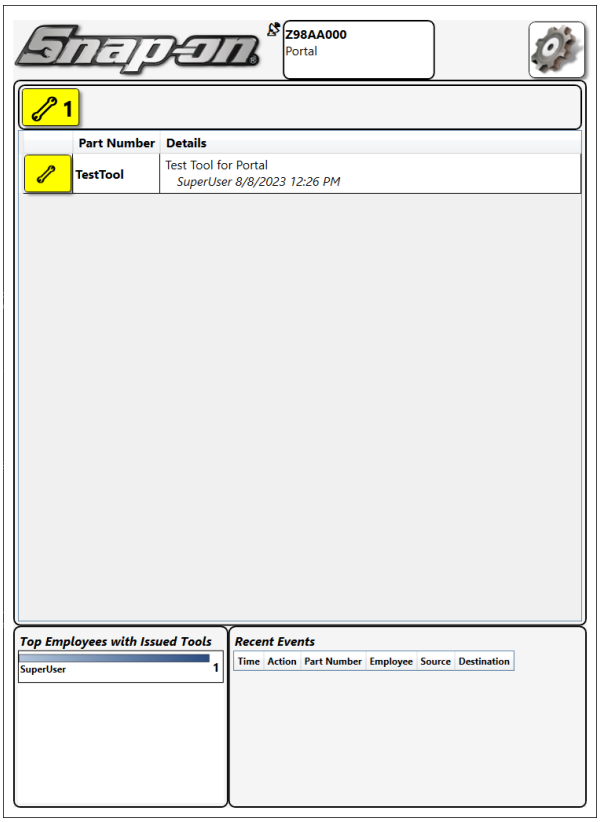
The Exit door will unlock. **Follow the audible instructions and exit the Portal.**

The system will log you out and lock the exit door after you exit.

The selected items are now issued to you

Return Items

When a Portal has tools issued out its Dashboard will show those issued tools, who issued them out, and when they were issued.



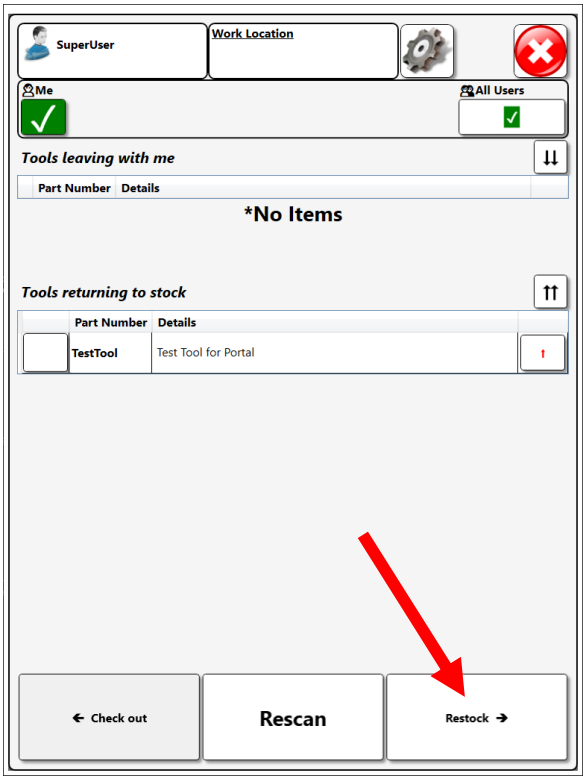
To return an item to the Tool Storage area, you will follow the standard process flow for using the Portal. Make note that you will need to interact with the Terminal on your way in to process the return of the tools.

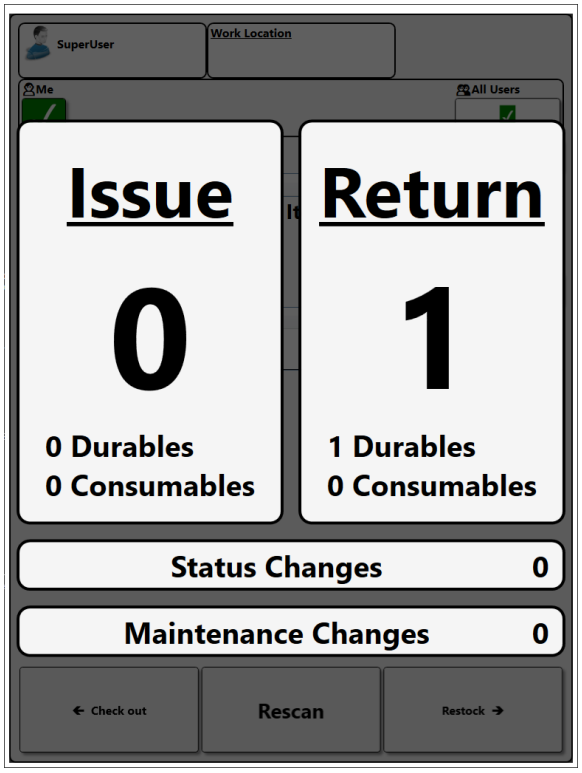
Standard Portal Process:

1. Enter Portal
2. **Terminal session to return tools (optional)**
3. Enter Tool Storage area to return and/or take tools.
4. Terminal session to leave portal.
5. Exit Portal

The following summarizes the Terminal session for returning tools:

After you begin the terminal session, the ATC Portal will scan items inside the portal and display them on the monitor. You will see the tool listed in the Return section of the screen. Once you have verified that the tool(s) were detected successfully you can tap the **Restock** button at the bottom of the screen. The system will provide you with a transaction summary.





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 Tools 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.

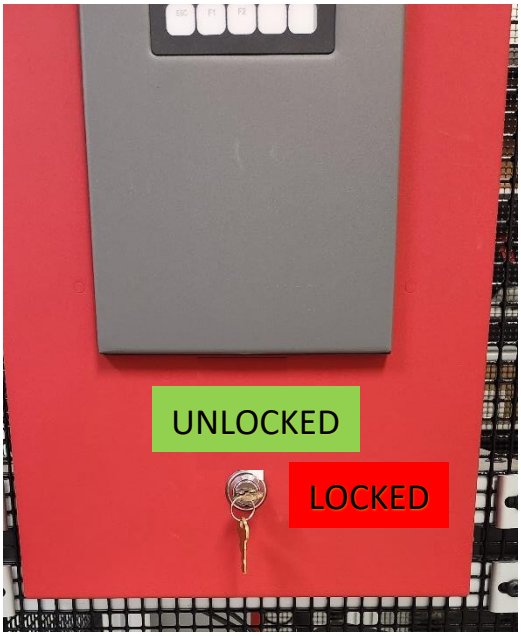
This Return item transaction is now complete.

Physical Keys

The portal is equipped with two physical key locks that can be used to override some functions of the Portal.

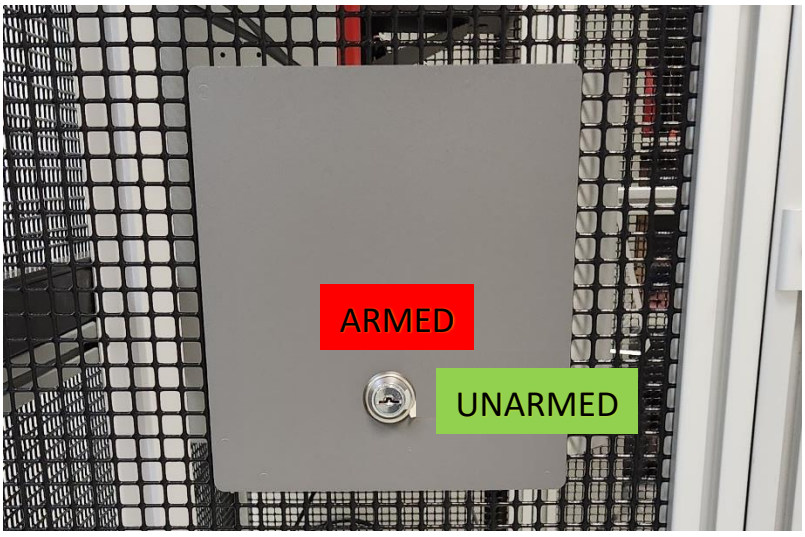
Door lock override

This lock will override the door lock to the portal if you need to enter it and perform maintenance or some other administrative function.



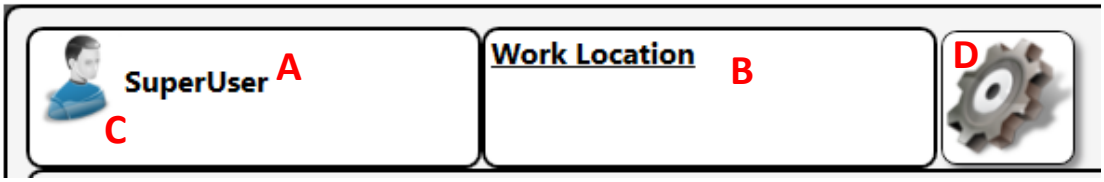
Alarm Disable Lock

This lock will disable the alarm that sounds when someone presses the emergency exit button inside of the portal.



User Status Frame

Displays the currently logged-in user, their profile image, and the work location if they selected one.



A – Name & Title – Displays the name & title of the currently logged-in user.

B – Work Location – Displays the currently selected work location. Users are prompted to choose a work location when they log into the system.

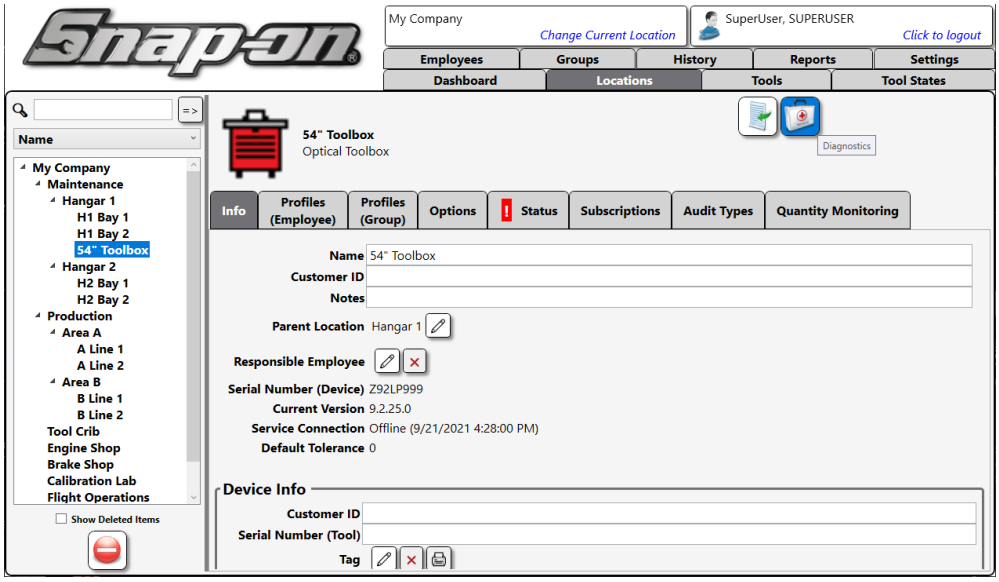
C – User Profile Picture – Displays the profile picture of the currently logged-in user. If a picture is not set for the user, a default image will be displayed (shown above).

D – Menu Button – Tapping this button will access the administrative functions of the Portal.

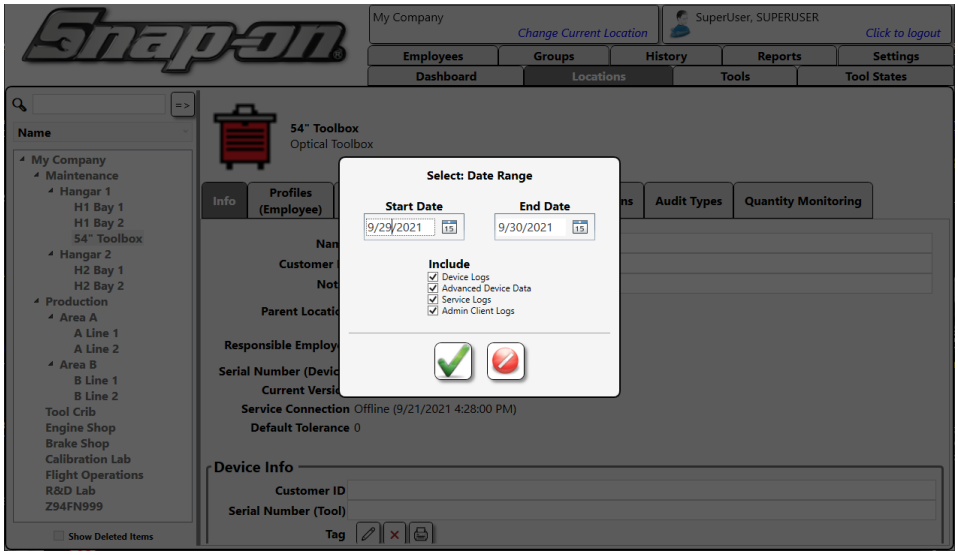
How to Retrieve Diagnostic Data

You may be asked by Technical Support to retrieve log files from your L5 Connect™ Device. If the Device is online and communicating with the L5 Connect™ Service, then log into the Admin Client and go to the Locations Tab.

Select the Device you want to pull diagnostic data from and click on the Diagnostics button.



Select the time range you want to review and click the Green Check



The system will prompt you for a location to save the .zip file containing all the diagnostic data.

Setting Up an ATC Device

Before you can use an L5 Connect Device, you must configure it. The following are the procedures needed to complete the full setup of a brand-new device.

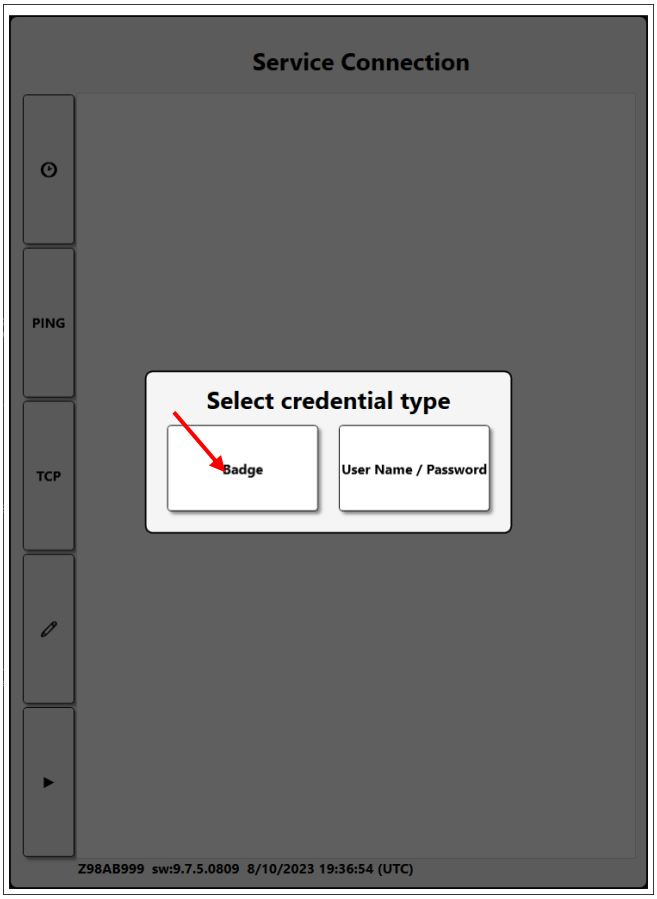
First Boot

When you turn the Portal on for the first time, it may restart to finalize its initial setup. Afterwards you will be presented with a Network setup screen. This will allow you to modify the external Ethernet connection parameters for the local network.

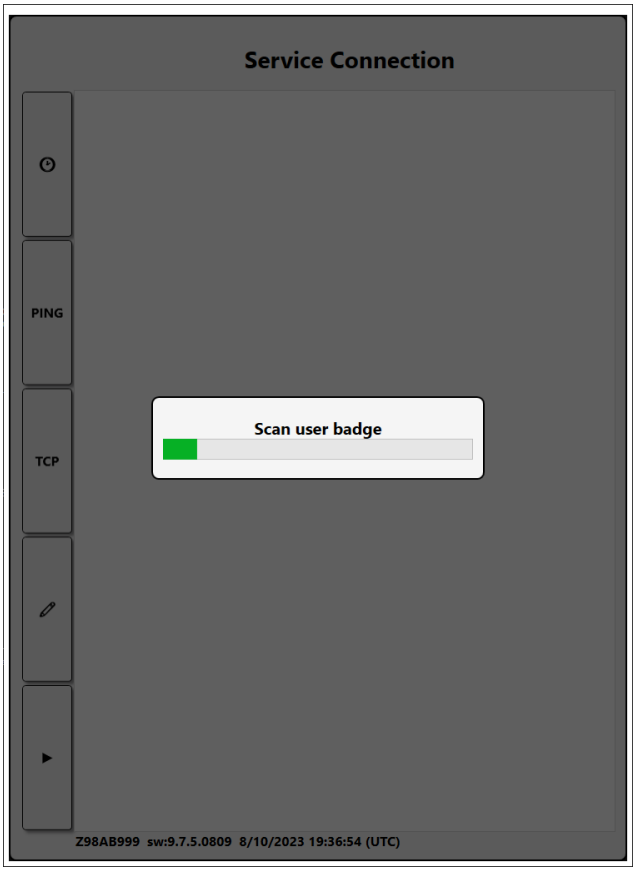
Connecting to a L5 Connect™ Service

You will need to connect to an L5 Connect service. ATC Portal needs 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.

When you first start ATC Portal, 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 may use your RFID Badge or your Admin Username and Password. In this case, you will use your Badge.

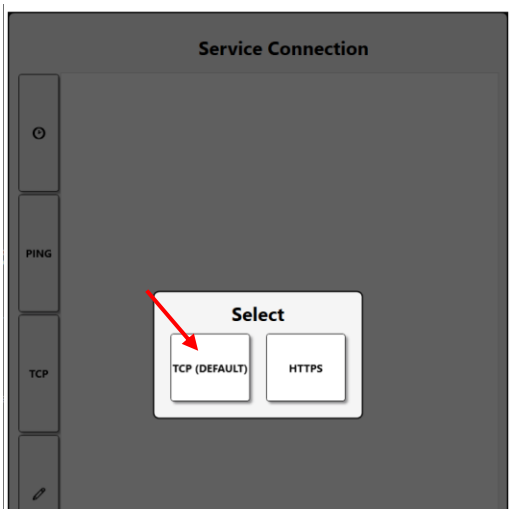


Select Badge, then wave your RFID badge near the reader mounted by the screen inside.



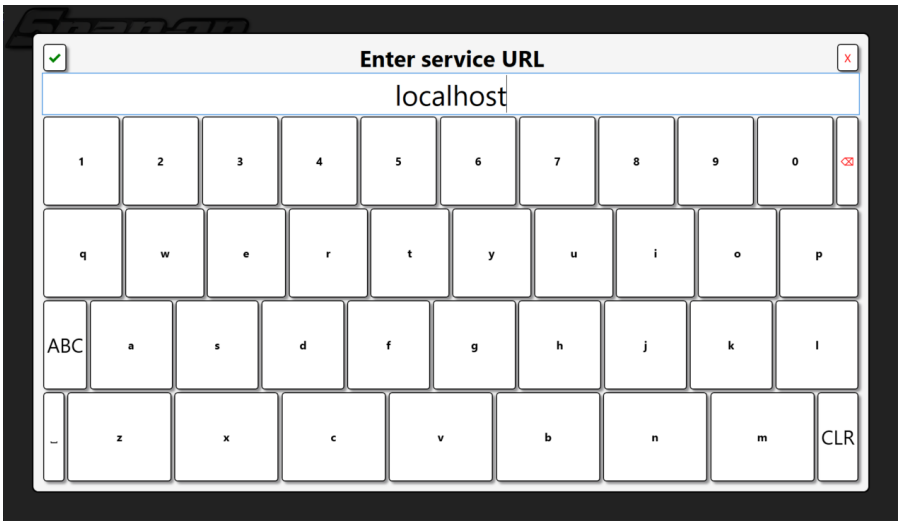
Next, you will be prompted to select the connection type for the Service. By default, the connection type is TCP. However, HTTPS is an advanced connection type that provides additional security and requires additional setup on the Service to implement.

Click on TCP(Default)



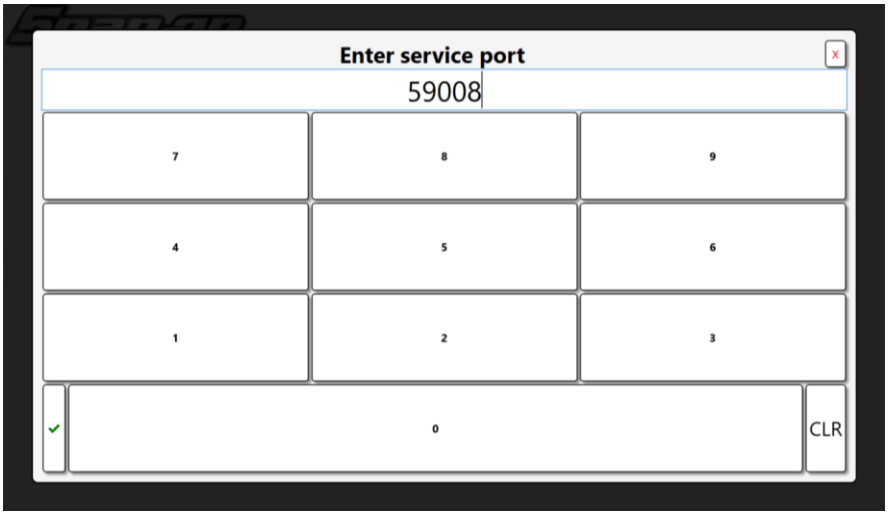
Next, you will be asked to type in the URL or Hostname (computer name) of the computer running the L5 Connect Service. In this example, we will use the hostname ***LOCALHOST*** but this will need to be the name of YOUR SERVICE when you are installing this in your environment.

Type in localhost and press Enter.



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.

Type in 59008 and press Enter.

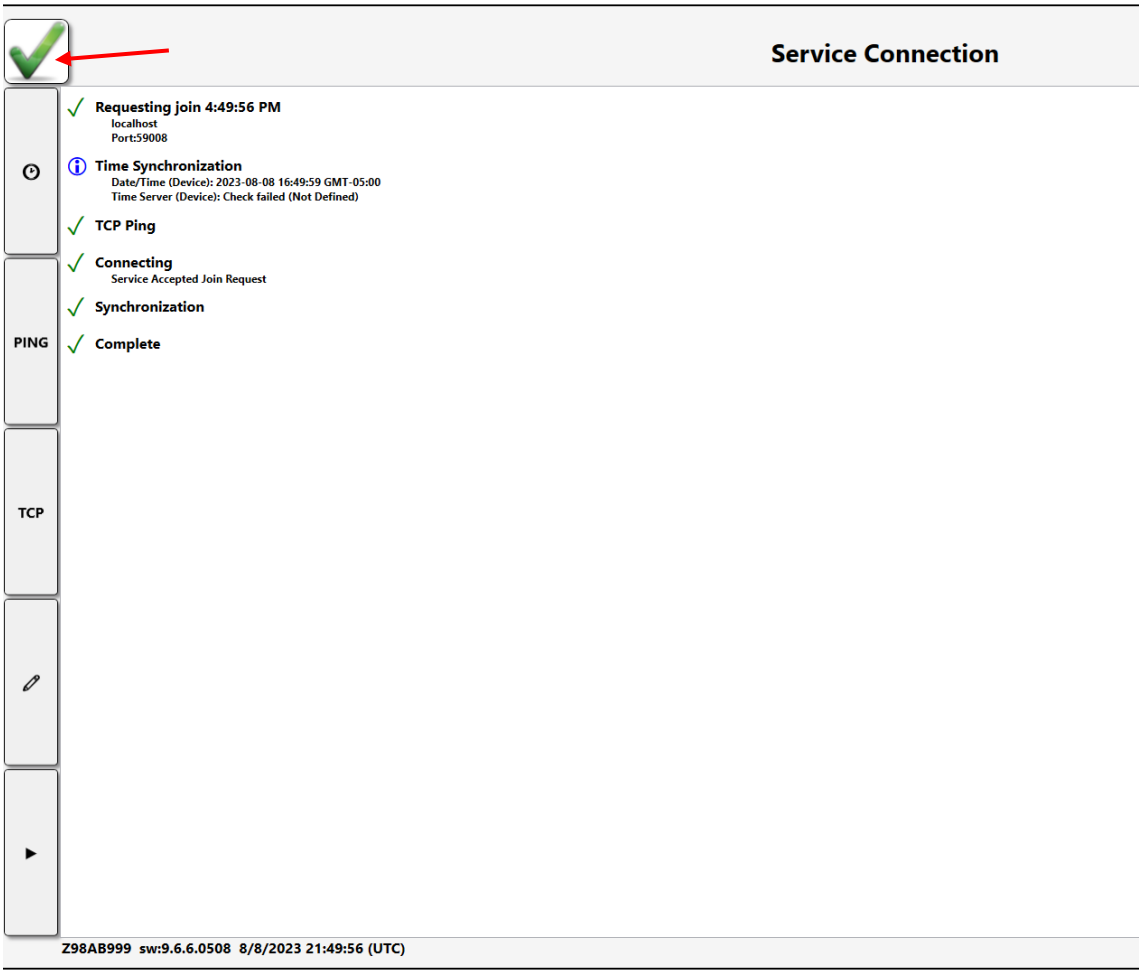


The system will then go through some validation checks. You may be prompted to update the software as the software version must match the software version running on the Service. If that happens, just follow the update prompts. When you are done, the software will restart and ask if you want to continue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

In this case, you are already running the same software version and can continue without interruptions.

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 Portal 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.



You will now be connected to the Service and ready to begin setting up the Portal.

Adding Tools to the L5 ATC Portal

After the Portal has been connected to the L5 Connect Service, you may begin adding tools to the Portal inventory. There are two methods in which you can load your tools into the system both utilizing the L5 Connect Administration Client.

Manually Add Tools

You can manually add the tools using the Tools tab in the admin client. Instructions on how to add tools and assign them to devices can be found in the L5 Connect Administration Guide (L5C-ADMINGUIDE).

Import Tools

When setting up the portal 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 (.xslx). To start, you must be logged into the Administration Client and have the appropriate permissions to import tools.

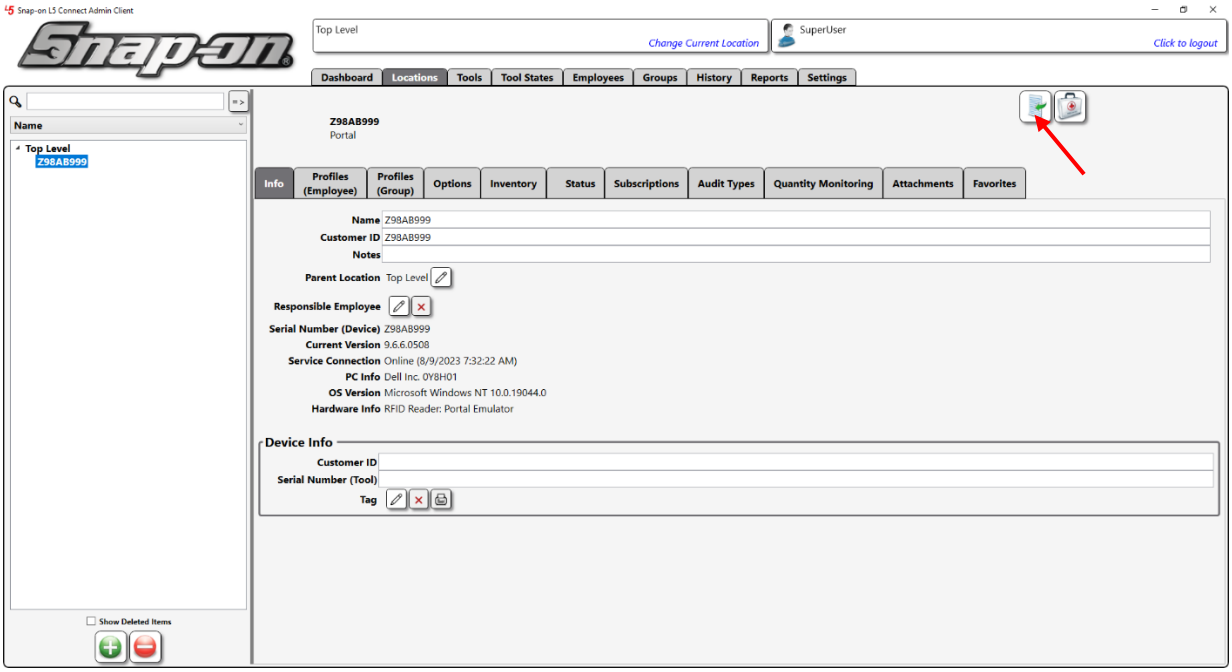
The tool properties that can be imported are:

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

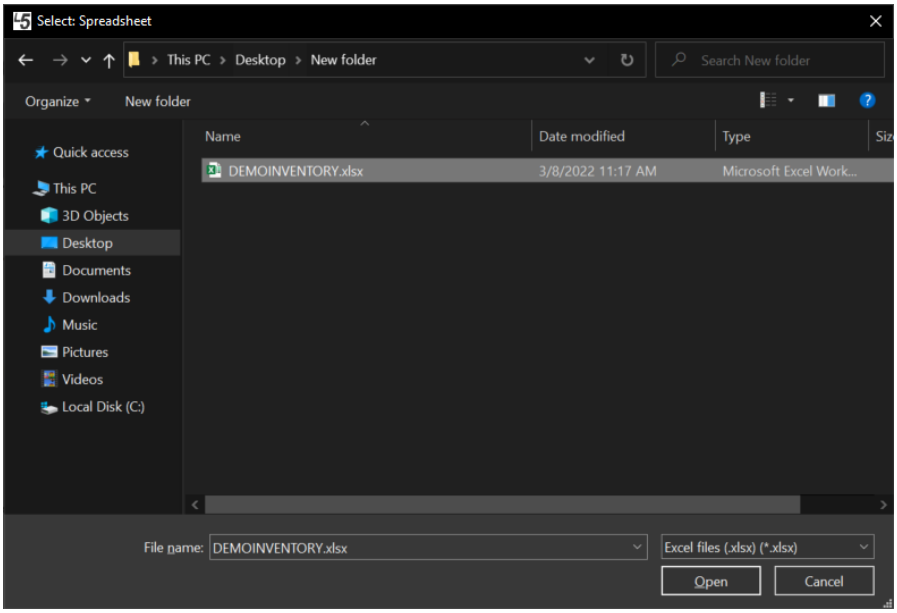
NOTE: As of version 9.6.6.0 you can only import 100 tools at a time.

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.

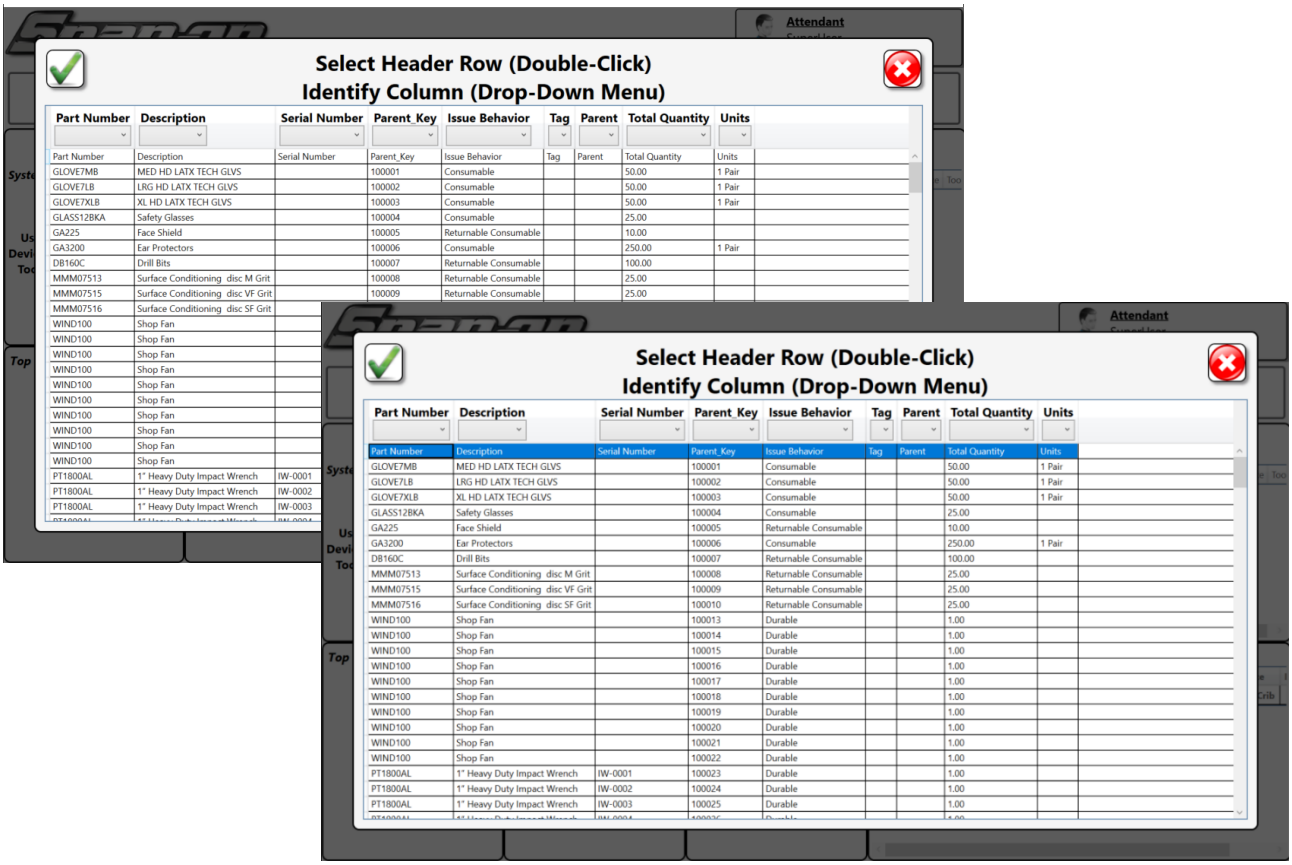
On the Location Tab, select the Portal on the left that you want to import tools into, then click the Import Tools Button open the import wizard.



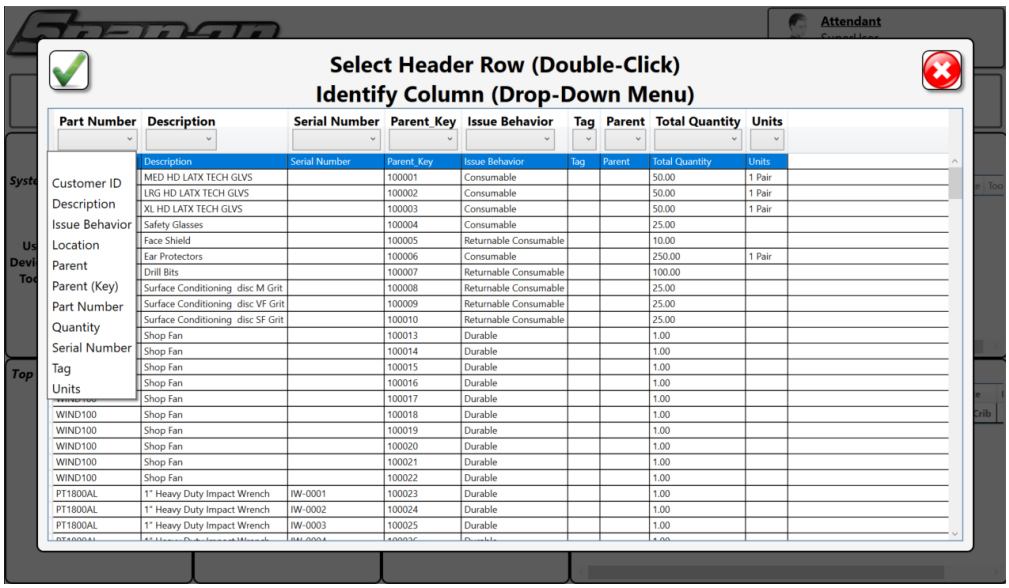
Then you need to select the file you want to use for the import.



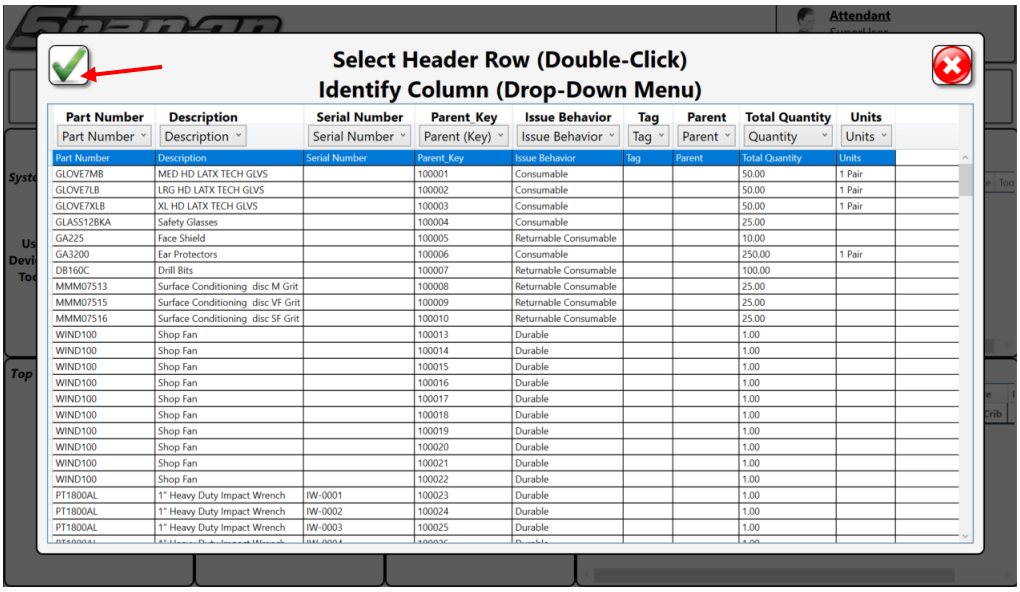
Once you have selected the file, the wizard will want you to define some data on the screen so it can read it correctly. Next, you will need to click on the row containing the data headers.



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.



Part Number	Description	Serial Number	Parent_Key	Issue Behavior	Tag	Parent	Total Quantity	Units
GLOVE7MB	MED HD LATX TECH GLVS		100001	Consumable			50.00	1 Pair
GLOVE7LB	LRG HD LATX TECH GLVS		100002	Consumable			50.00	1 Pair
GLOVE7XLB	XL HD LATX TECH GLVS		100003	Consumable			50.00	1 Pair
GLASS12BKA	Safety Glasses		100004	Consumable			25.00	
GA225	Face Shield		100005	Returnable Consumable			10.00	
GA3200	Ear Protectors		100006	Consumable			250.00	1 Pair
DB160C	Drill Bits		100007	Returnable Consumable			100.00	
MMM07513	Surface Conditioning disc M Grit		100008	Returnable Consumable			25.00	
MMM07515	Surface Conditioning disc VF Grit		100009	Returnable Consumable			25.00	
MMM07516	Surface Conditioning disc SF Grit		100010	Returnable Consumable			25.00	
WIND100	Shop Fan		100013	Durable			1.00	
WIND100	Shop Fan		100014	Durable			1.00	
WIND100	Shop Fan		100015	Durable			1.00	
WIND100	Shop Fan		100016	Durable			1.00	
WIND100	Shop Fan		100017	Durable			1.00	
WIND100	Shop Fan		100018	Durable			1.00	
WIND100	Shop Fan		100019	Durable			1.00	
WIND100	Shop Fan		100020	Durable			1.00	
WIND100	Shop Fan		100021	Durable			1.00	
WIND100	Shop Fan		100022	Durable			1.00	
PT1800AL	1" Heavy Duty Impact Wrench	IW-0001	100023	Durable			1.00	
PT1800AL	1" Heavy Duty Impact Wrench	IW-0002	100024	Durable			1.00	
PT1800AL	1" Heavy Duty Impact Wrench	IW-0003	100025	Durable			1.00	

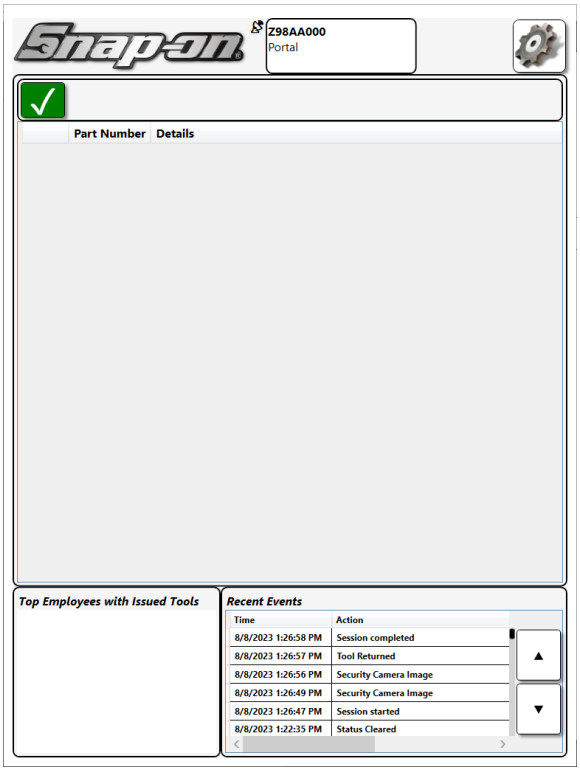
The tools should now be added to the Crib.

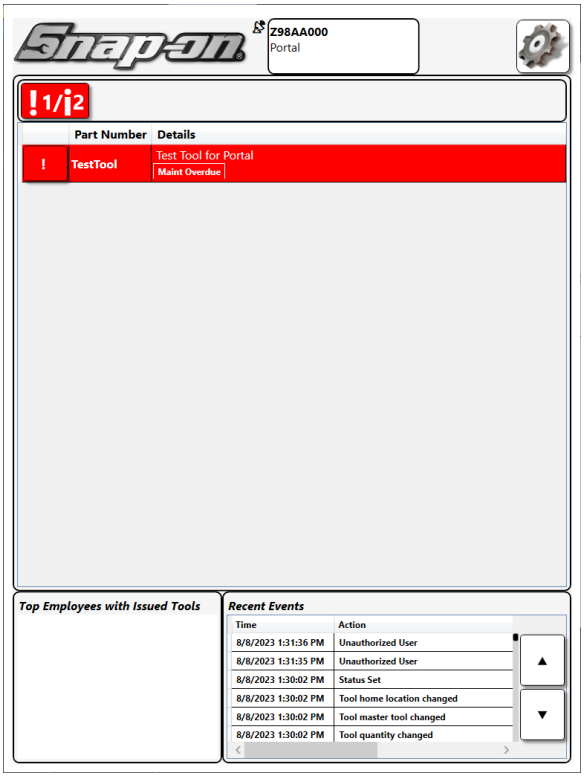
Dashboard

The Dashboard is used to display at a glance the status and condition of the ATC Portal

L5 ATC Portal Dashboard

When the Portal is operating correctly and all tools present, the Dashboard will look like this:





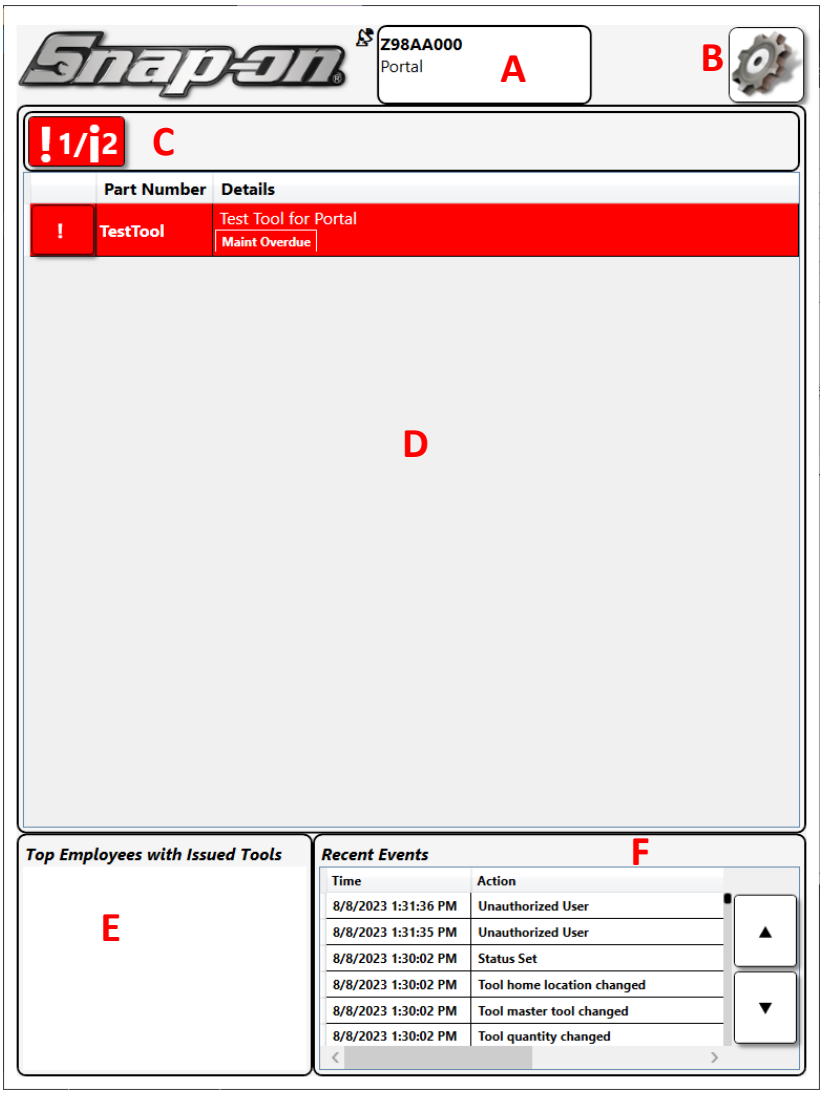
The 2nd image shows the Dashboard with statuses applied to tools for several different users.

Service Connection Indicator

If a device is connected to a L5 Connect™ service and is communicating correctly, you will see the following icon near the Snap-on® logo:

Dashboard Layout

The following section will go over each of the components of the default view of the dashboard and explain their function.



NOTE: This screen is customizable as described later in this guide. The image shown is the default view of the Dashboard.

A – Device Info – Displays Device Name and Type of Device

B - Main Menu – Administrative Functions

C – Device Status Bar – Quick view of the status of Tools and Device

D – Tool List – List of tools issued and tools with statuses

E – Top Employees with Issued Tools – A List of employees with the most tools currently issued.

F – Recent Event – Displays events since last software reboot

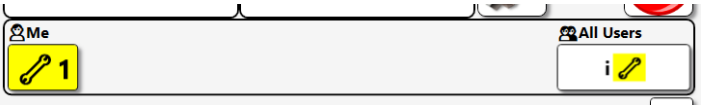
Device Status Bar

This section displays the number of tools with statuses applied to them and the number of issued tools.

When logged in to the terminal, you can switch views between the currently logged-in user and all users by tapping the All-Users button.

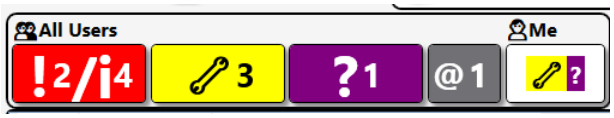
Dashboard View

Logged in View



All Users Toggle

Status Color Codes in Bar



Yellow represents the number of currently issued tools.
Red ! represents the number of tools with an alert status.
White i represents the number of tools with a status that is not an alert.
Purple represents the number of tools that need to be confirmed.
Grey represents the number of tools that are managed out of the box (out for repair, etc.)

You can also tap on any of these numbers and bring up the tool inventory screen with a quick filter already applied.

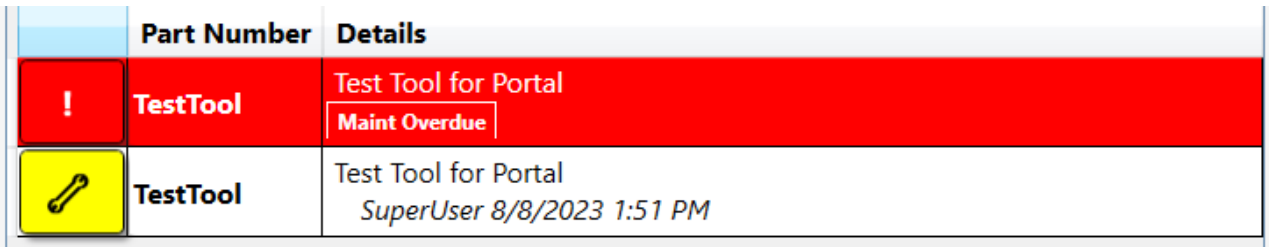
If the status bar displays **green** with a checkmark, all tools are accounted for, and there is nothing wrong with the Device.
If the status bar shows a **Red** Flag Icon, it means there is an issue with the ATC Device and needs to be addressed.

All Tools Accounted For, No Issues with Device

ATC Device Issue

Tool List

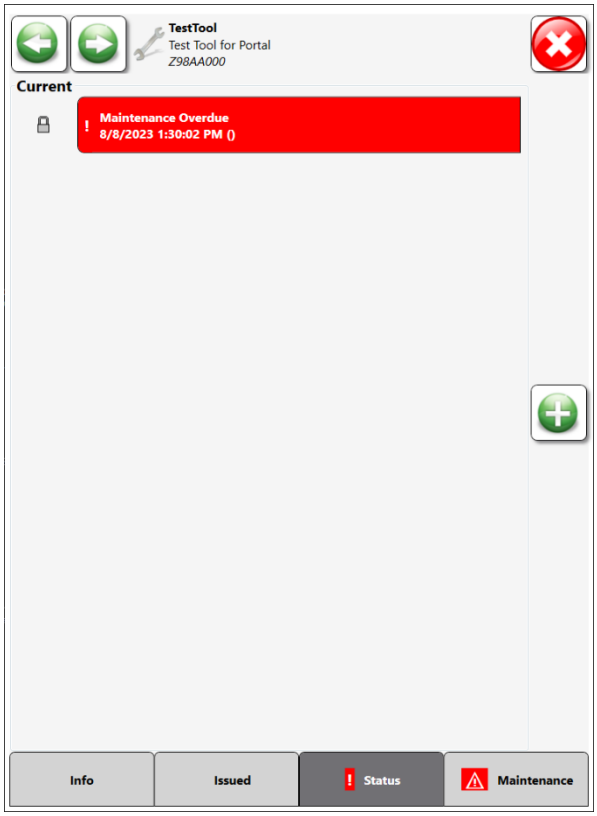
This section displays all tools that are currently issued or have an alert status applied to them.



Yellow means that the tool is currently issued.
Red means that the tool has an Alert applied to it.

When a user logs into the Device, the tool list will only display the tools issued to that user.

You can long-press a tool in the list to access the tool properties.

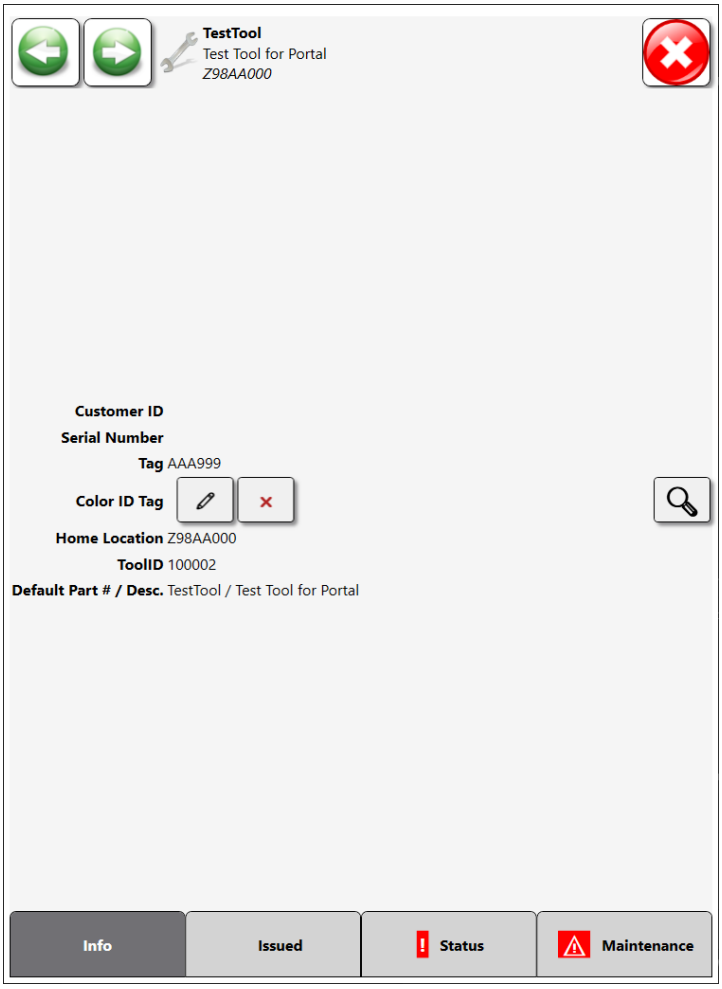


Tool Properties

The tool Properties screen allows you to view detailed information and modify properties of the selected tool in the Device. To access the Tool Properties long press on the tool in the list on the main screen or from the Inventory screen from the main menu.

Info Tab

The info tab displays the properties of the selected tool. Except for the Color ID Tag, all data is static and is defined with the L5 Connect™ Admin Client.

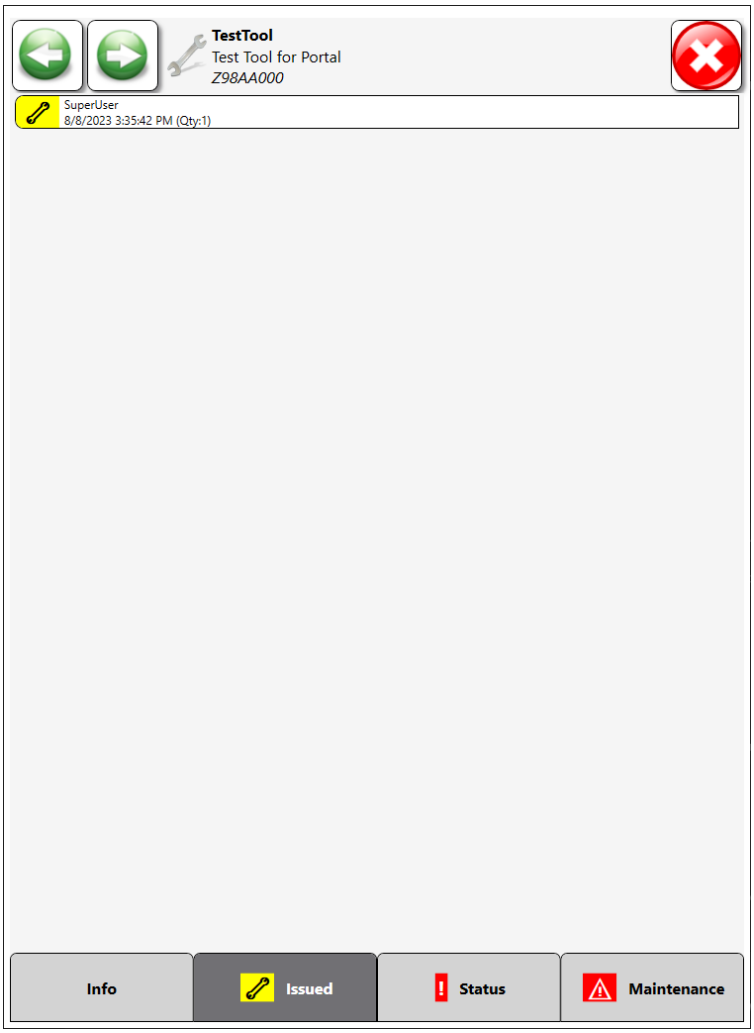


A – Navigation Buttons – These buttons allow you to move to the previous/next tool in the current list
B – Exit Button – This button will return you to the previous screen
C – Tool Properties

- **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
- **RFID Tag** – RFID Tag assigned to the tool
- **Home Location** – The device name and storage location.
- **ToolID** – An internal number the system uses to track this specific tool instance
- **Default Part# / Desc.** – The Master Tool that this tool instance is associated with

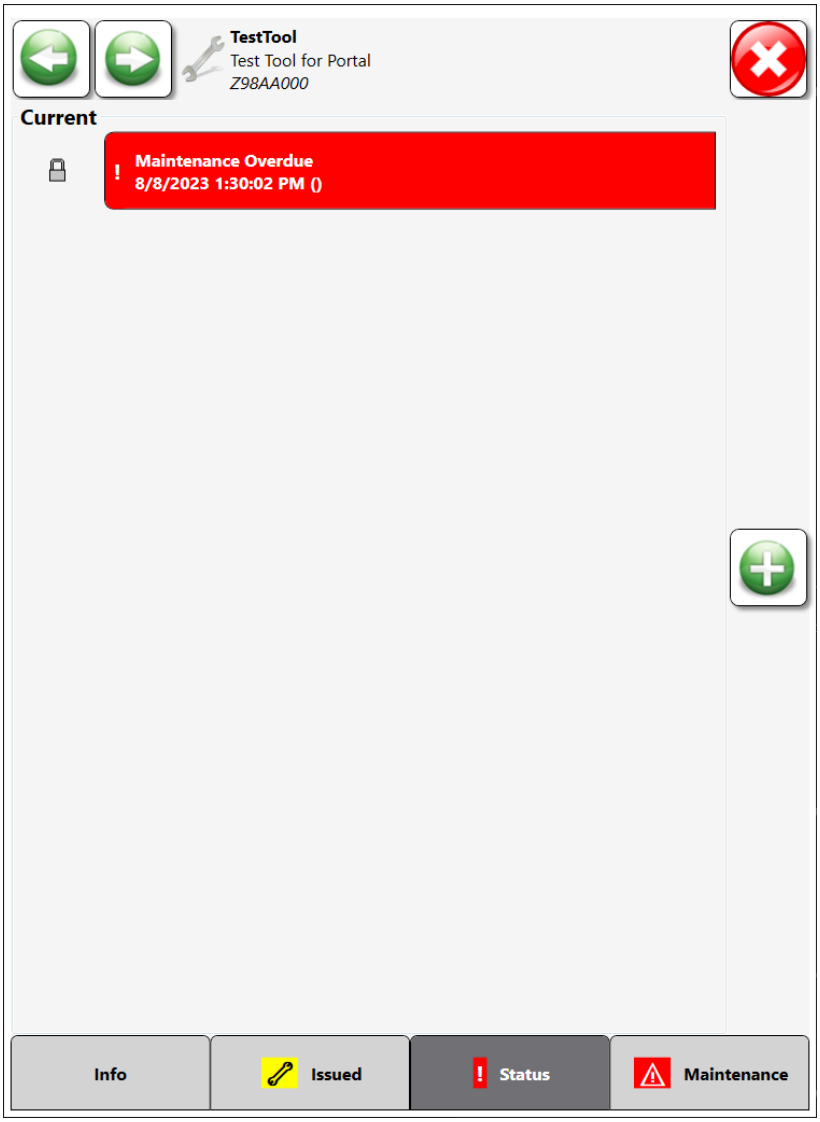
Issued Tab

If a tool is issued to a user, this tab will display the information of whom the tool was issued to and when it was issued. If a work location were assigned during the issue, it would also show here as well.



Status Tab

This tab will display any status applied to a tool.

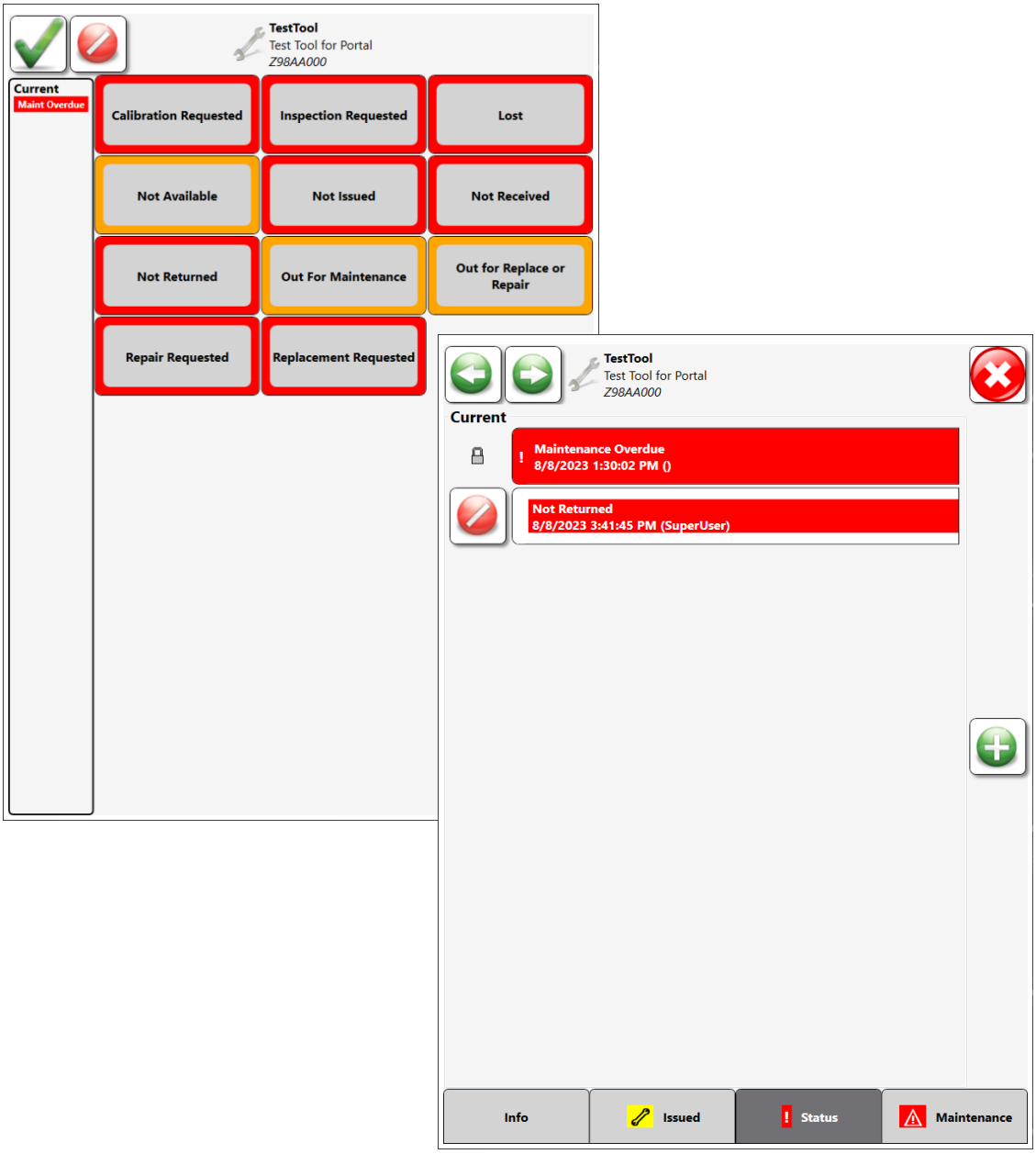


Note: some status are automatic and cannot be manually added or removed.

If you are logged in with a user with permissions, you can add/remove statuses to the tool. To add a status to the tool, tap on the  button.

Note: You must be logged in as a user that has the appropriate permissions to Add / Remove statuses from tools.

You will be displayed a screen of status types that can be applied.



If you do not want to apply a status to the tool, tap the button to return to the previous screen.

Once you have selected a status, you will be returned to the previous screen, where the new status is displayed.

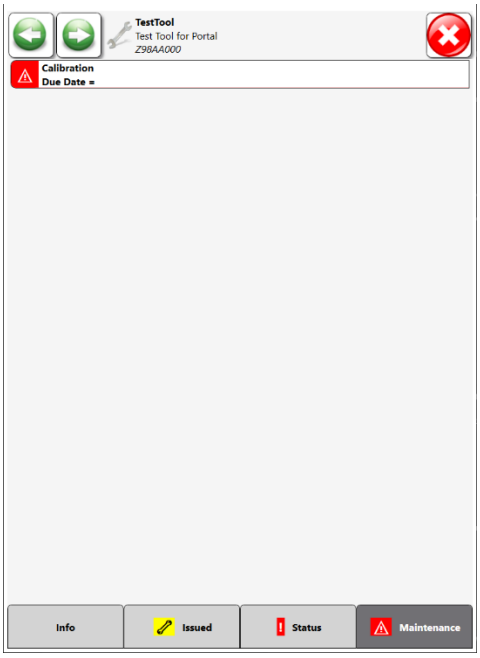
To **clear status** from a tool, press the button to the **LEFT** of the status.

To **apply the status** to the tool, press the button.

To **cancel all changes** to the tool, press the button at the **TOP** of the screen.

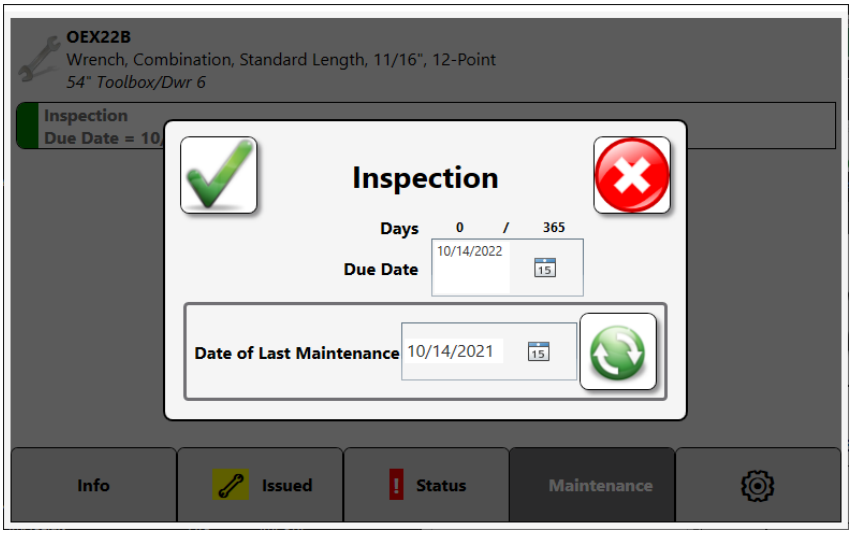
Maintenance Tab

This tab is hidden unless a tool has a maintenance type associated with it. It will display the maintenance type and the Due date of that maintenance. Maintenance Types are defined and set on the Master Tool within the L5 Connect™ Admin Client.



NOTE: You must be logged in with appropriate permissions to make changes to Maintenance Dates.

You can long-press the maintenance type to change the dates.



The **Days** are set by the Maintenance Type in the L5 Connect™ Admin Client.

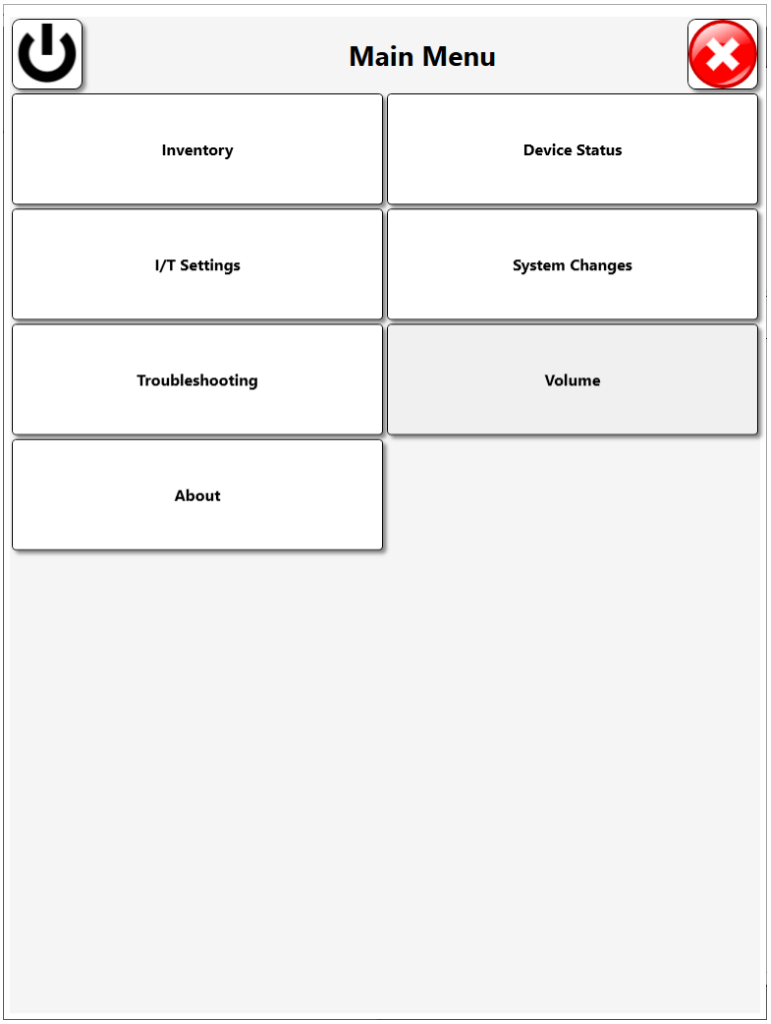
The **Due Date** is calculated based on the number of **Days** and the **Date of Last Maintenance**.

You can manually set the **Date of Last Maintenance,** or you can press the button to select the date to the current system date.

More information about maintenance types can be found in the **L5 Connect™ Administration Guide**.

Main Menu

The Main menu is used to access the advanced administrative functions of the Device.



The following is a simple description of each of the buttons in the Main Menu. We will go into depth for each item listed here:

Inventory – Lists all known tools assigned to the Device. Can use filters to narrow the search for a specific tool.

Device Status – Displays information about the Device and Status Type if applied to the Device.

I/T Settings – Allows access to IT-related Functions.

System Changes – Allows a user to make changes to the device settings.

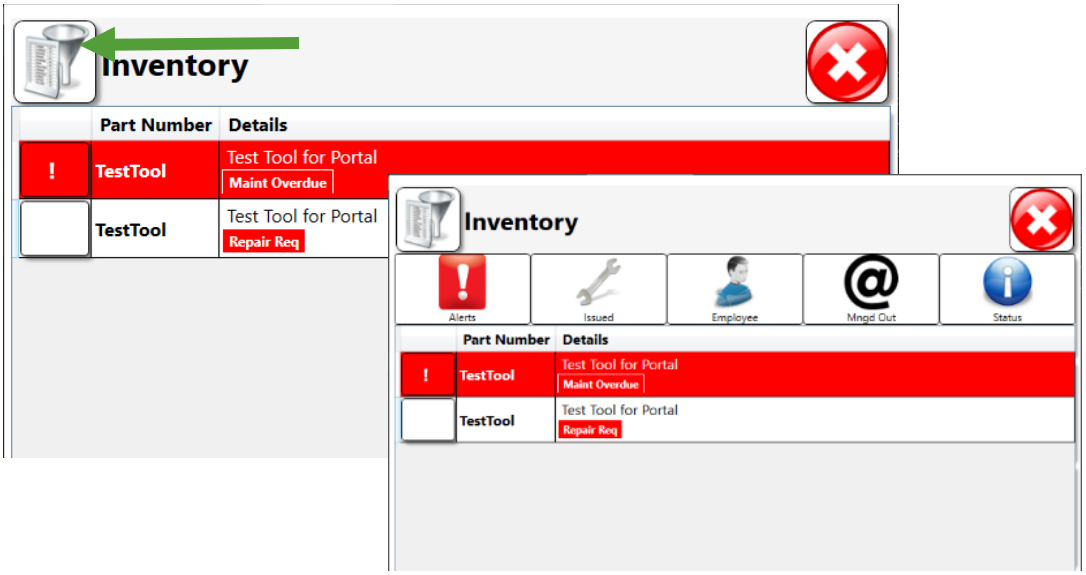
Troubleshooting – A set of tools to diagnose and correct issues with the Device.

Volume – Change the volume of the audio feedback voice. **(Requires Login)**

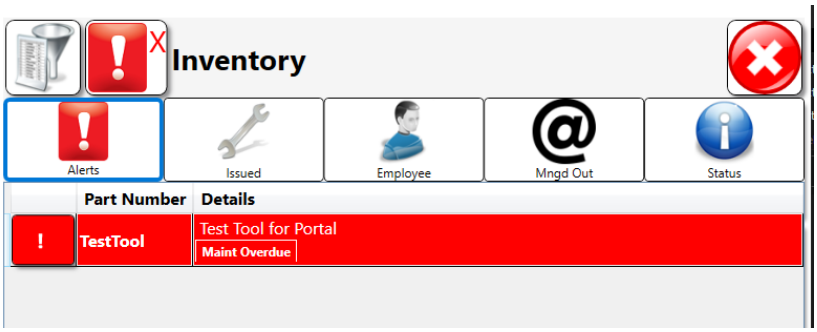
About – Displays Information about Device and Service.

Inventory

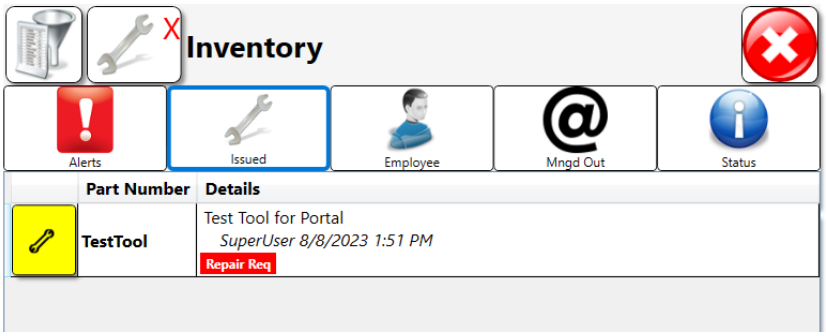
The inventory screen displays all known tool instances that have been assigned to the Device. If the tool has been assigned to a pocket in a drawer, the drawer # will be listed in the part number column. You can filter the list based on several criteria. To access the filters, simply press the show filters button:



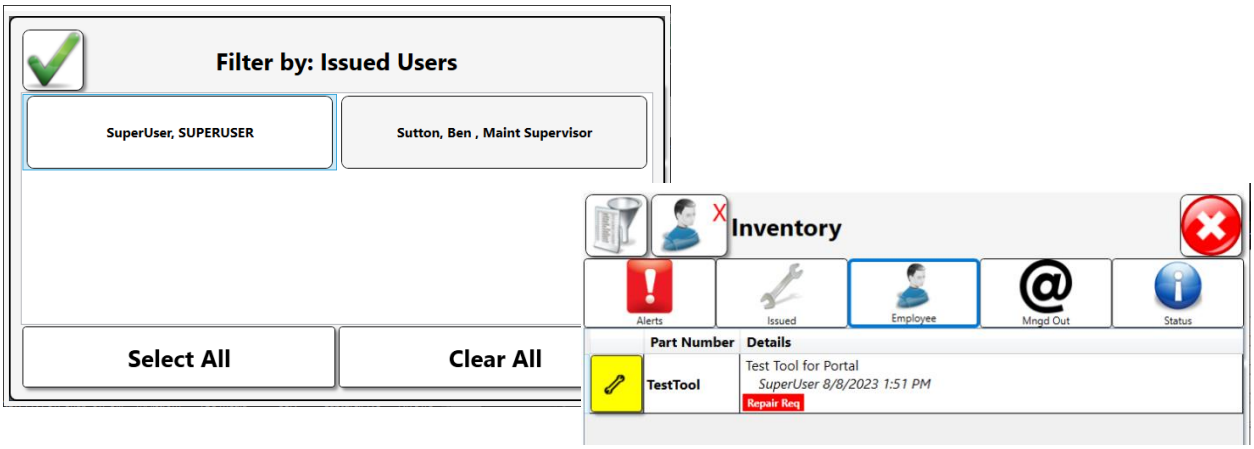
Alerts: This Filter will hide any tool that doesn't have an Alert status applied to it.



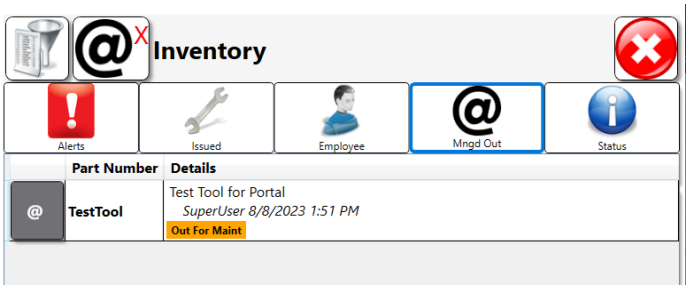
Issued: This filter will only show tools that have been issued to a user.



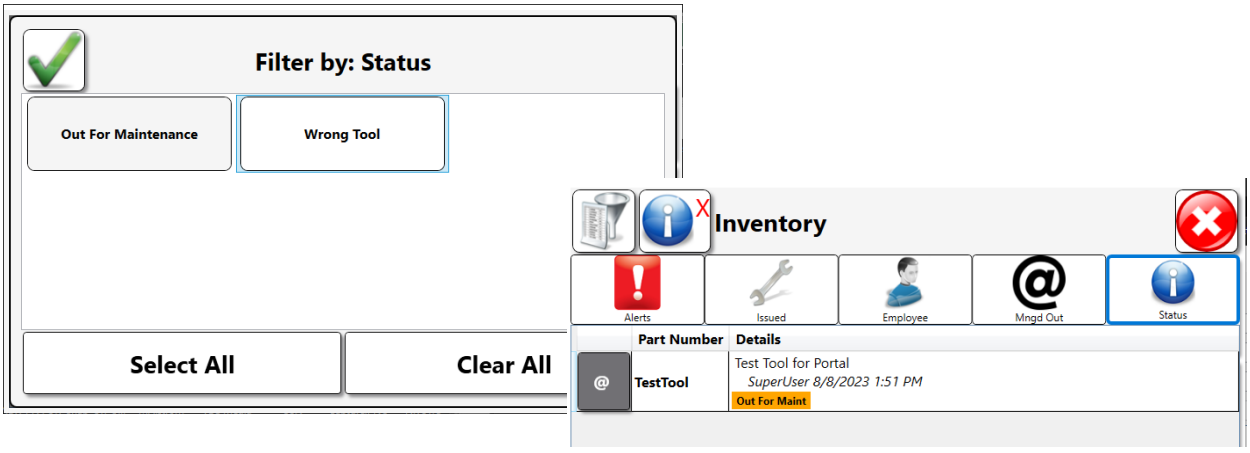
Employee: You can use this filter to only show tools that are issued to a particular employee. Select the user you want to filter by then click on the green checkmark.



Mngd Out: Only show tools that have the Managed-Out status applied.

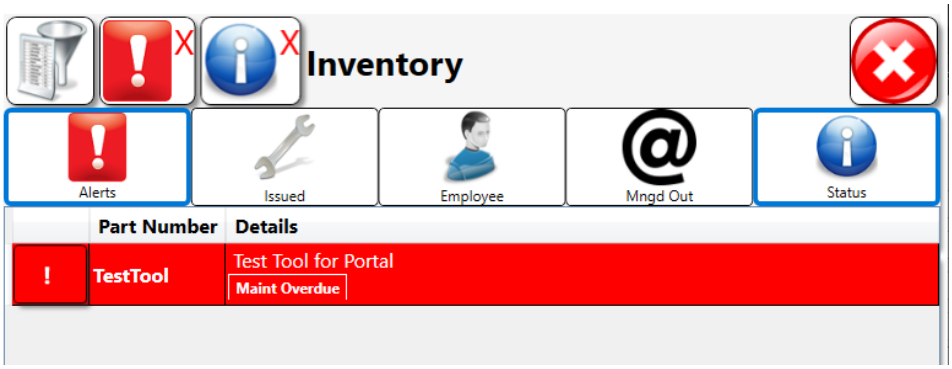


Status: List tools that have a status applied to them. You can filter by a single status or several status types.



Multiple Filters:

You are not limited to just one filter at a time. You can apply several filters at the same time:



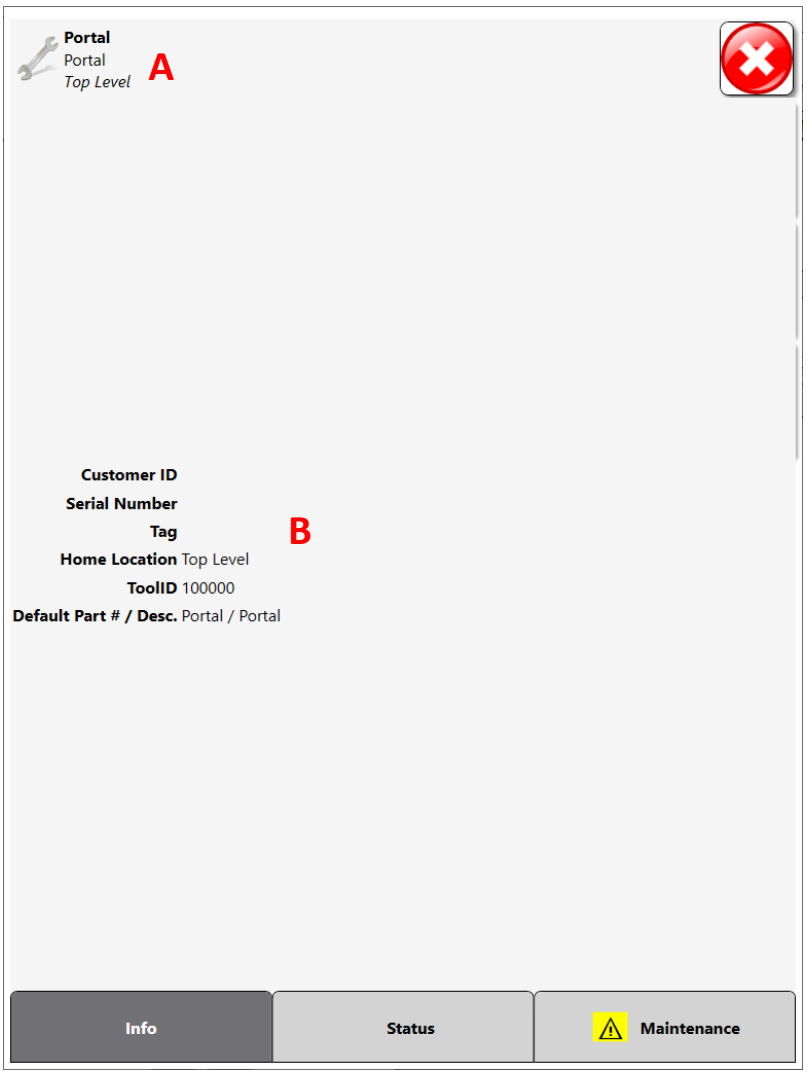
As you can see here, we have applied the Alert and Status filters.

Remember, when applying multiple filters only tools that meet ALL of the filters will be displayed.

Device Status

The Device Status screen displays detailed information about the device, such as device type, location, and any Statuses or Maintenance applied to it.

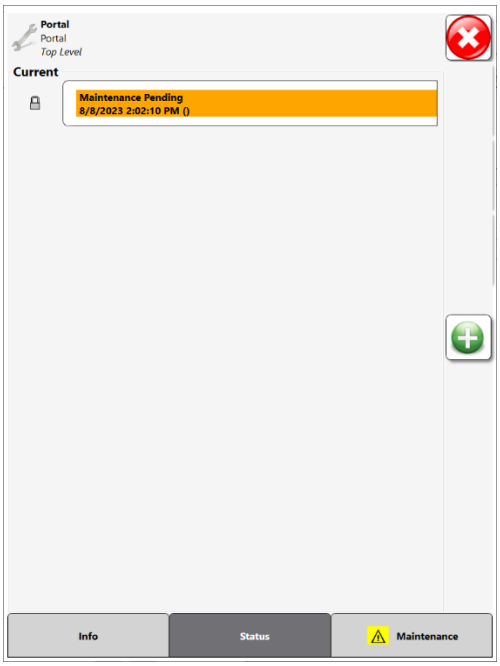
Info Tab



- **A.** Displays the Device Part Number, the Description of the Device, and the Location.
- **B.** Displays detailed data from the L5 Connect™ Service
    - **a. CustomerID** – customer provided ID number
    - **b. Serial Number** – Customer Optional Serial Number
    - **c. Tag** – Barcode assigned to Device
    - **d. Home Location** – Location of the Device
    - **e. ToolID** – internal ID
    - **f. Default Part#/Desc.** – Part Number and Description of Device

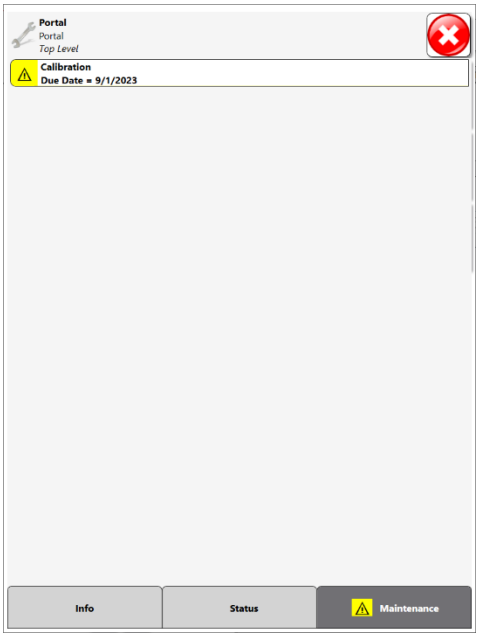
Status Tab

Displays any status currently applied to the device



Maintenance Tab

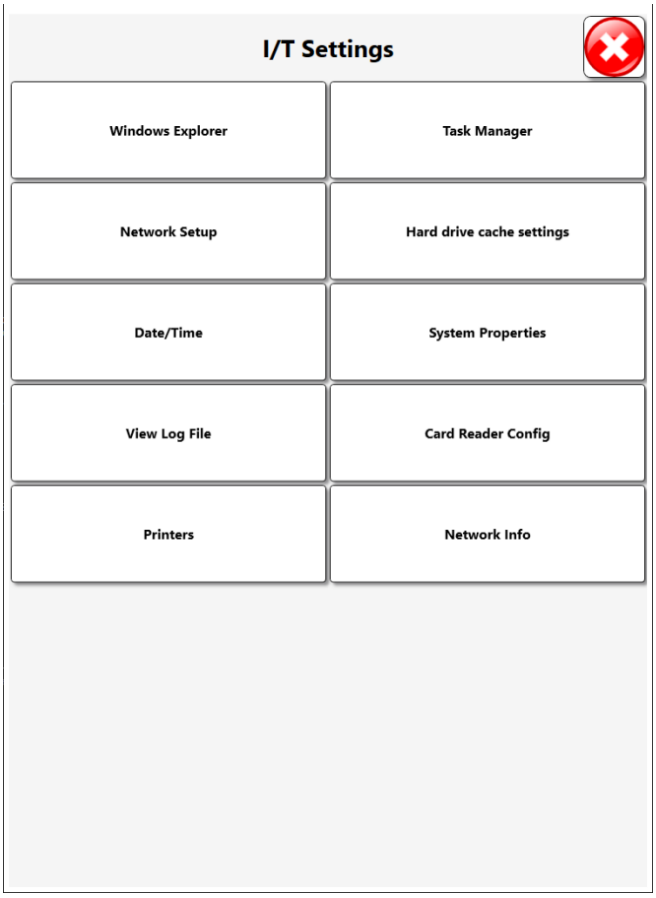
Displays any maintenance alerts applied to the Device.



Note: If there are not any maintenance types applied to the device, this tab is hidden.

I/T Settings

These settings allow the user to change the system configuration for the device, such as network and date/time settings. You must be logged into the system as an Employee with permission to access these functions. (See Profiles and Permissions in the L5 Connect™ Administration Guide).



Windows Explorer – This button will bring up the Windows File Browser.

Task Manager – This button will launch the Windows Task Manager

Network Setup – This button will open the Network Setup Menu.

Hard drive cache settings – Disable caching on the internal Storage Device

Date/Time – This button will bring up Windows Date & Time Settings

System Properties – This button will launch Windows System Settings

View Log File – This button will bring up the directory that contains all the log files for the Device.

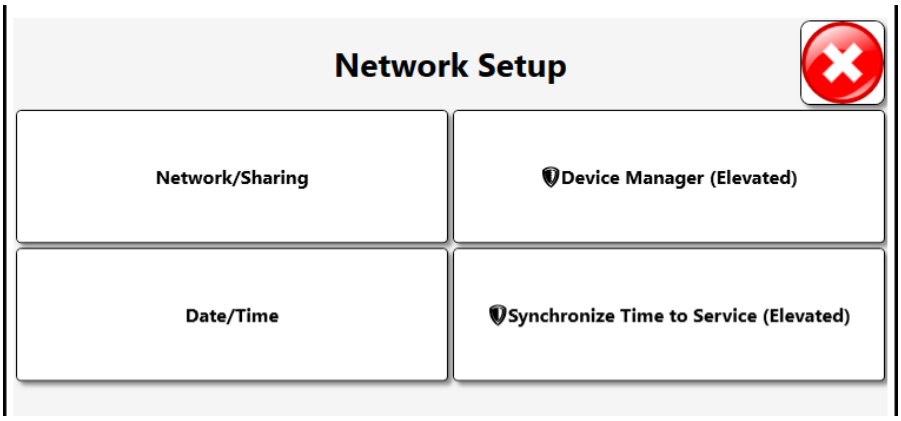
Card Reader Config – This will launch a utility that is used to configure the badge scanner on the Device.

Printers – Configure local receipt Printer.

Network Info – View Network information

Network Setup

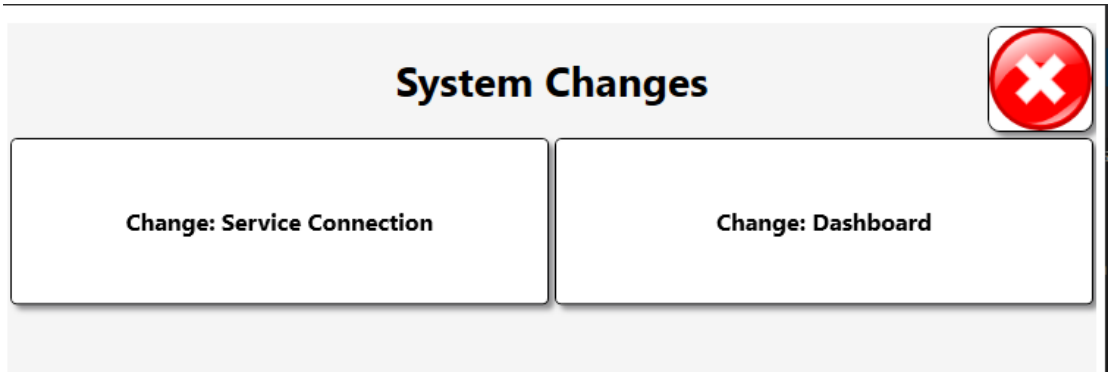
This screen allows the user to change network-related settings.



Network/Sharing – Launches the Windows Network and Sharing Center
Device Manager – Launches the Windows Device Manager
Date/Time – This button will bring up Windows Date & Time Settings
Synchronize Time to Service – Set the Time Server that windows will check to the Service PC.

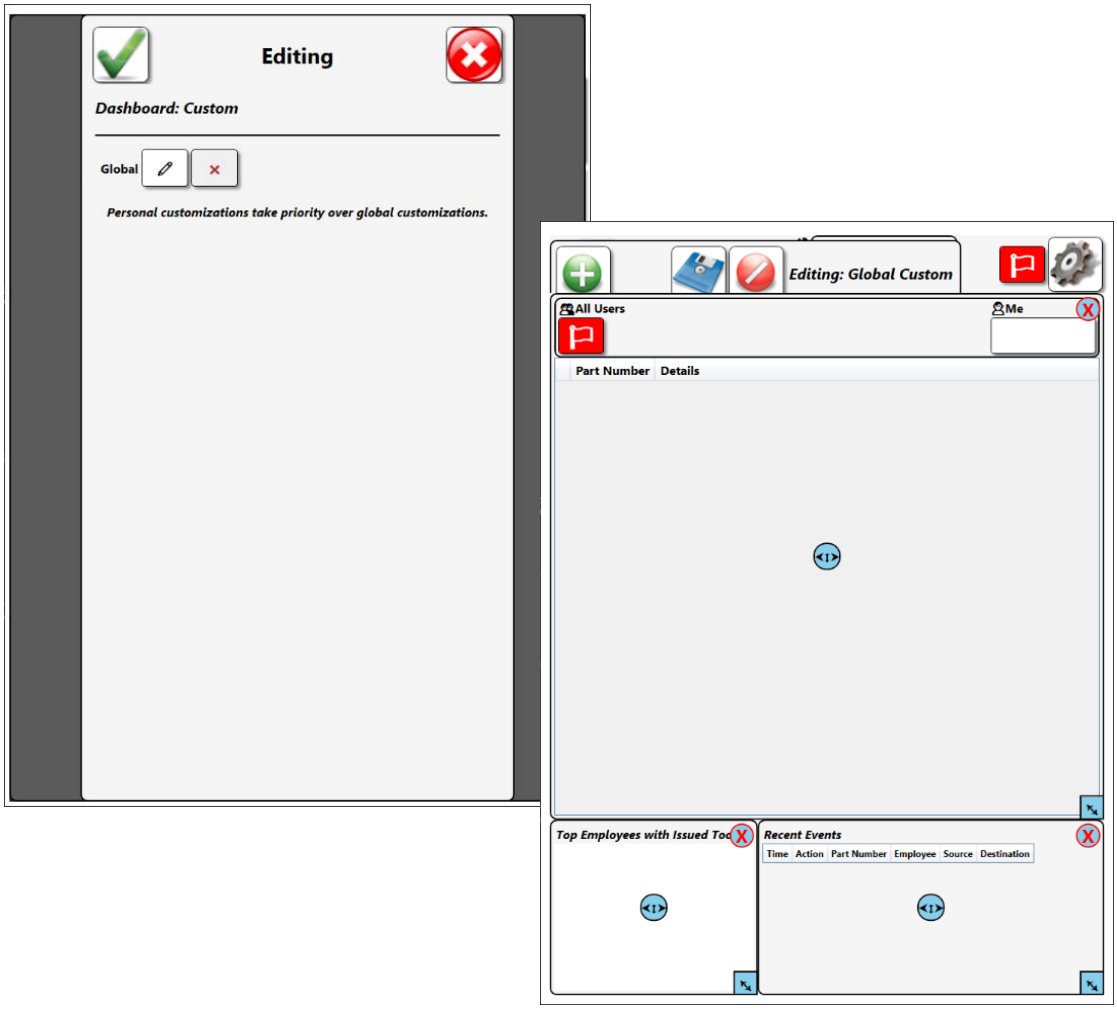
System Changes

The System Changes screen grants access to functions that modify the ATC settings of the device.



Change: Service Connection – If you need to move the Device to a new L5 Connect™ service, you will use this function to do so. **(See Connecting to a L5 Connect™ Service)**

Change: Dashboard – This allows you to define the dashboard layout of the Portal.

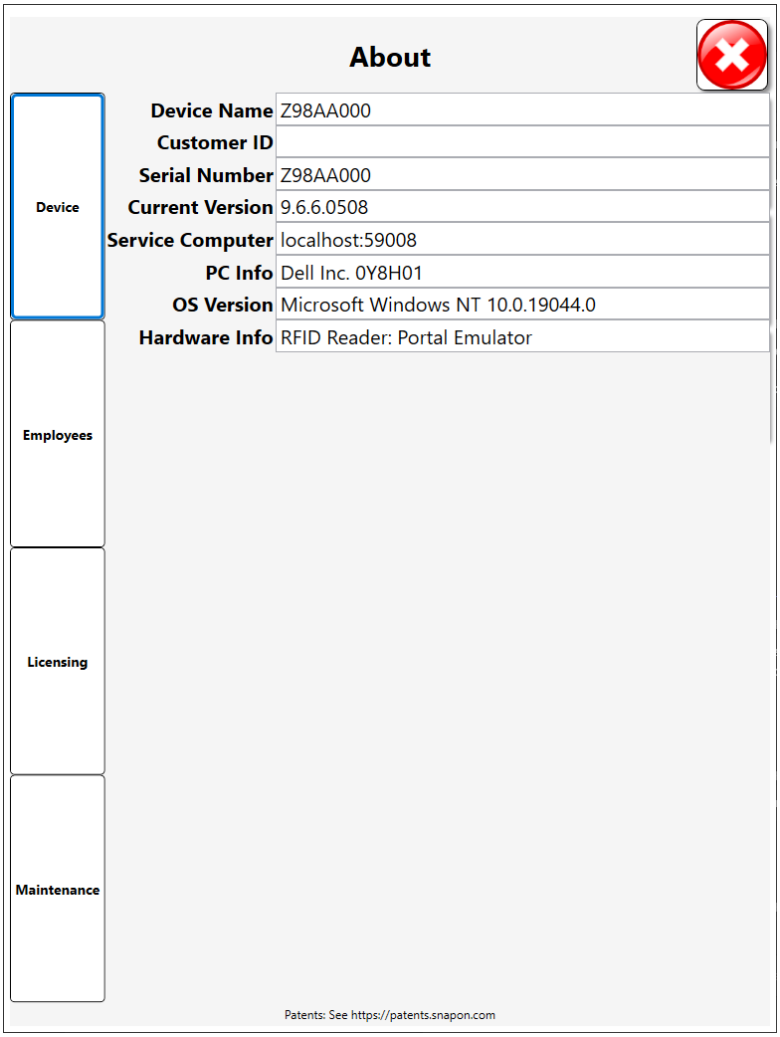


About

The about screen displays Device-specific information as well as last known user and advanced feature availability.

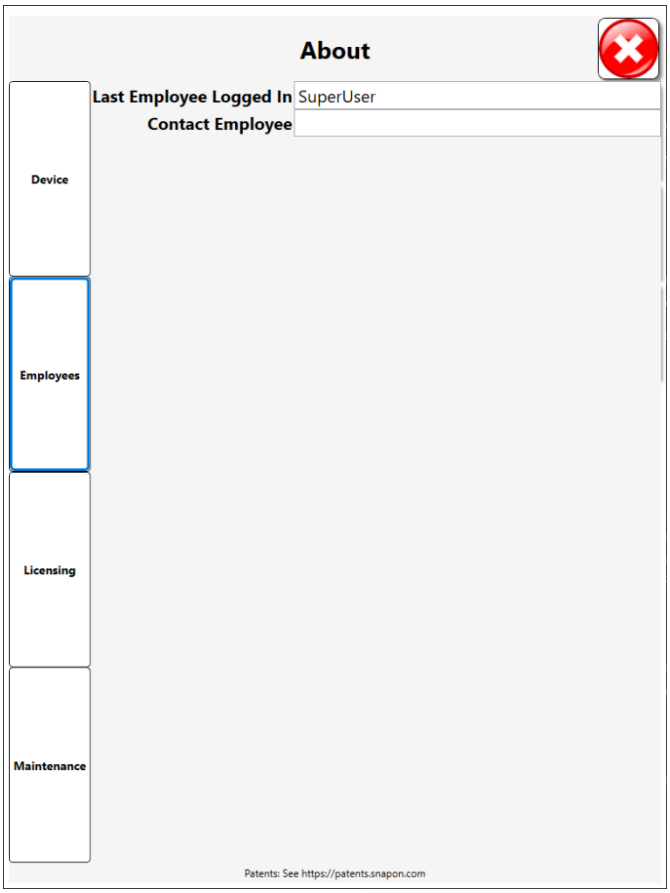
There are three tabs on the About Screen:

Device – This tab displays information about the Device. This data is read-only and can be changed in the L5 Connect™ Admin Client. This tab also displays any Maintenance Types and the Due Date if one has been applied to the Device.

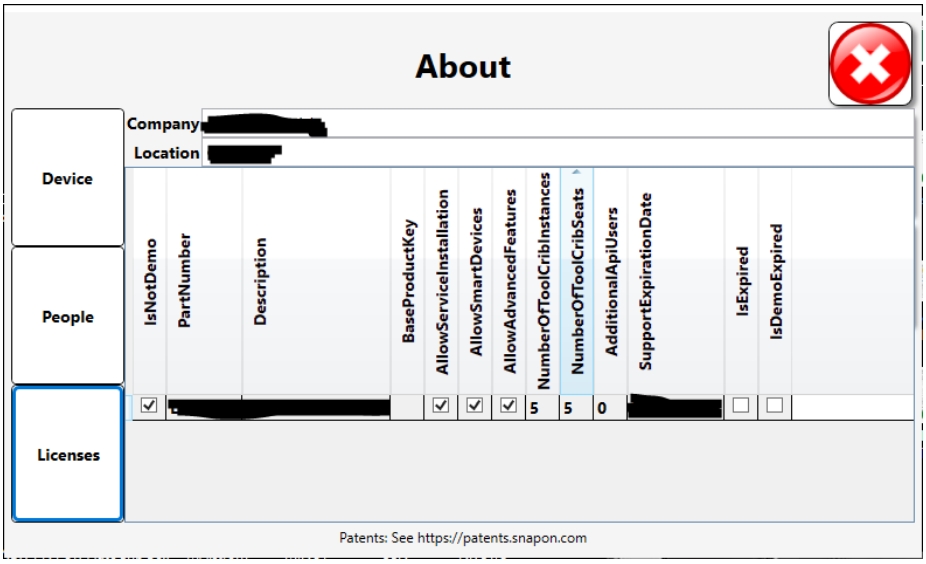


Device Name – The friendly name of the Device.
Customer ID – A unique ID number set by the user.
Serial Number – The Serial Number of the Device is hard-coded and doesn't change.
Current Version – The current version of software the system is running.
Service Computer – The hostname or IP of the L5 Connect™ service this Device is connected.
PC Info – Displays the Baseboard information of the PC running the Portal Software
OS Version – Displays the OS version information of the Portal PC
Hardware Info – Displays the type of RFID reader the Portal is using.

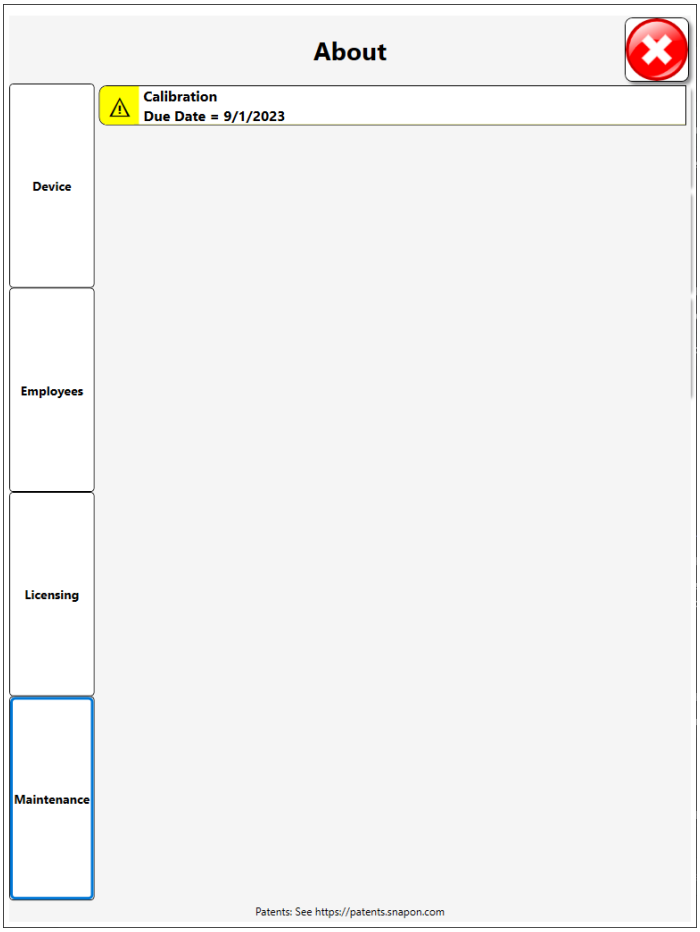
Employees – The employee tab displays the last logged-in user and the employee whom users need to contact if there are any problems with the box.



Licenses – This tab will display the current license that has been applied from the service to the device.

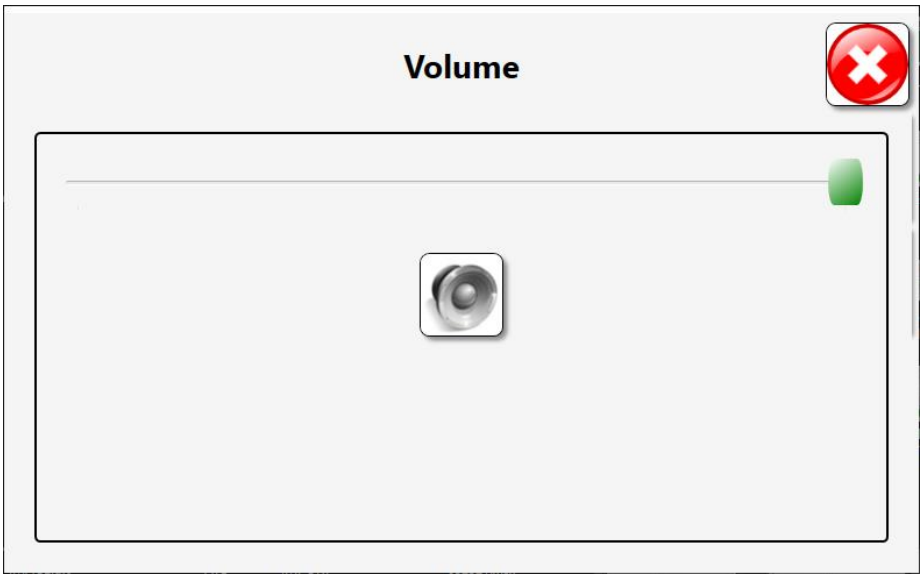


Maintenance – This tab will display the current maintenance plans assigned to this device.



Volume

This setting allows you to change the volume of the system audio. Moving the slider to the left <- will reduce the volume. You can press the button to play an audio sample to test the sound and volume.



RFID Catalog & Accessories

The following sections cover the RFID Tags and Accessories used in the RFID Cabinet.

RFID Tags

To order tags, call 1 877 740-1900

For Technical Assistance, call 800 272-2033

TAG–RFID SM–HID–82

Snap-on Part Number

3-00807A (US)

Dimension:	1.5” x 0.51” x 0.2”
	38 x 13 x 4 mm
Chip:	Impinj Monza R6 Global
Frequency:	860-960 MHz
Read Range:	Up to 3m (9.8 ft)
Material:	Industry Grade Polymer
Operating Temp:	-40° to +185 °F

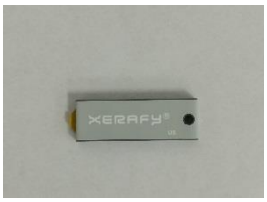
Kits Available:

10 piece kit – PN L5A0331J50B (US Only)

Recommended Usage: Metallic and non-metallic surfaces, Electronic Equipment & Devices, Power Tools, Power tool batteries, and chargers.

Note: This Tag should be the first choice when applying tags for use with the US ATC locker & Portal.

TAG – RFID XE DT 2



Snap-on Part Number

3-00607A (EU)

Dimension:	1.5” x 0.51” x 0.16”
	(38 x 13 x 4 mm)
Chip:	Impinj Monza 4E
Frequency:	ETSI 866-868 MHz (EU)
Read Range:	Up to 4.5 m (14.8 ft)
Material:	Industry Grade Polymer
Operating Temp:	-40° to +85°C

Kits Available:

10 piece kit – PN L5A0331J59A (EU Only)

Recommended Usage: Metallic and non-metallic surfaces, Electronic Equipment & Devices, Power Tools, Power tool batteries, and chargers.

Note: This Tag should be the first choice when applying tags for use with the EU ATC locker & Portal.

LABEL – RFID: 3.8 in x 0.50 in

Snap-on Part Number

3-00207A

Dimension: 3.8” x 0.5”
Chip: Higgs-4
Frequency: 860 – 960 MHz
Read Range: 3 – 6 ft. Varies With application
application Material: TT
Printable White Film with General purpose permanent adhesive
Operating Temp: -40°F to +158°F

Kits Available:

100 piece kit – PN L5A0331J51A

Recommended Usage: Non-metallic surfaces, books, tote bags, plastic tools, non-electronic items. It does not work on batteries, battery chargers, drill bodies, etc

TAG – WF-SM-22 Foam

Snap-on Part Number 3-01007A

Dimension: 4" x 1.38" x .14”
Chip: Impinj
Frequency: 860 – 960 MHz
Read Range: Up to 15 ft.
Operating Temperature:- -40°F to +168°F

Kits Available:

10 Piece Kit – PN L5A0331J65A

Recommended Usage: Identification Labeling, High-Value Asset Labeling, Warehouse, Asset Marking & Tracking, Vehicle/Fleet Marking.
The passive response provided by this Tag can be hampered by metallic surfaces. However, it can be used in applications where the tagged object moves as it is very flexible and durable.

Note: This Tag does not work when placed on or near metal surfaces.

- **If this Tag is used, TOOL PLACEMENT IS CRITICAL**
  - **Direct line of sight with antennas is required**
  - **The Tag must be isolated from metal tools and the metal walls of the locker**

Tag – WF-SM-85

Snap-on Part Number 3-00907A

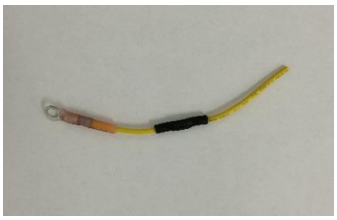
Dimension:	3.54" x 0.97" x 0.12" 90 x 25 x 3 mm
Chip:	Alien Higgs 3
Frequency:	866-928 MHz (Global)
Read Range:	Up to 40’
Material:	Fiberglass
Operating Temp:	-40°F to 302°F

Kits Available:

10 Piece Kit – PN L5A0331J64A

Recommended Usage: High-Value Asset Labeling, Metal Mount, Asset Marking & Tracking, High Temperature, Tools Tracking, IT.
The strong, rigid body is sealed to protect the Tag from impact, water, and any chemicals it may come in contact with.

TAG – RFID, SM WIRE WITH LOOP



Snap-on Part Number 3-00507A

Dimension:	6" x 0.125"
Chip:	Alien® Higgs® 3, 480 Bits
Frequency:	860 ~ 960 MHz
Read Range:	5” to 20’
Material:	Insulated Metal Wire
Operating Temp:	-40ºF to 400ºF -40ºC to 200ºC

Kits Available:

10 piece kit – PN L5A0331J54A

Recommended Usage:
Harsh Environment, High-Temperature applications. It can be attached to a wide variety of items

- **Use when**
  - **If there is not an area on the tool available to attach a tag**
  - **The tool needs to be flexible**
- **Do not attach directly to tools with metallic surfaces or interiors**

Starter Kits

L5A0331J62B Rev. B Tag Starter Kit – North America		
Qty	**PART NO.**	**DESCRIPTION**
2	L5A0331J50B	KIT-RFID TAG, WF– SM – HID – 82
1	L5A0331J51A	KIT – RFID LABEL, 3.8 in x 0.5 in
1	L5A0331J54A	KIT – RFID TAG, WIRE WITH LOOP
1	L5A0331J56A	TUBING, HEAT SHRINK, 0.75 in ID, BLK
1	L5A0331J57A	TUBING, HEAT SHRINK, 1.0 in ID, BLK
1	8-11632A	ADHESIVE – RFID TAG, LT 401
1	5-12040A	TAPE – SELF FUSING SILICONE, 20 ft.

L5A0331J63A Tag Starter Kit – Europe / UK		
Qty	**PART NO.**	**DESCRIPTION**
2	L5A0331J59A	KIT– EURFID TAG, XE DT 2
1	L5A0331J51A	KIT – RFID LABEL, 3.8 in x 0.5 in
1	L5A0331J54A	KIT – RFID TAG, WIRE WITH LOOP
1	L5A0331J56A	TUBING, HEAT SHRINK, 0.75 in ID, BLK
1	L5A0331J57A	TUBING, HEAT SHRINK, 1.0 in ID, BLK
1	8-11632A	ADHESIVE – RFID TAG, LT 401
1	5-12040A	TAPE – SELF FUSING SILICONE, 20 ft.

Handheld Scanners

L5A0331J20A – SCANNER KIT HANDHELD RFID

- Zebra Technologies DS9908R
- DS9900 Series Corded Hybrid Imager
- 1D/2D Barcode, RFID reader, USB Powered
- DS9908-SR00004ZZWW Scanner
- Includes CBA-U21-S07ZBR Shielded USB Cable
- RFID USB Kit, Black, Standard Range
- For use in all global regions programmable via barcode
    - setup manual TL5A0331J20A

Heat Shrink Tubing and Silicone Tape

Part Number	Description	Length	Material
L5A0331J55A	Tubing - Heat Shrink, 0.5 IN ID, BLK	6 feet	Adhesive Lined Polyolefin
L5A0331J56A	Tubing - Heat Shrink, 0.75 IN ID, BLK	6 feet	Adhesive Lined Polyolefin
L5A0331J57A	Tubing - Heat Shrink, 1.0 IN ID, BLK	6 feet	Adhesive Lined Polyolefin
L5A0331J58A	Tubing - Heat Shrink, 1.5 IN ID, BLK	6 feet	Adhesive Lined Polyolefin
5-12040	TAPE – SELF FUSING, SILICONE	20 feet	Cured Silicone rubber with 25% Sinusoidal Fiberglass substrate

Tag Adhesive and Epoxy

Part Number	Description	Amount	Material	Usage
8-11632A	Adhesive - RFID Tag, LT-401	20 g	Cyanoacrylate Instant Adhesive	Surface Insensitive Not recommended for tags with adhesive backing
8-11732A	Adhesive - RFID Tag, LT-454	20 g	Cyanoacrylate Instant Adhesive	Surface Insensitive gel for porous or absorbent materials Not recommended for tags with adhesive backing
8-11832	Epoxy - RFID Tag, LT E-00CL	50 ml	2 Part Epoxy Resin	Additional Tag Protection when Heat Shrink tube or silicone tape cannot be used
8-12132	Epoxy - RFID Tag, LT E-05MR	50 ml	2 Part Epoxy Resin	Additional Tag Protection when Heat Shrink tube or silicone tape cannot be used

Epoxy Applicator

Part Number	Description	Usage
8-11932A	Mixer - Epoxy, Gun Manual, 50 ml 2:1	Applicator gun for 50 ml two-part epoxy
8-12032A	Element Pack- Mixer, 0.25" ID x 6.02" L	Pack of twenty mixer tubes for 2 part epoxy applicator gun.

RFID Tag Installation - BEST PRACTICES

The proper performance of your Snap-on RFID Locker & Portal depends on many factors. One of the most important of these is the proper mounting of the Tag to the asset. The process to correctly mount tags to assets consists of these steps:

1) Tag selection, positioning, and initial performance confirmation
2) Cleaning
3) Tag application and readability
4) Tag protection
5) Confirming readability

1) Tag selection and positioning
    a. Proper tag selection depends on the type and configuration of the asset to be tagged.
    b. For metal assets, use a metal mount tag
    c. For other asset materials, non-metal mount tags or RFID labels can be used
    d. Tags should be located in areas where they do not interfere with the usage of the asset and where the material in the asset does not interfere with the performance of the Tag.
    e. Properly locating the tags on assets may be an iterative process. The Tag can be temporarily fixed to the asset and checked for readability. Use the North American Scanner 3-18906A or the International L5A0331J61A – RFID Scanner to confirm the readability of the Tag
    f. If the readability of the Tag is less than expected, move the Tag to another location on the asset and reconfirm readability, or use a different type of tag.
2) Cleaning
    a. Remove contaminants such as dirt, grease, oil, or wax from the surface of the object.
    b. Use a solvent appropriate for the surface, such as isopropyl alcohol, acetone and follow directions on the label.
    c. Wipe the object dry. Allow at least 5 minutes of drying time.
3) Tag Application and Readability
    a. Once the tag location is selected and is cleaned, adhesive-backed tags are applied by peeling the protective layer from the adhesive, positioning the Tag in the selected location, and applying firm pressure to the Tag for about 10 seconds to ensure proper adherence.
    b. The paper decal tags may be applied the same way

c. For tags without the adhesive layer, apply a drop of the cyanoacrylate adhesive to the asset at the appropriate location and apply the Tag. Apply light but firm pressure to the Tag for 5 to 10 seconds to ensure a good bond

4) Tag Protection
   a. In many cases, it is desired to protect the Tag from damage or loss by applying a protective layer. Depending on the application, Snap-on provides Epoxy, heat shrink tubing, and silicon tape. It is important to remember that tag performance can be degraded by applying too thick a layer of the protective material.
5) Confirming readability
   a. As mentioned in items 1e and 1f:
      i. Use the North American Scanner 3-18906A or the International L5A0331J61A – RFID Scanner to confirm the readability of the Tag
   b. If the readability of the Tag is less than expected, move the Tag to another location on the asset and reconfirm readability, or use a different type of tag.

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 ½" 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.

Snap-on
LEVEL 5 ATC
Tool Control System™

P/N: EAL0414J27A

L5 Connect™ Device Models

To see the latest in L5 Connect Devices and Accessories that are available, please visit our online catalog: Pages 38-41

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