

Snap-on

L5 Connect™ Install & Setup Guide

Version 2.0

Houston, Cody L 10-20-2022

This Page Left Blank

Table of Contents

Introduction	
L5 Connect™ Minimal System Requirements	5
The L5 Connect License	ε
The License Process	6
License Expiration and Renewal	ε
Add-ons	6
Installing L5 Connect™	7
All-in-one Installation	7
Single Component Installation	14
Installing the L5 Connect™ Service	14
Installing the L5 Connect™ Administration Client	18
Installing SQL Server Express	23
Installing True-Crib™	30
Creating the L5 Connect™ Database	35
Configuring the Windows Firewall	39
Updating L5 Connect™	44
L5 Connect™ Service Configuration	47
Diagnostics	49
Info	50
Database	51
Licensing	52
Data Retention	53
APPENDIX A – L5 Connect™ Licenses	54

This Page Left Blank

Introduction

Thank you for your purchase of L5 Connect[™]. This guide is meant to assist you in installing and configuring your **L5 Connect[™] Service**.

The first part of this guide will go through the different methods you can use to install the software on your system. The second part of the guide will cover how to setup the L5 Connect™ Database and L5 Connect™ Service so that it can be used by your L5 Connect™ Devices.

Although this guide contains detailed instructions on the installation of L5 Connect™, 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: L5 Connect™ is an extremely efficient solution to tool control. Yet, a robust Tool Control program with L5 Connect™ and ATC Devices at its core, integrated with your current processes and procedures, is still needed to ensure successful tool control in your organization.

NOTE: This Guide was written with software version 9.4.6.0 and some screens and features described in this guide may appear differently than in the version you may be using.

L5 Connect™ Minimal System Requirements

The following system requirements is for the L5 Connect™ software only, you need to consider any other software and the Windows requirements for the system as well.

L5 Connect Service - up to 20 Devices*	
CPU	Dual Core @ 2.0GHz
RAM	2GB DDR4
Storage	250GB**
OS	Windows 10 1709 & newer or Windows Server 2016 & newer

L5 Connec	L5 Connect Service – 21 to 100 Devices*	
CPU	Quad Core @ 2.0GHz	
RAM	4GB DDR4	
Storage	1TB**	
OS	Windows 10 1709 & newer or Windows Server 2016 & newer	
If more than 20 devices, it is recommended to install both service and database on a Server.		

L5 Connec	L5 Connect Database - up to 100 Devices*	
CPU	Quad Core @ 2.0GHz	
RAM	4GB DDR4	
Storage	10GB***	
OS	Windows 10 1709 & newer or Windows Server 2016 & newer	
SQL	SQL Express 2014 or newer	
If more than 100 devices are used, the full version of SQL Server is recommended.		

L5 Connect Administration Client	
CPU	Dual Core @ 2.0GHz
RAM	2GB DDR4
Storage	300MB
OS	Windows 10 1709 & newer or Windows Server 2016 & newer

True-Crib	
CPU	Dual Core @ 2.0GHz
RAM	2GB DDR4
Storage	1GB
OS	Windows 10 1709 & newer or Windows Server 2016 & newer

IF YOU HAVE MORE THAN 100 DEVICES, PLEASE CONTACT SNAP-ON FOR A CUSTOM SPEC

- * Devices include Optical Toolbox, RFID Cabinet, & True-Crib
- ** Storage based on 1-year usage, 300 MB hard drive space plus additional 875MB per active box per month for archive
- *** SQL Express restricts a database to a maximum size of 10GB.

The L5 Connect License

Before you can install L5 Connect™, you must first purchase and activate a L5 Connect™ License. The license determines what features and components are allowed for use on your L5 Connect™ Service. For a complete list of all Licenses available please see **Appendix A**.

The License Process

The following steps are how you can purchase and activate your L5 Connect License.

- 1. Contact your Snap-on® Sales Representative.
- 2. Determine what license is right for you and place your order
- 3. Shortly after, you will receive a packet that will contain the Product Key for your license
- 4. Email L5 Connect License Support: TrueSiteLic@snapon.com and provide your Product Key
- 5. You will be asked to download and run an Install-ID tool to generate your installation ID.
- 6. Provide all information from this tool to the licensing team.
- 7. Shortly after you will receive an email with a License file for your system.
- 8. During the installation process the system will ask you to import this license file.

License Expiration and Renewal

Some licenses are for 1 year from the date it was activated, and you will need to renew your license before the license expires. It is not recommended to run your L5 Connect™ system with an expired license as some features will be disabled.

If you allow your licenses to expire the following features will be disabled:

- 1. All True-Crib™ seats will become unavailable
- 2. The API Tokens and access will be revoked

To renew your license, contact your Snap-on® sales representative and place an order for a renewal license. The process to acquire and activate this renewal follows the same process as acquiring a new license above.

Add-ons

If you have activated a license and find you need to add new features to your system, you can purchase an add-on license. This purchase allows you to add those features to the current installation. These licenses require the original Product Key of your license to activate.

To get an add-on license contact your Snap-on® sales representative to place your order. Once received contact the L5 Connect™ licensing team and they will issue you a new license with the added features.

NOTE: License files are only valid for the PC used to generate the Installation ID.

Installing L5 Connect™

L5 Connect™ can be deployed in several different ways, you can have everything running on a single Windows 10 PC or you can install it across multiple systems.

There are several different ways you can install the software depending on your environment.

All-in-one – This is a single installer that will install the L5 Connect™ Service, SQL Express 2017, L5 Connect™ Administration Client, and True-Crib™ on a single PC.

Single Component – With this method you will run the installer for each component individually. This method is used if you want your L5 Connect™ system on multiple PCs or if SQL is already installed on the PC.

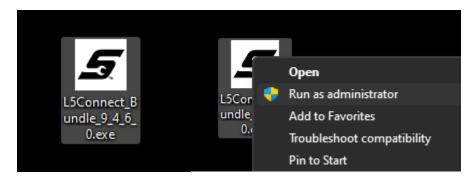
All-in-one Installation

The All-in-one (AIO) installer is what you use when you want to install all L5 Connect™ components onto a single computer. The Service, Database, Admin Client, and True-Crib all run from the same PC. This configuration is for smaller limited scope deployments.

WARNING: If any version of SQL Server, or any L5 Connect™ Componets are already installed on the PC, DO NOT run this installer as it will cause the installation process to fail.

Before you begin, save any unsaved changes, and close any open applications. You will need to copy the installer file to the target PC as running it from a USB or over a network could cause issues.

Right-click on the L5 Connect™_Bundle.exe file and select "Run as Administrator."



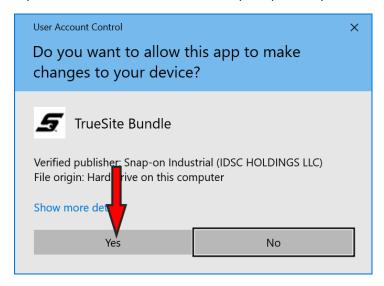
If SmartScreen blocks the installer, click on More Info and then "Run Anyway."



Once the installer launches, if you want to install the service software in a different location that the default location (C:\Program File x86\Tool Control System\) click on the Options button. You can browse to the location you want the software installed. Click OK when done, you will be at the main screen again, click **INSTALL** to continue.



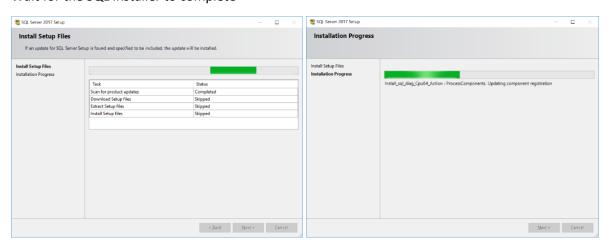
If you receive a User Account Control prompt, click yes, or enter administrative credentials.



During this process, **SQL Server Express 2017** is installed. Click **OK.**

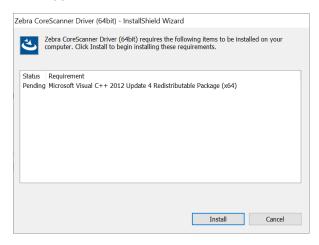


Wait for the SQL installer to complete

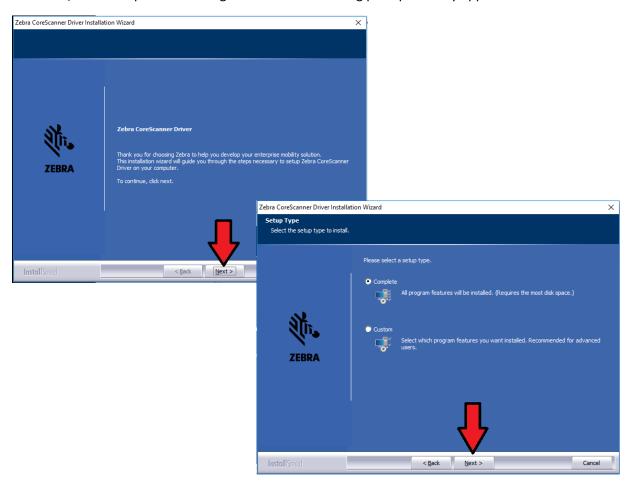


After the **SQL Server Express** installation is complete, the **Zebra CoreScanner** installation starts. If the **Zebra CoreScanner** is already installed, the following prompts do not appear.

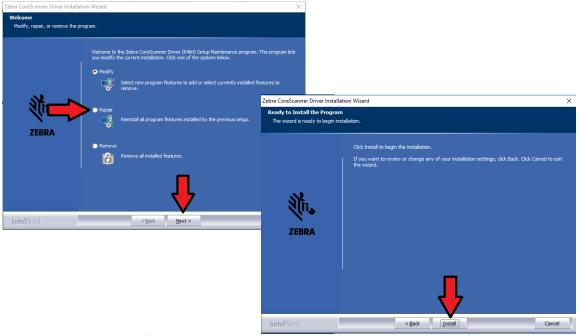
If not already installed, a prompt to install pre-required software for the **Zebra CoreScanner** software to work appears. Click **Install**



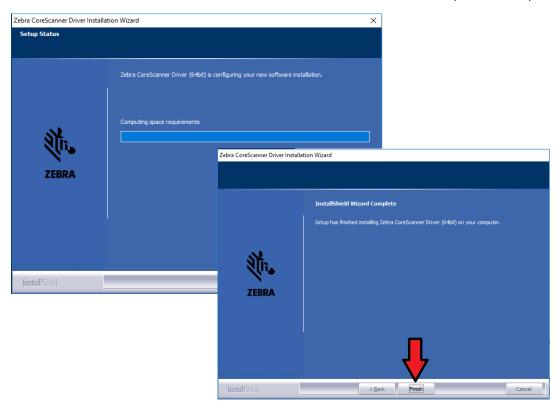
Click **Next / Install** to proceed through each of the following prompts if they appear.



If you receive a Modify, repair, or remove the program prompt, choose Repair.



Wait while the Zebra software is installed and click Finish when the install process completes

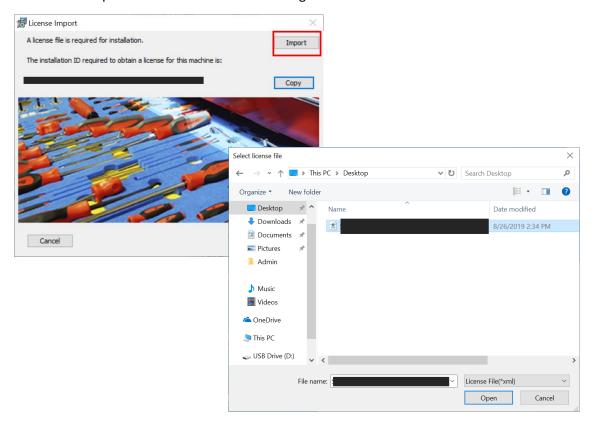


After the CoreScanner software is installed, the service installer will run.

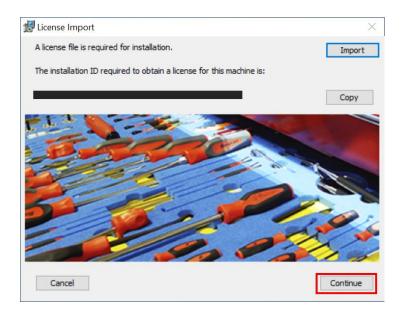
Read the License Agreement and click the "I accept the terms in the License Agreement" checkbox to accept. Click the Install button to proceed.



Click on the Import button and use the file dialog to select the activated license file



Click Continue after selecting the license file.



NOTE: IF you get an error or the Continue button doesn't activate, please check your license file, and make sure the install-ID on the screen matches what is in the license file.

When the Service Installation portion of the installation process completes, you then click **Finish** to continue the process.



When the entire installation process has completed click on the Close button on the success window

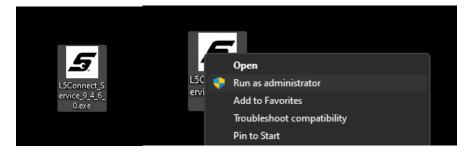


Single Component Installation

If you do not want to install the software onto a single PC, you can install the different programs independently. These installers intended use is for when you need to deploy the components on different machines. You can also use these installers as add-ons to an existing deployment.

Installing the L5 Connect™ Service

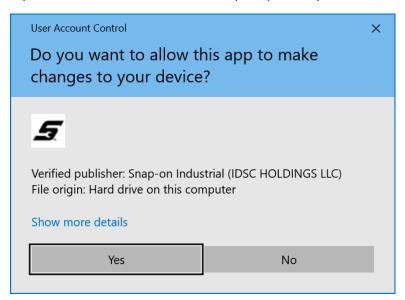
Launch the L5Connect_Service_9xxxx installer.



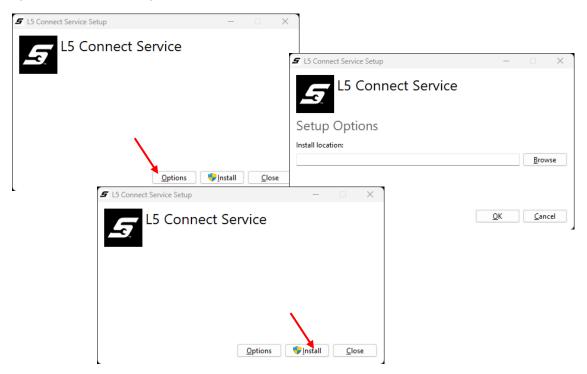
If SmartScreen blocks the installer click on More Info and then Run Anyway



If you receive a User Account Control prompt, click yes, or enter administrative credentials.



This installer allows you to install the L5 Connect™ service on a Windows PC. If you want to install the service software in a different location that the default location (C:\Program File x86\Tool Control System\) click on the Options button.

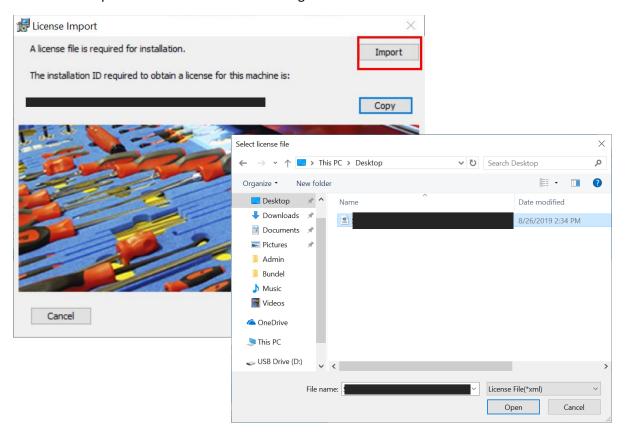


You can browse to the location you want the software installed. Click OK when done, you will be at the main screen again, click **INSTALL** to continue.

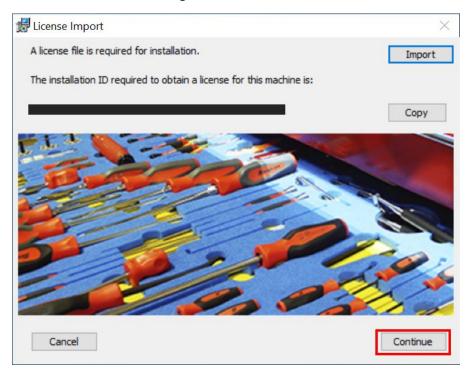
Read the License Agreement and click the "I accept the terms in the License Agreement" checkbox to accept. Click the Install button to proceed.



Click on the Import button and use the file dialog to select the downloaded license file



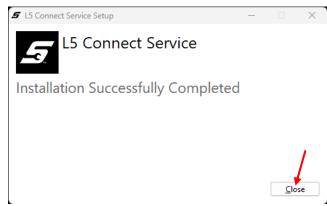
Click **Continue** after selecting the license file.



NOTE: IF you get an error or the Continue button doesn't activate, please check your license file, and make sure the install-ID on the screen matches what is in the license file.

When the Service Installation portion of the installation process completes, click **Finish**. Then close the Service Installer.





Installing the L5 Connect™ Administration Client

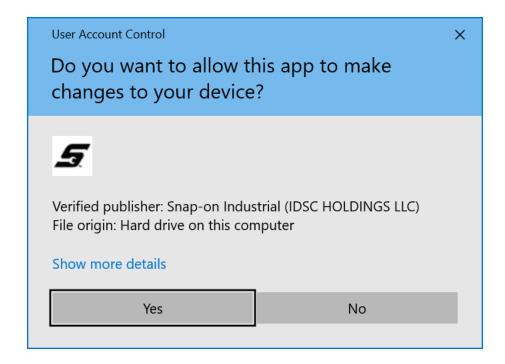
This installer allows you to install the L5 Connect™ Administration Client which is used to manage the L5 Connect™ Server.

Launch the **L5Connect_Admin_9xxxx** installer.

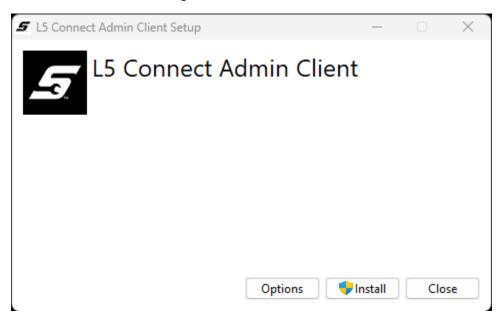
If SmartScreen blocks the installer click on More Info and then Run Anyway



If you receive a User Account Control prompt, click yes, or enter administrative credentials.

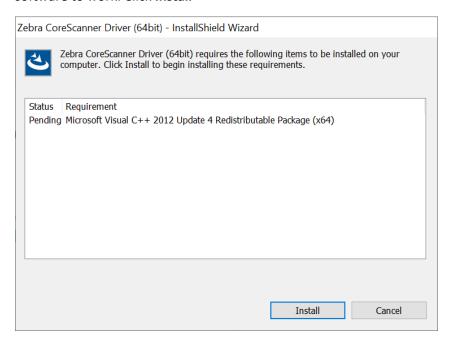


Click the **Install** button to begin

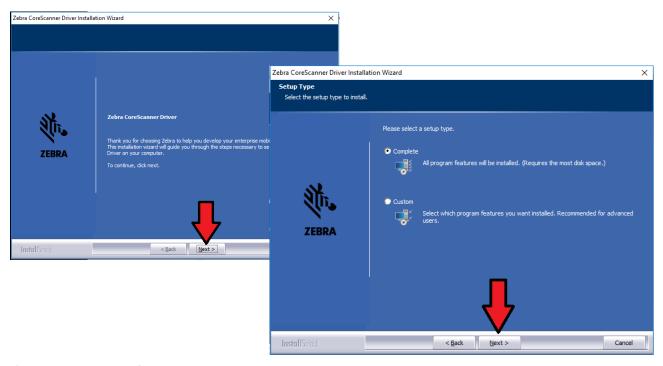


After you click install, the **Zebra CoreScanner** installation begins. If **Zebra CoreScanner** has previously been installed the following prompts may not appear.

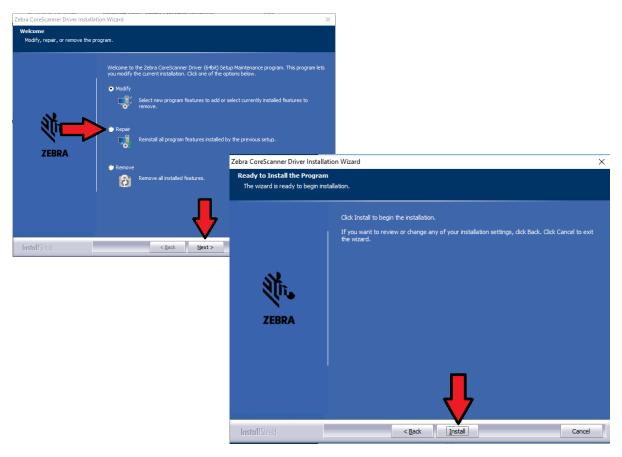
If not already installed, you are prompted to install pre-required software for the **Zebra CoreScanner** software to work. Click **Install**

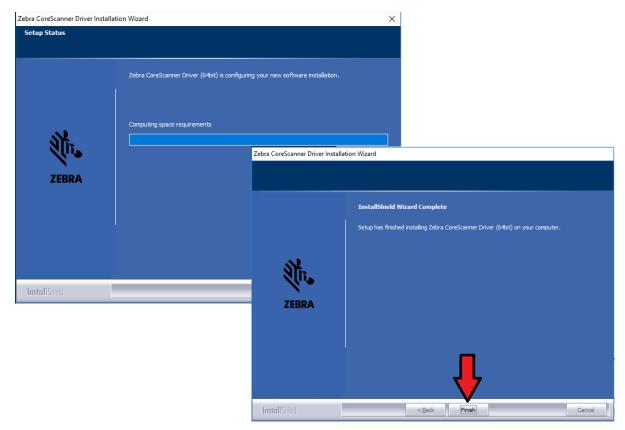


Click **Next / Install** to proceed through each of the following prompts if they appear.



If you receive a Modify, repair, or remove the program prompt, choose Repair.



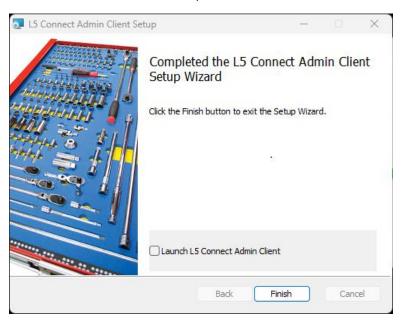


Wait while the Zebra software is installed and click Finish when the install process completes

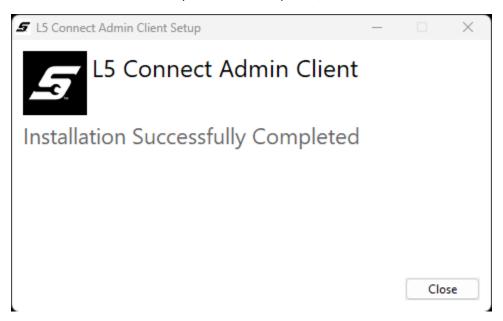
Read the License Agreement and click the "I accept the terms in the License Agreement" checkbox to accept. Click the Install button to proceed.



Wait for the installation to complete then click Finish.



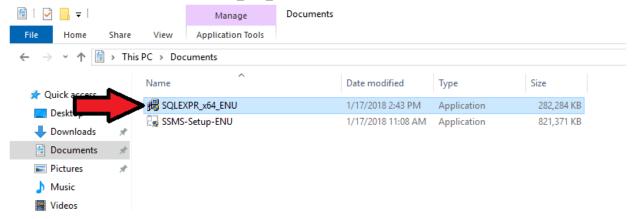
When the entire installation process has completed, click the Close button on the success window



Installing SQL Server Express

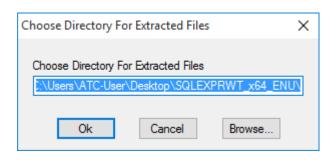
If you choose not to use the bundle installer and do not already have a SQL Server available, you will need to install SQL Express. You can either install SQL on the same Windows computer as the L5 Connect™ service or on a remote PC or Server. L5 Connect™ requires **SQL 2017** or newer. You can download SQL Express from Microsoft.

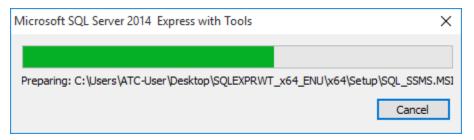
To install SQL, Double-click on the **SQLEXPR_x64_ENU** file.



Click Yes when asked to allow the app to make changes

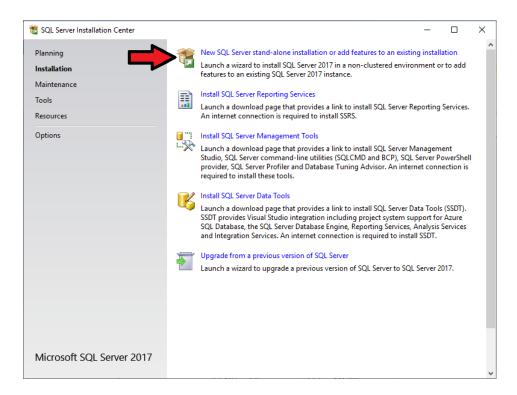
You are asked to choose which directory you want to extract the installation files to. The default directory is acceptable.



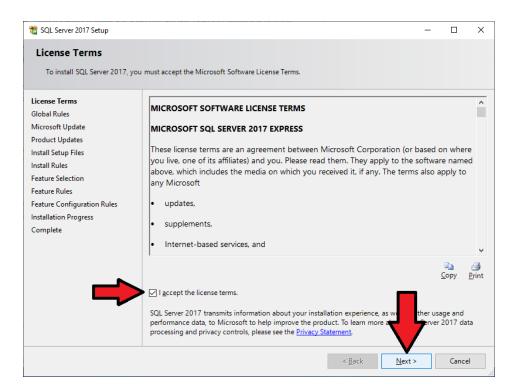


If the installation process doesn't automatically start, you need to double click on the setup.exe file located in the directory specified in the previous step.

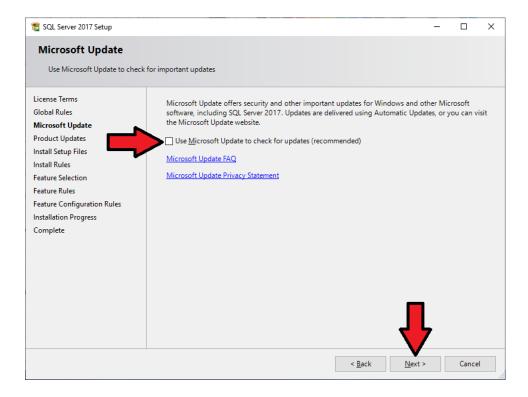
Click on the New SQL Server stand-alone installation line item



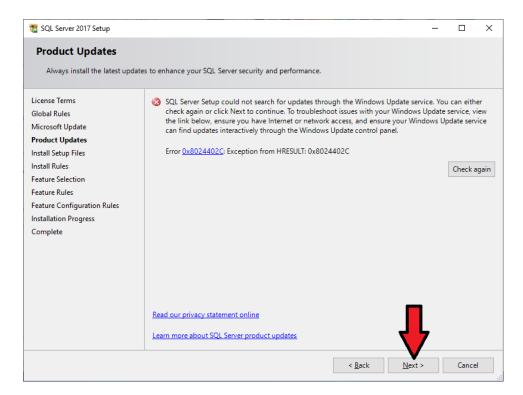
Check the box I accept license terms and click on NEXT to continue



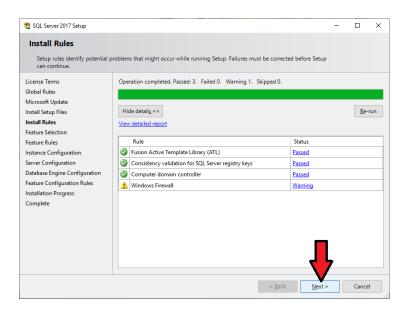
Leave the Microsoft Update functionality **unchecked** and click **NEXT** to continue.



Click **Next** on the Product Update error screen



Install Rules - Click NEXT on the Install Rules screen

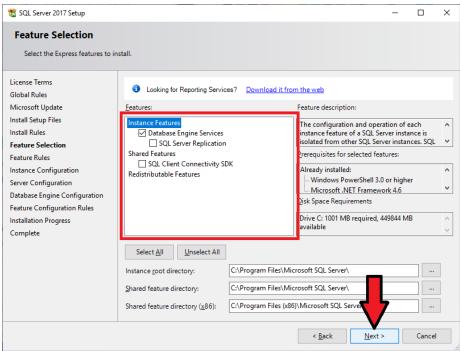


Feature Selection

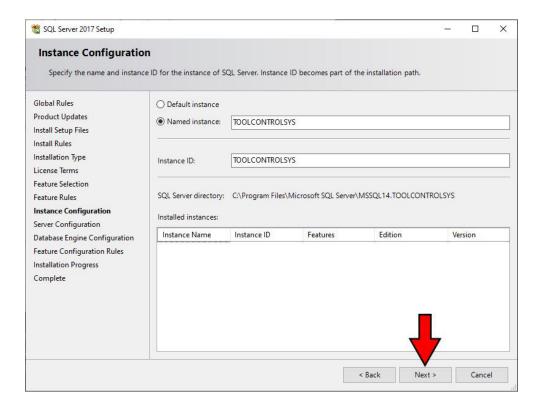
- 1. Check
 - Database Engine Services
- 2. Un-Check all other options which could include
 - SQL Server Replication
 - SQL Client Connectivity SDK

If you want to change the default installation directory of SQL Express, you can. Click the ... button and browse to the folder you want to install SQL.

Click **NEXT** to continue



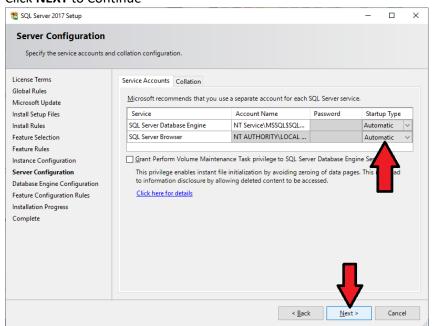
Set the name to TOOLCONTROLSYS then Click NEXT to continue (no changes needed)



Server Configuration

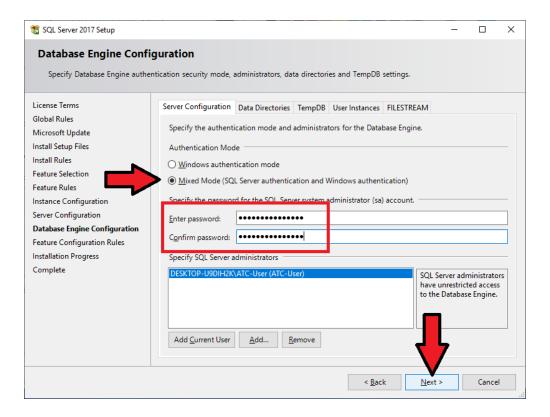
- 1. SQL Server Database Engine "Automatic"
- 2. SQL Server Browser "Automatic"

Click **NEXT** to Continue

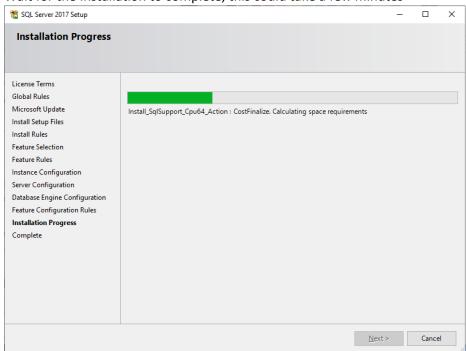


Database Engine Configuration

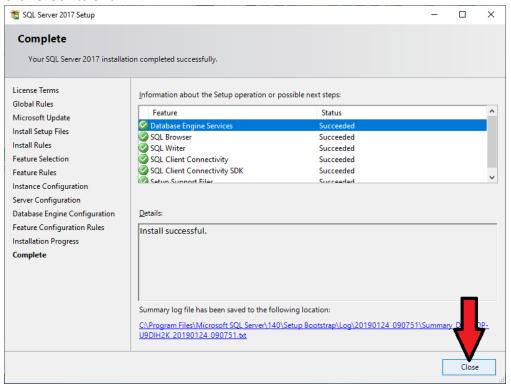
- 1. Select Mixed Mode
- 2. Enter a password of Fourth@ndInch3\$ (Must confirm Password)
- 3. Click **NEXT** to continue



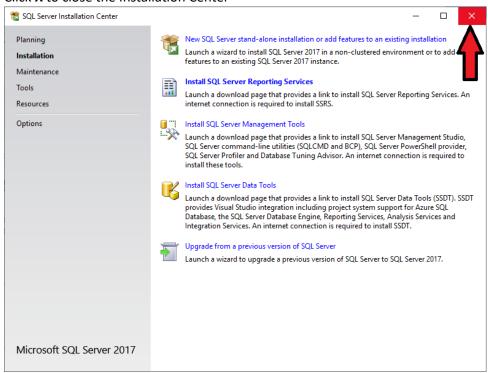
Wait for the Installation to complete, this could take a few minutes



Click **CLOSE** to exit



Click X to close the Installation Center



Installing True-Crib™

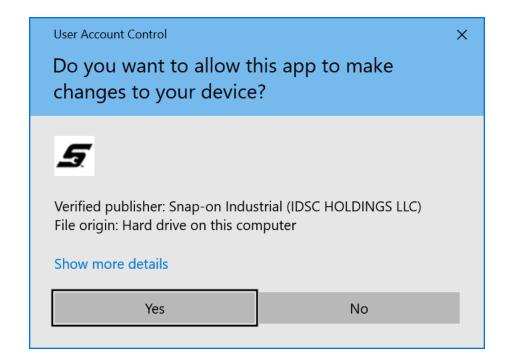
This installer allows you to install the True-Crib™ software which is used to issue/ return and manage a tool room inventory.

Launch the L5Connect_TrueCrib_9xxxx installer.

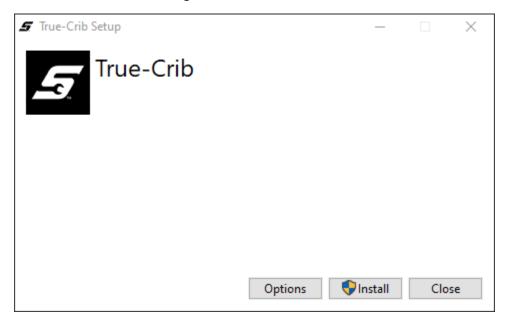
If SmartScreen blocks the installer click on More Info and then Run Anyway



If you receive a User Account Control prompt, click yes, or enter administrative credentials.

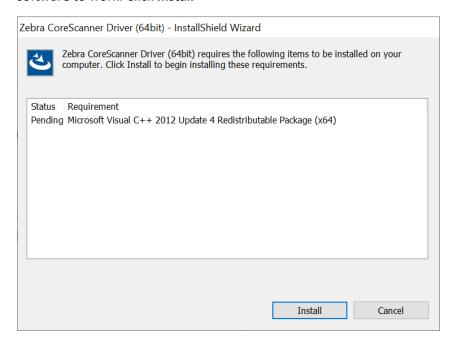


Click the **Install** button to begin

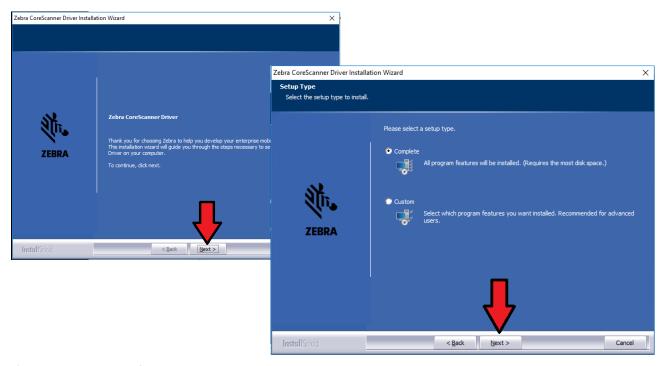


After you click install, the **Zebra CoreScanner** installation begins. If **Zebra CoreScanner** has previously been installed the following prompts may not appear.

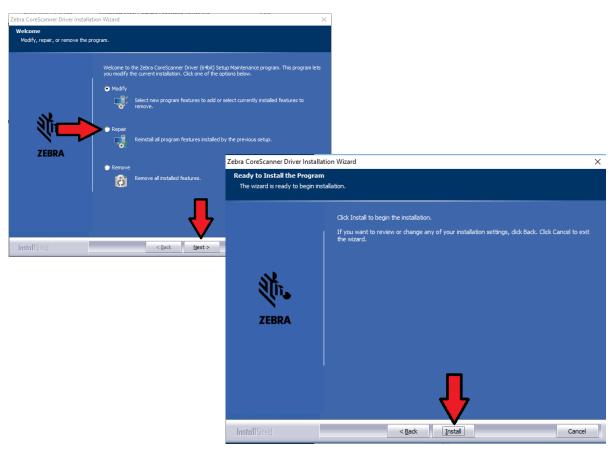
If not already installed, you are prompted to install pre-required software for the **Zebra CoreScanner** software to work. Click **Install**

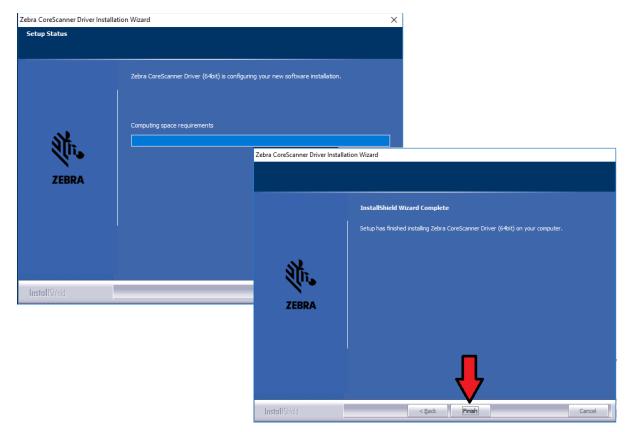


Click **Next / Install** to proceed through each of the following prompts if they appear.



If you receive a Modify, repair, or remove the program prompt, choose Repair.



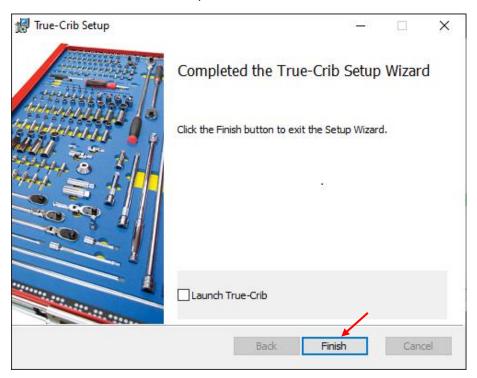


Wait while the Zebra software is installed and click Finish when the install process completes

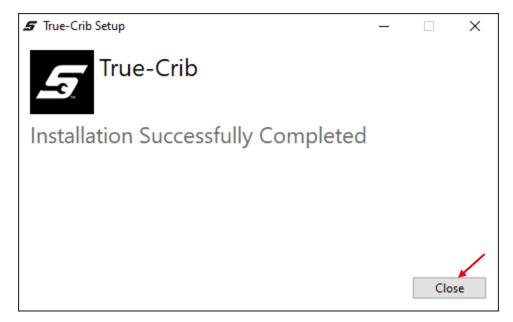
Read the License Agreement and click the "I accept the terms in the License Agreement" checkbox to accept. Click the Install button to proceed.



Wait for the installation to complete then click Finish.



When the entire installation process has completed, click the Close button on the success window

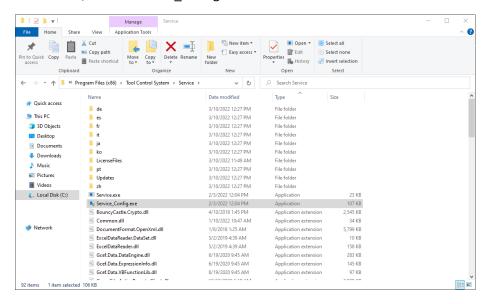


Creating the L5 Connect™ Database

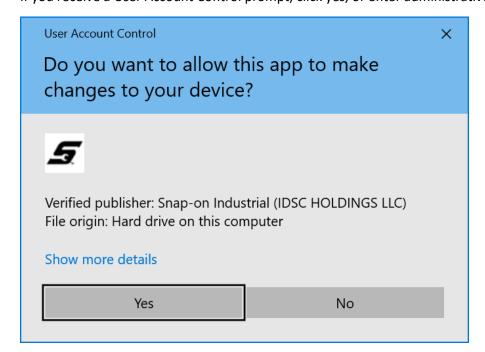
After you have installed the L5 Connect™ service, you need to create the default database that the system will use. If you do not the system will fail to start.

To begin, go to the installation directory of the service (*default:* C:\Program Files (x86)\Tool Control System\Service)

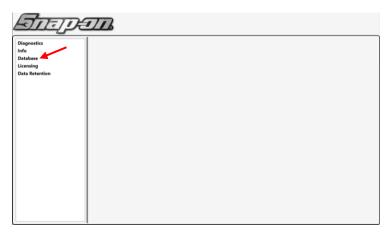
From there, launch Service Config.exe



If you receive a User Account Control prompt, click yes, or enter administrative credentials.



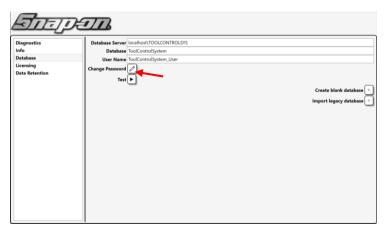
You will then be presented with the L5 Connect™ service config utility. Click on Database.

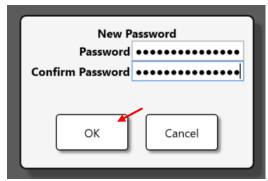


The database info screen will display. Verify the information on the screen is correct and you are targeting the correct Database Server.

Click the

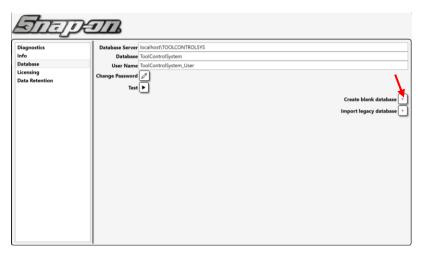
button next to Change Password to set the password the SQL user account will use to access the L5 Connect™ database (default: F0urth@ndInch3\$). Click OK. Then click the Blue SAVE button at the top right of the screen.

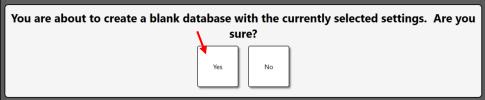






Next you will click on the + button next to Create blank database. Click Yes to continue.





Click on SQL Server Login

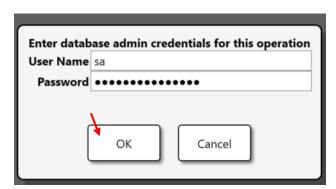


Input the SQL sa account information you set up during the installation of SQL Server

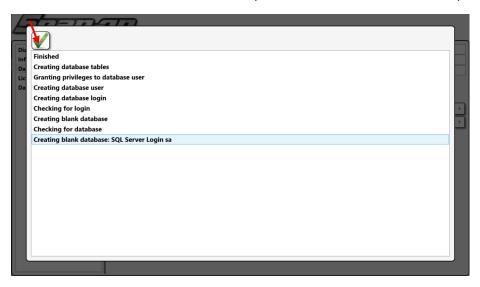
Default: User Name – sa

Password - F0urth@ndInch3\$

Then click OK



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.

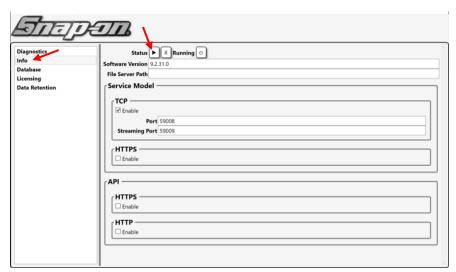


You can test the database connections by clicking on the ▶ button by Test.

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



After you have created the database, you need to start the service. Click on Info then click the ▶ button by Status. When it shows Running the system is ready to go.

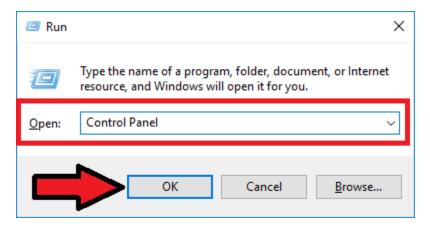


For more information about the Service Configuration Utility, please see the L5 Connect™ Service Configuration section of this guide.

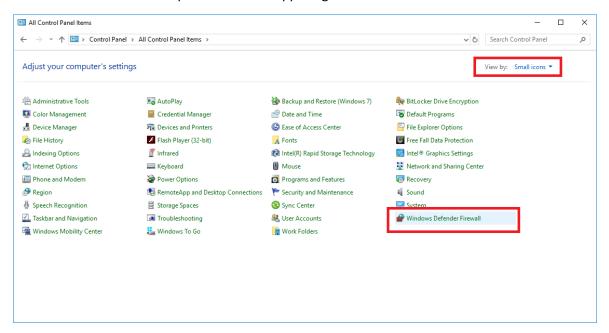
Configuring the Windows Firewall

Before any devices or Admin clients can connect to your L5 Connect[™] service PC, you must configure the firewall to allow incoming connections. The steps below are for the built-in Windows Defender firewall. If you have a 3rd party firewall installed, you will need to consult the user guide of that software to enable these rules.

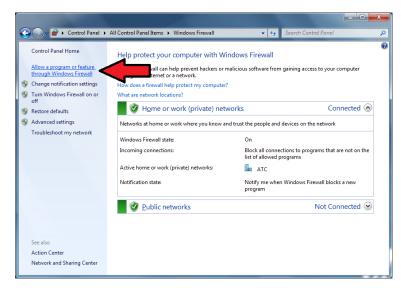
To begin, Press the Windows and R keys to open the Run window and type Control Panel and click OK



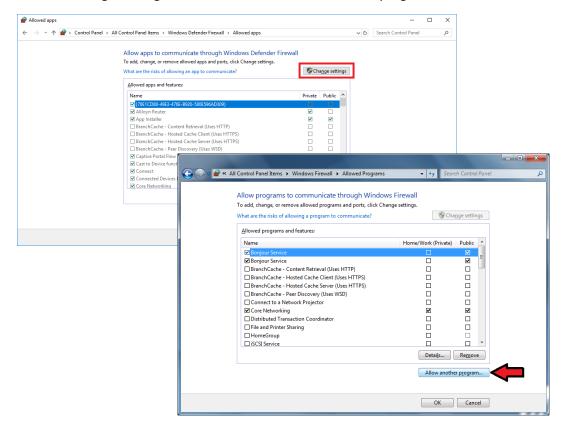
Select Small Icons from the pulldown in the upper right corner and click on Windows Defender Firewall



Select Allow a program or feature through Windows Defender Firewall



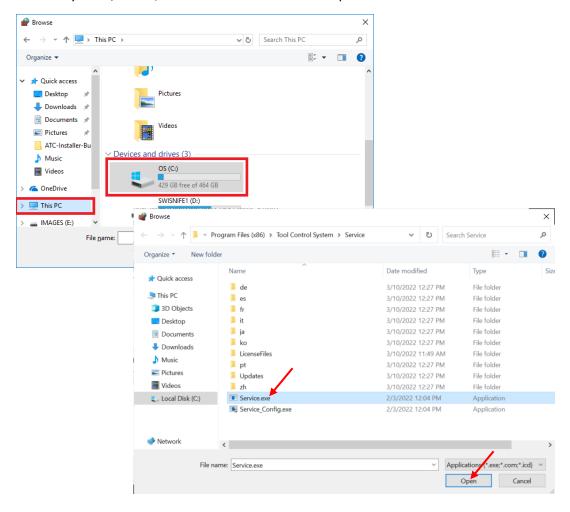
Click the Change Settings button and click the Allow another program button



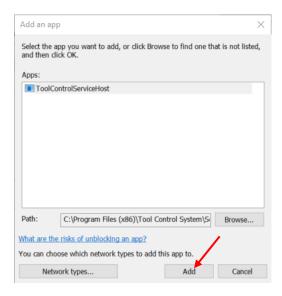
Click the Browse button



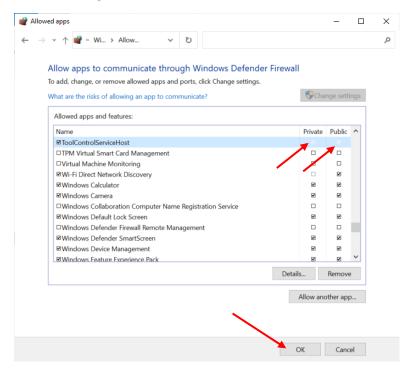
On the left, select This PC and double-click on the C: drive then navigate to C:\Program Files (x86)\Tool Control System\Service, select Service.exe and click Open.



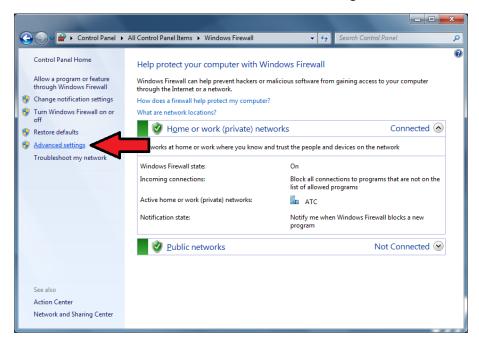
Make sure ToolControlServiceHost is selected and click the Add button



Make sure both the Private and Public options are checked for ToolControlServiceHost then Click OK to save the changes



Back on the Firewall main screen, Select Advanced settings



Click Inbound Rules and select all File and Printer Sharing rules. Right-click on the selection and left-click Enable Rule. Then close all open windows.



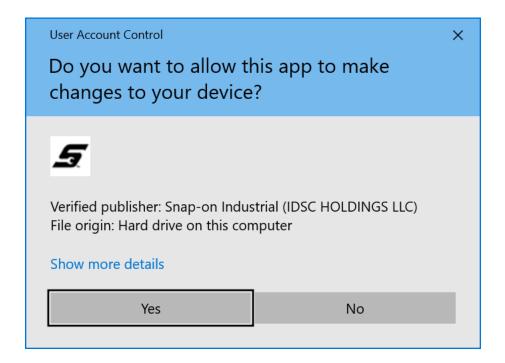
Updating L5 Connect™

Snap-on will release periodic updates for L5 Connect™ with bug fixes and new features. To apply these updates, double-click on the **L5Connect_Updater_9xxxx** installer file on the Windows PC running the L5 Connect™ service.

If SmartScreen blocks the installer click on More Info and then Run Anyway



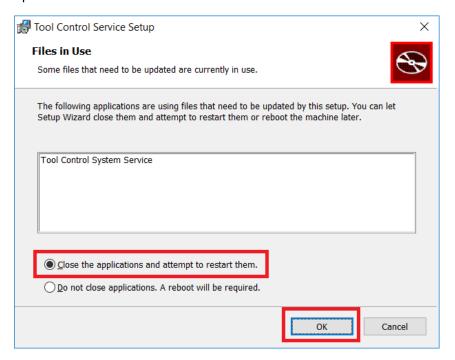
If you receive a User Account Control prompt, click yes, or enter administrative credentials.



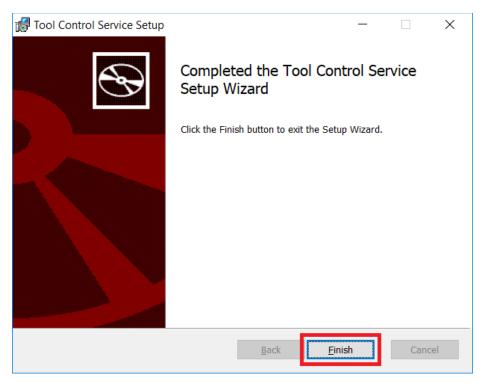
Read the License Agreement and click the "I accept the terms in the License Agreement" checkbox to accept. Click the Install button to proceed.



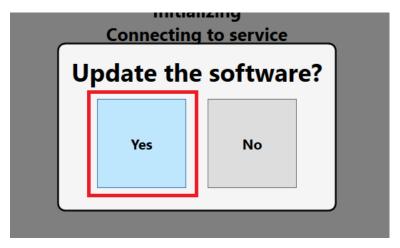
If you receive a **File in Use** prompt, select **Close the applications and then attempt to restart them** option. Click **OK** to continue.



Wait while the installer upgrades the software then click **Finish** to complete the update process.

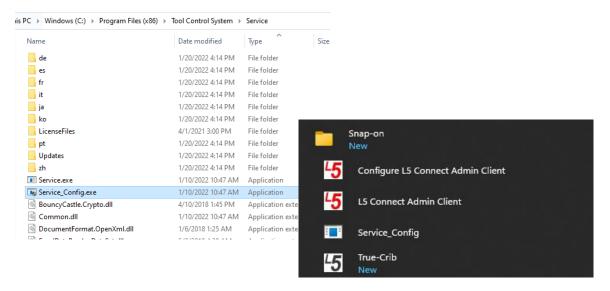


After the update is complete all devices and Clients connected to the service will prompt you to update to the new version. Click Yes to update.



L5 Connect™ Service Configuration

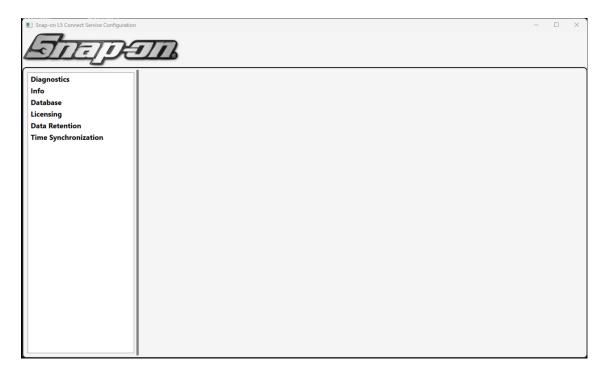
Suppose you want to customize your L5 Connect™ Service settings or need to apply a renewal license to the system. In that case, you will need to access the service configuration tool. The default location of this tool is C:\Program Files (x86)\Tool Control System\Service\Service_Config.exe. You can also find it within the windows start menu under Snap-on.



Upon launching the **Service_Config** application, the system presents you with the following screen. This is the EULA that you will need to accept before you can use the system.



Once accepted you will gain access to the config utility.



The image above is the main service configuration screen. The list on the left shows the different categories of settings you can select.

Diagnostics – This page allows an administrator to test if the system is working correctly. **Info** – This page displays information about the service.

Database – This page allows for the configuration of the database used by the L5 Connect™ Service. **Licensing** – This page displays the current license applied to the service. You can also update the license here as well.

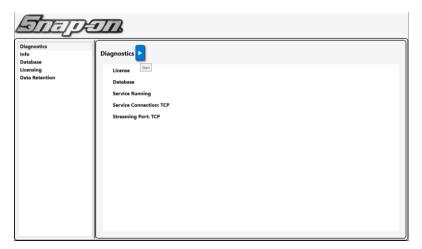
Data Retention – This page allows an admin to clear out old L5 Connect data to reduce used disk space. **Time Synchronization** – This will enable the Service to run as a NTP Time Server for all L5 Connect Devices.

NOTE: All changes made in the Service_Config utility will require a restart of the service to take effect.

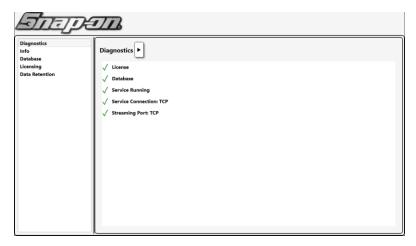
NOTE: For a step by step guide on how to configure your L5 Connect™ Service for the first time, please review the L5 Connect™ Installation guide.

Diagnostics

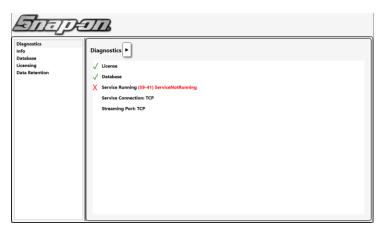
The Diagnostics screen will allow you to run tests to see if the service is running correctly. To run these tests, simply click on the ▶ button.



You will see the results after a couple of seconds as each test completes. If you get a ✓ the test passed.

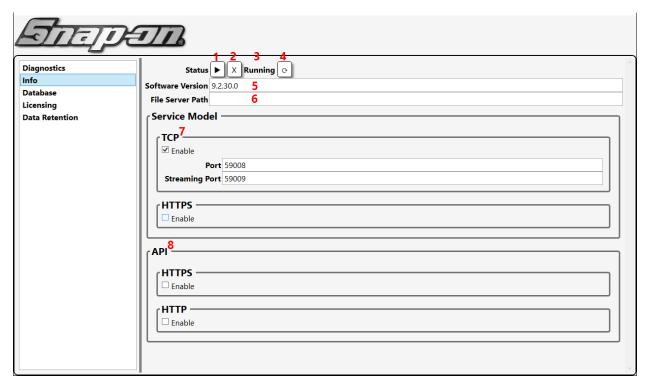


If a test gets a X, it has failed. Please get in touch with technical support for assistance.



Info

The Info Screen allows you to determine what ports and protocols the service will use, see the status of the service, and set the directory of the data repository (if using a file server). Finally, you can start/stop the service using the controls at the top of the screen.

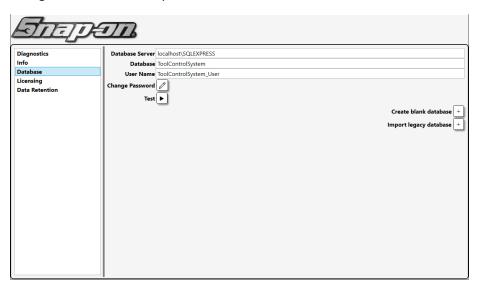


- 1. Start Service Button
- 2. Stop Service Button
- 3. Service Status
- 4. Refresh Service Status
- 5. Installed Software Version
- 6. LFS or UNC path of the folder that will store L5 Connect Data
- 7. Communication Settings
- 8. API Communication Settings

NOTE: For more information about HTTPS and API usage. Please contact L5 Connect™ support.

Database

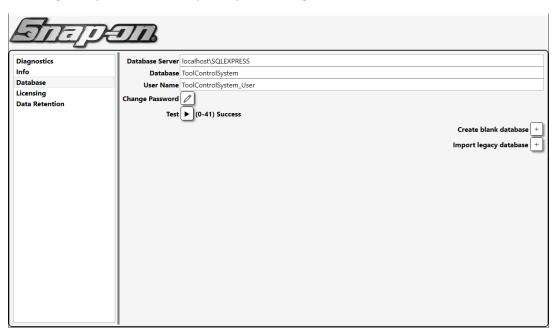
You can define the SQL Instance of the L5 Connect™ Database on the Database screen. You can also change the user account/password to access the database.



NOTE: If you change the password on this screen, you must also change the password in the Database as well.

Click on ▶ to test the connection and password to the L5 Connect[™] Database. A (0-41) Success means everything is OK.

To change the password used by the system to log into SQL, click on the \nearrow .

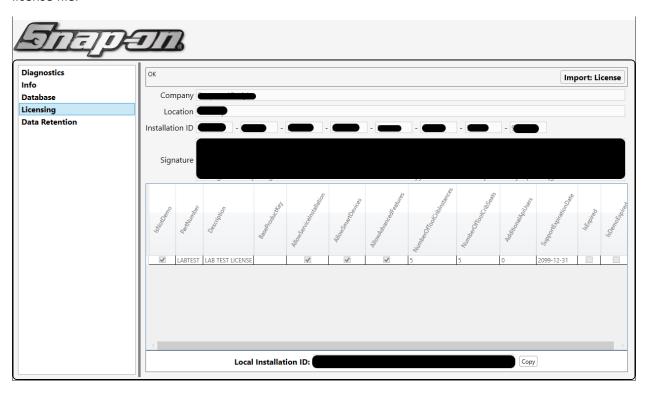


Create blank database - is used during setup to create the default L5 Connect database.

Import legacy database - allows users to import customizations from older versions of Snap-on ATC.

Licensing

This page displays information regarding the current license registered to the service. All licenses are tied to an Installation ID which is unique to each computer. This Installation ID list located at the bottom of this screen. When you need to renew your license, you will use this page to import your renewal license file.

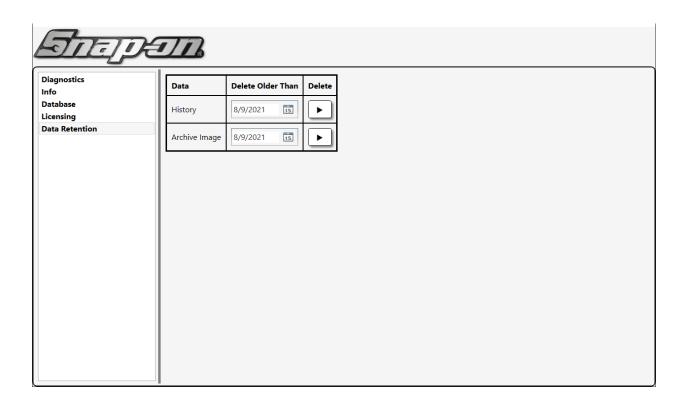


NOTE: Information about how to acquire and apply a L5 Connect™ License can be found in the Licensing section of this guide.

For a complete list of L5 Connect™ Licenses, please see Appendix A of this guide.

Data Retention

This page allows an administrator to clear out old archive data to save disk space. By default, the date is set to delete anything older than six-months. You can set the date to whatever you like. Anything before the date will be deleted when the button is pressed.



NOTE: It is a good idea to clear out both History and Archive Images using the same date. If you use different dates, you can have incomplete records in your archive.

APPENDIX A − L5 Connect[™] Licenses

Part Number	Description
L5CONNECT	L5 Admin software
L5CONNECTAPI	API license 1yr
L5TSCC011N	True Crib Admin w/1 Seat
L5TSS0011N	1 True Crib Seat License 1YR
L5TSC0011M	Annual Support 1 True Crib Seat

KEY:

Server & ATC
Server Add-on
Tool Crib



USA

Snap-on Industrial

Automated Tool Control Group 309 Exchange Avenue Conway, Arkansas 72032 Customer Service Number 1-800-272-2033 Fax: (501) 450-1585

Snap-on Tools International LLC

2801 80th Street Kenosha, WI 53143 For General Inquiries, 262-656-5200

Southeast Europe - Middle East

(SEEMEA) Division PO Box 65 033 Athens 15410, Greece Tel: +30 210 6724828

Fax: +30 210 6725754

E-mail: snap_mead@ath.forthnet.gr

United Kingdom

Industrial Sales Division - Snap-on Tools

Telford Way

38a, Telford Way, Kettering Northants NN16 8UN, England

Tel: +44 (0) 1536 413904 Fax: +44 (0) 1536 413874

E-mail: industrialuk@snapon.com

Snap-on Tools (Australia) Pty LTD

National Distribution Centre Unit 6/110 Station Road P.O. Box 663

Seven Hills, NSW 1730 Australia

Tel: (61) 2-9837-9100 Fax: (61) 2-9624-2445

E-mail: sots.webmasters@snapon.com

Snap-on Industrial Belgium & Luxembourg Division

SNA Germany GmbH Auf dem Huls 5 40822 Mettmann Germany

Tel: +32 - (0) 14-231967 Fax: +32 - (0) 14-232627

E-mail: industrial.be@snapon.com

Snap-on Industrial Germany Division

SNA Germany GmbH Auf dem Huls 5 40822 Mettmann Germany

Tel: +49-(0) 2104-950-911 Fax: +49-(0) 2104-950-999

E-mail: indus.germany@snapon.com

Snap-on Industrial Netherlands

SNA Germany GmbH Auf dem Huls 5 40822 Mettmann Germany Tel: +31-(0)20-5682664

Fax: +31-(0)20-5682660

E-mail: industrial.nl@snapon.com

Snap-on Tools Italia S.r.l

Via Bizet, 43/45

20092 Cinisello Balsamo (MI), Italy

Tel: +39 02 66 04 53 70 Fax: +39 02 61 29 78 15

E-mail: indus.italia@snapon.com

