Installation Guide

CONVERGENCE™ Local Agent AV Manager

Software Version: 3.0

DOC-0429-001v3.0 April 2022

Notices

Document: DOC-0429-001v3.0 April 2022

Contents

1. Introduction

CONVERGENCE™ Local AV Manager connects on-site Pro Audio devices to Cloud AV Manager or Enterprise AV Manager for discovery, monitoring, control, and auditing.

Related documents that help you set up and use this application, based on your user role, are found in the Web application's Help view.

1.1 Product Features

Local Agent Special Features

- Easy-to-install Local Agent server provides bi-directional communication with Pro Audio devices and Cloud or Enterprise.
- Available as a hardware appliance or free server software.
- Get up and running quickly with auto discovery of Pro Audio devices.
- Supports multiple subnets or VLANs.
- The server's portal shows the name of your organization, site, or local agent server account on Cloud or Enterprise, as "Branding".
- May also act as an independent AV Manager on an organization's local network behind a firewall or remotely over VPN.

Unified Software Platform

- Available as a Cloud AV Manager service, or Enterprise AV Manager software, either supported by Local Agent AV Manager servers.
- Scales to support organizations of any size – large or small.
- Organize AV devices and user permissions by any location hierarchy, such as city, building, and room.
- Assign access rights by organization, location, user, and customized roles.
- Communicate using integrated video, audio, and chat tools.
- Convenient single-sign-on access through LDAP connectivity.
- End-to-end security with HTTPS, encrypted cloud servers, and 256-bit encrypted password management for both users and devices.
- Access from any device, desktop to mobile, with a powerful and elegant browser interface.
- Integrates with third-party management systems via a RESTful web interface.

Monitor

- Remote real-time access provides at-a-glance and all-inclusive powerful dashboard views.
- Stay informed with email and SMS text alerts.

Control

- Remotely configure, backup, restore, and update CONVERGE® DSP Mixers and P-Link peripherals systemwide – and simultaneously.
- Provision CONVERGE Pro 2 VoIP lines and view VoIP registration status.

Audit

- Get up and running quickly with auto discovery of Pro Audio devices.
- Download device logs and data for troubleshooting, auditing, and reports.

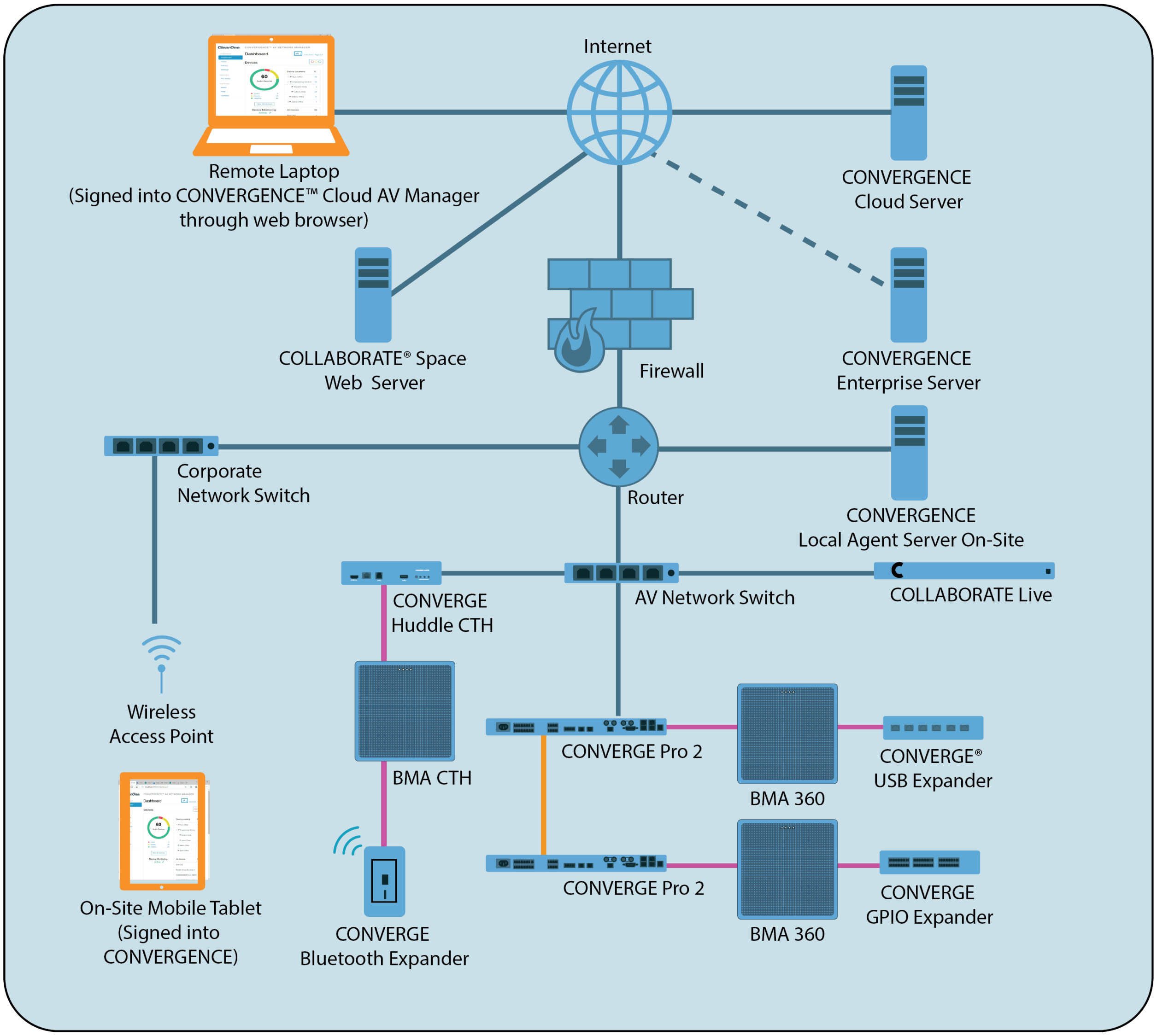
[Back to Table of Contents](#)

1.2 Supported ClearOne Products

- CONVERGE® Pro 2 DSP Mixers and associated peripheral devices (minimum firmware: 5.0.x)
- CONVERGE Huddle DSP Mixer and associated peripheral devices (minimum firmware: 1.0.x)
- COLLABORATE® Live video codecs (minimum firmware: 249.0.0.77)
- COLLABORATE Space (collaboratespace.net and up-to-date, on-premise versions)

1.3 Example Deployment

Install an instance of CONVERGENCE™ Local Agent AV Manager on a Windows server behind an Internet firewall on your organization's IP network. This can be a Local Area Network (LAN) or a Campus Area Network (CAN) with a connection to the Internet.



The CONVERGENCE Local Agent server does not need to be on the same subnet as your supported ClearOne audio and video devices. But if it is, it will immediately discover the audio devices. You can monitor and control these devices on multiple subnets. There just needs to be a communication path from the server to the devices or their subnet(s) over Ethernet. Supported ClearOne video devices may also be accessed over the Internet.

After you set up a Local Agent Server Account for your organization on CONVERGENCE Cloud AV Manager or CONVERGENCE Enterprise AV Manager, you can connect your CONVERGENCE Local Agent server to it.

Then users of your organization can remotely and securely monitor and control the ClearOne CONVERGE® audio devices behind your firewall through Cloud AV Manager or Enterprise AV Manager without the need of VPN. If desired, computers or mobile devices behind the firewall can directly access the CONVERGENCE Local Agent server over Ethernet or WiFi. In either case, users sign in through the web browser on their laptops or other computing devices.

You can connect multiple Local Agent servers of your organization to Cloud AV Manager or Enterprise AV Manager, aggregating all of them together into a single dashboard, device list, and alert. This capability can also enable an integrator to better service your equipment.

Through your user account settings, you can also sign into your COLLABORATE Space account in the cloud. Then you can monitor or administer your organization's COLLABORATE Space account users and COLLABORATE Live video codecs, together with your accessible supported CONVERGE audio devices.

2. System Requirements

- Disk space: 2.2 GB free
- Processor: 1 GHz Intel Pentium processor (dual core or more recommended)
- RAM: 1GB RAM free (to serve over 2,000 devices)
- Operating System: Windows 7 and above, or Windows Server 2012 R2 and above (Windows 10 Pro or Windows Server 2019 recommended)
- A CONVERGENCE Local Agent server must reach the Internet to connect to:
  - ClearOne's update server
  - CONVERGENCE Cloud or Enterprise AV Manager
  - COLLABORATE Space Administrator (collaboratespace.net)
- Supported browsers:
  - Firefox
  - Chrome
  - Edge
  - Safari
  - Internet Explorer works for the most part, but may have a few minor issues.
- The Web server, database, and application are 100% pure Java (8 and above). However, part of the installation can only run on Windows currently. Therefore, an installation is only available for the following operating systems:
  - Microsoft Windows 7, 8, and 10
  - Microsoft Windows Server 2012 R2 and above

3. Known Issues

- Automatic updates of the Local Agent from version 2.0.3 do not work due to major underlying updates in version 2.0.4. But they should work normally after installing version 2.0.4 and above.
- Older versions of CONVERGENCE AV Network Manager and Local Agent AV Manager (1.x, 2.0.0, 2.0.1) must first be upgraded to version 2.0.2.5 of CONVERGENCE AV Local Agent before upgrading to version 2.0.3.x, or your database will be corrupted.
- User interface translations of CONVERGENCE have been temporarily disabled.
- To update CONVERGENCE Local Agent AV Manager, you must first uninstall the previous version and restart the server machine.
- The Help documentation is in English only.
- CONVERGENCE Local Agent only changes live values of DSP audio mixers and cannot save them to CONSOLE AI project files, or read them.

- Unless all CP2s of the stack are already in the database, CONVERGENCE Local Agent does **not** correctly identify an incomplete stack.
- CONVERGENCE Local Agent does not recognize when a CONVERGE Pro 2 supporting VoIP is registered to Skype for Business.
- Actions on Pro Audio devices may not always work properly if there is more than one instance of CONVERGENCE Local Agent logged into them.
- CONSOLE project loading may not work properly with CONVERGENCE Local Agent present if Pro Audio device firmware is not up to date.
- COLLABORATE Live device firmware needs to be up-to-date to download its logs, see accurate device time, or see its serial number.
- If CONVERGENCE reports COLLABORATE Live devices are down, but they are up and running, you may need to reaccept the device's GDPR in Settings > Advanced > Space.
- The Windows service "Clearone Convergence Dashboard" may not restart on Windows Server without restarting the host machine.
- Video Collaboration devices may not update older firmware from Convergence. You may need to update it from the COLLABORATE Live device screen or its web page.

4. Network Ports

Required Network Ports

The following network ports are required for your machine to act like a Web server, or for CONVERGENCE Local Agent to have access to updates, or to communicate with and control devices.

Ports that should not be used by other applications (usually other Web applications, depending on protocol and port chosen during installation):

- HTTP: 80 or 8080, 9990 for database
- HTTPS: 443 or 8443, 9993 for database
- Configuration File Service: 8888

Open server firewall inbound ports (depends on protocol and port chosen during installation):

- HTTP (not secure): 80 or 8080
- HTTPS (secure, but requires a keystore certificate): 443 or 8443
- FTP: 21(to access ClearOne FTP update site; outbound port may also need to be opened)
- Device communication (and control): 9001-65000

Note: Needed firewall rules are now added and removed automatically as part of installation and uninstallation respectively. (See Appendix section 7.3 on how to manually inspect, add, or change network ports on Windows.).

Note the following regarding HTTP and HTTPS protocols:

- The CONVERGENCE Local Agent installer allows you to choose either HTTP or HTTPS for your webserver's protocol.
- If you are only "trying out" CONVERGENCE, HTTP is simplest. However, it may **not** satisfy enterprise security requirements.
- If you install CONVERGENCE on your organization's network and have a SSL (Secure Socket Layer) certificate from a trusted authority, or can use a self-signed one, you can use HTTPS.
- You typically must pay for a certificate from a trusted authority and renew it regularly.
- To create a keystore file for CONVERGENCE you first must have a p12 file that contains both the certificate and key. The following is a command to use to create the p12 file using the openssl command line tool:

```
openssl pkcs12 -export -inkey key.key  -in cert.crt -name “<certificate name>”
-out keystore.p12
```

- Once you have the p12 file, you can create the keystore file using Java’s keytool on the command line:

```
keytool -importkeystore -deststorepass <password> -destkeypass <password>
-destkeystore <my-organization>.keystore -srckeystore keystore.p12
-srcstoretype PKCS12
```

- Use the .keystore file when prompted during installation.

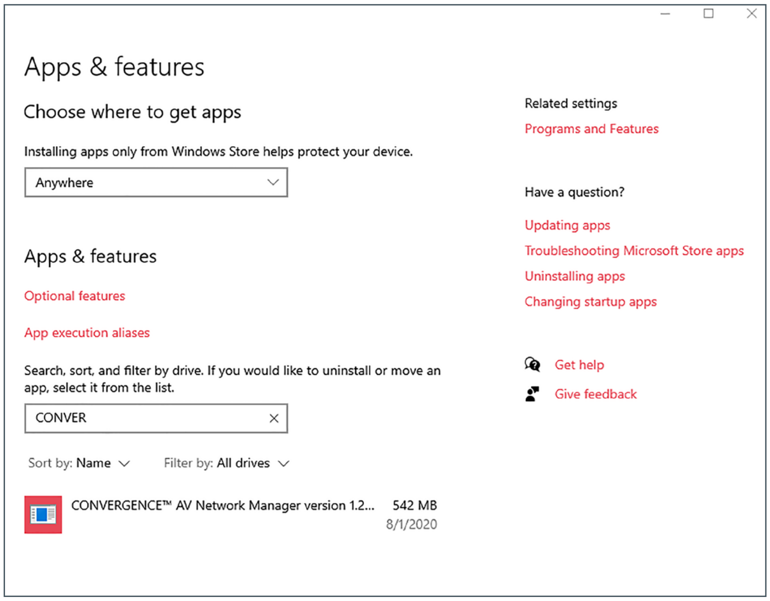
5. Un-install Before You Update

If you have a previously installed version of CONVERGENCE on your machine, you must complete the steps in this section. If not, proceed to ***section 6. Installation***.

5.1 From your Windows menu, **navigate to Settings > Apps > Apps & Features.**

5.2 **Scroll down** to “CONVERGENCE™ AV Local Agent…” or “CONVERGENCE™ AV Network Manager” or type part of it in the Search field.

Then **click** the **CONVERGENCE AV Local Agent** or the **CONVERGENCE AV Network Manager entry**.



Apps & features

Choose where to get apps

Installing apps only from Windows Store helps protect your device.

Anywhere

Apps & features

Optional features

App execution aliases

Search, sort, and filter by drive. If you would like to uninstall or move an app, select it from the list.

CONVERGENCE

Sort by: Name Filter by: All drives

CONVERGENCE™ AV Network Manager version 1.2... 542 MB 8/1/2020

Related settings

Programs and Features

Have a question?

Updating apps

Troubleshooting Microsoft Store apps

Uninstalling apps

Changing startup apps

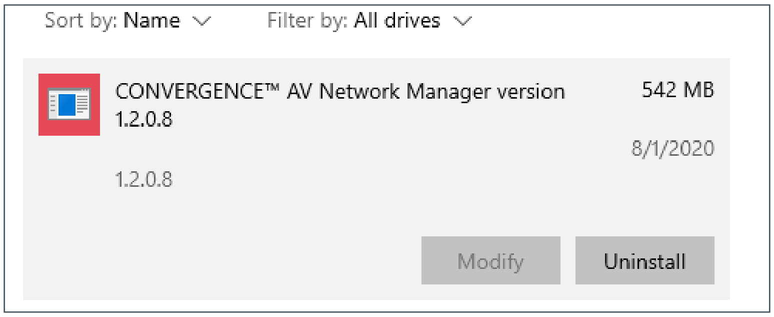
Get help

Give feedback

The icon expands to show Modify and Uninstall options.

5.3 **Click Uninstall**.

A popup dialog box appears.



Sort by: Name Filter by: All drives

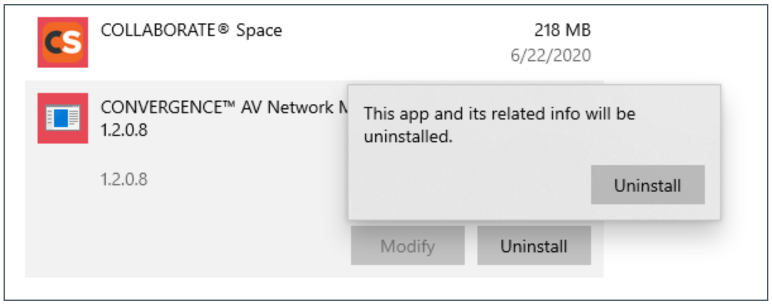
CONVERGENCE™ AV Network Manager version 1.2.0.8 542 MB

8/1/2020

1.2.0.8

5.4 On the popup dialog box, **click Uninstall.**

The system displays a window to make sure you want to completely remove CONVERGENCE.



COLLABORATE® Space 218 MB 6/22/2020

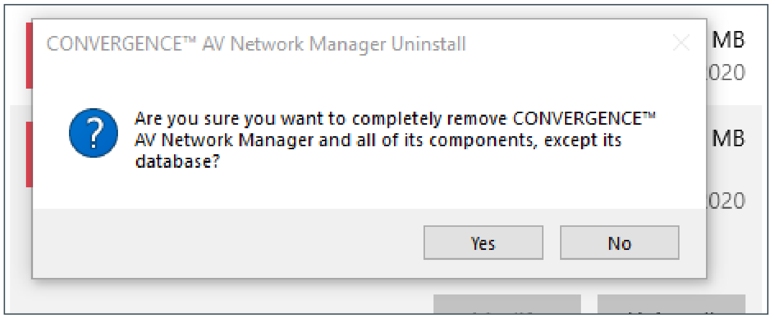
CONVERGENCE™ AV Network M 1.2.0.8

1.2.0.8

This app and its related info will be uninstalled.

5.5 **Click Yes**.

Windows presents a dialog window (not shown here) that asks for permission to alter your computer.

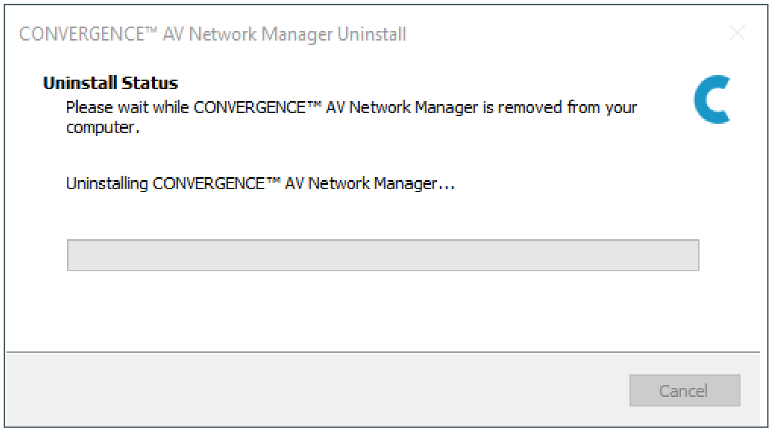


CONVERGENCE™ AV Network Manager Uninstall

Are you sure you want to completely remove CONVERGENCE™ AV Network Manager and all of its components, except its database?

5.6 **Click Yes** to allow Windows to remove CONVERGENCE AV Local Agent.

Windows begins the process to uninstall CONVERGENCE AV Local Agent.



CONVERGENCE™ AV Network Manager Uninstall

Uninstall Status

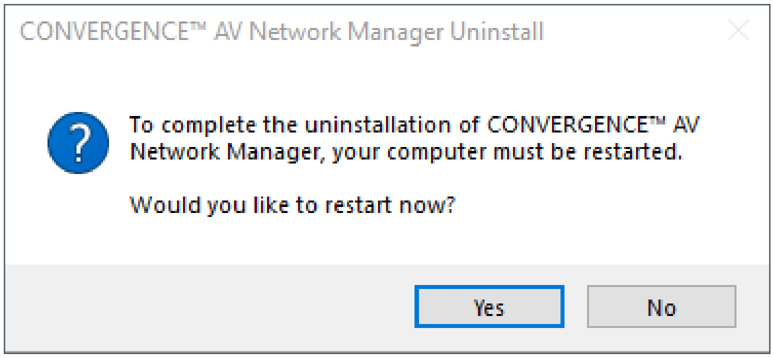
Please wait while CONVERGENCE™ AV Network Manager is removed from your computer.

Uninstalling CONVERGENCE™ AV Network Manager...

After the uninstall process is complete, a pop-up window appears that asks if you want to restart your computer.

5.7 **Click Yes**.

Your computer restarts.



CONVERGENCE™ AV Network Manager Uninstall

To complete the uninstallation of CONVERGENCE™ AV Network Manager, your computer must be restarted.

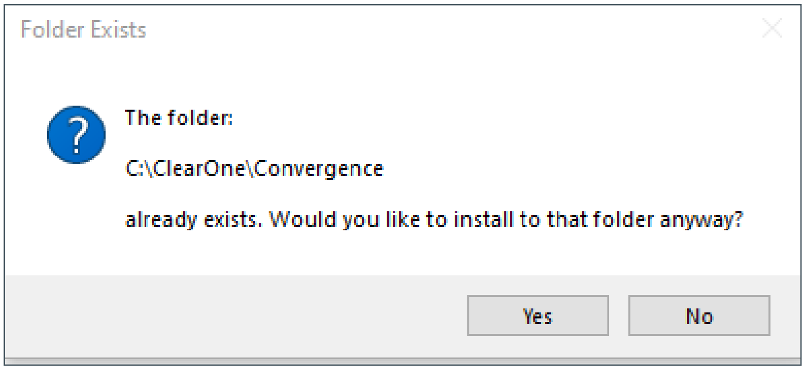
Would you like to restart now?

5.8 **Navigate to the folder** where you downloaded the most recent version of the CONVERGENCE AV Local Agent installer.

5.9 **Open** the **CONVERGENCE installer (.exe) file**.

Note the following:

- The uninstall process does not delete all folders and files that the install process loaded onto your computer.
- During reinstall, when you select a destination location (see step 6.6), if you select the same location for CONVERGENCE Local Agent, the installer displays the following dialog window:



Folder Exists

The folder:

C:\ClearOne\Convergence

already exists. Would you like to install to that folder anyway?

- You may click **Yes**.

6. Installation

Important: If CONVERGENCE Local Agent is already on your machine and you are re-installing, you must first ***uninstall it.***

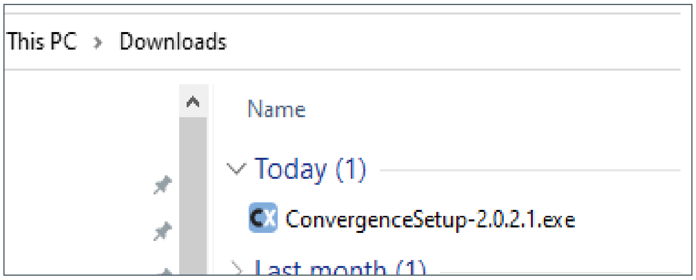
Important: Older versions of CONVERGENCE AV Network Manager and AV Local Agent (1.x, 2.0.0, 2.0.1) must first be upgraded to version 2.0.2.5 of AV Local Agent before upgrading to 2.0.3.x or your database will be corrupted. If you mistakenly migrated directly to 2.0.3.x:

1. Uninstall CONVERGENCE Local Agent 2.0.3.x;
2. Delete folder C:\ClearOne\Convergence\mysql-8.0.23-winx64;
3. Install version 2.0.2.5 and wait for the Convergence service startup to be successful;
4. Then uninstall 2.0.2.5;
5. Install version 2.0.3.x.

To download and install CONVERGENCE, complete the following steps:

6.1 **Navigate to the folder** where you downloaded the **CONVERGENCE Local Agent installer (.exe)**.

Open the installer.



6.2 If your system displays a window that asks if you want to allow this app to make changes to your device, **click Yes**.

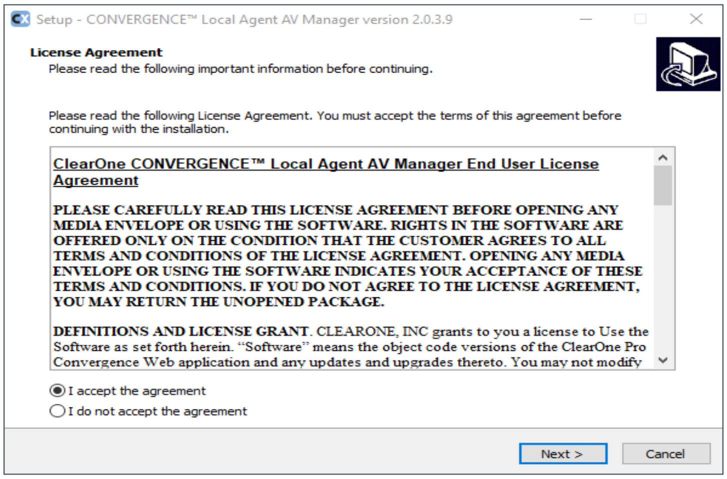
The License Agreement window opens.

6.3 **Carefully read** the license agreement. Then click the **I accept the agreement** radio button.

The Next button activates.

6.4 **Click Next.**

The installer displays the Select Destination Location window.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

License Agreement

Please read the following important information before continuing.

Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.

ClearOne CONVERGENCE™ Local Agent AV Manager End User License Agreement

PLEASE CAREFULLY READ THIS LICENSE AGREEMENT BEFORE OPENING ANY MEDIA ENVELOPE OR USING THE SOFTWARE. RIGHTS IN THE SOFTWARE ARE OFFERED ONLY ON THE CONDITION THAT THE CUSTOMER AGREES TO ALL TERMS AND CONDITIONS OF THE LICENSE AGREEMENT. OPENING ANY MEDIA ENVELOPE OR USING THE SOFTWARE INDICATES YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS. IF YOU DO NOT AGREE TO THE LICENSE AGREEMENT, YOU MAY RETURN THE UNOPENED PACKAGE.

DEFINITIONS AND LICENSE GRANT. CLEARONE, INC grants to you a license to Use the Software as set forth herein. "Software" means the object code versions of the ClearOne Pro Convergence Web application and any updates and upgrades thereto. You may not modify

● I accept the agreement
○ I do not accept the agreement

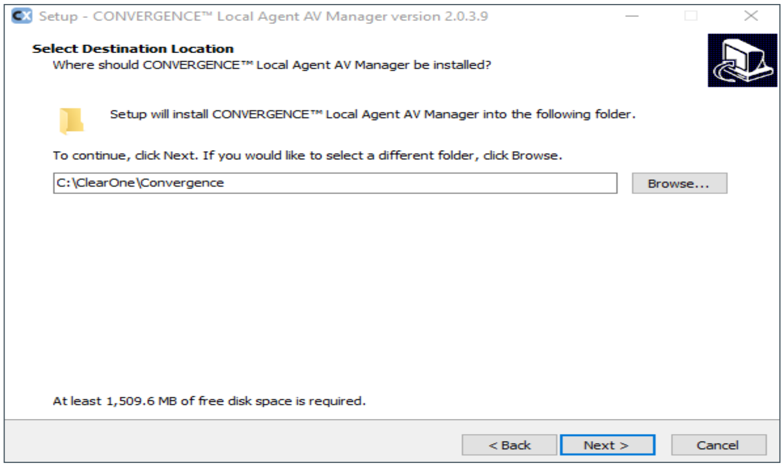
6.5 If you want the installer to use the folder location indicated, **click Next**.

or

To use a different folder:

Click Browse, **navigate** to the folder, **select it**, then on the Browse for folder window, **click OK**.

> **Caution:** If you select an existing folder, the installer overwrites the folder's contents.
>
> The target directory path must **not** contain a blank space.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Select Destination Location

Where should CONVERGENCE™ Local Agent AV Manager be installed?

Setup will install CONVERGENCE™ Local Agent AV Manager into the following folder.

To continue, click Next. If you would like to select a different folder, click Browse.

C:\ClearOne\Convergence

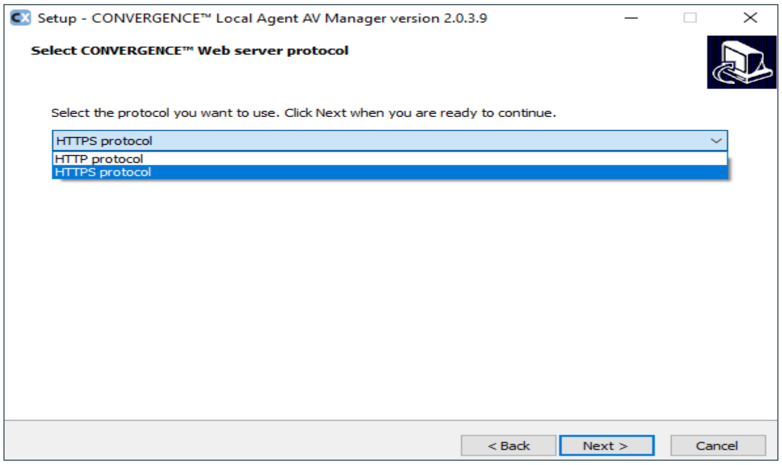
At least 1,509.6 MB of free disk space is required.

On the installer's destination location window, **click Next**.

The installer displays the Select Convergence Web server protocol window.

6.6 From the dropdown, **select** either **HTTP protocol** or **HTTPS protocol**.

Then **click Next**.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Select CONVERGENCE™ Web server protocol

Select the protocol you want to use. Click Next when you are ready to continue.

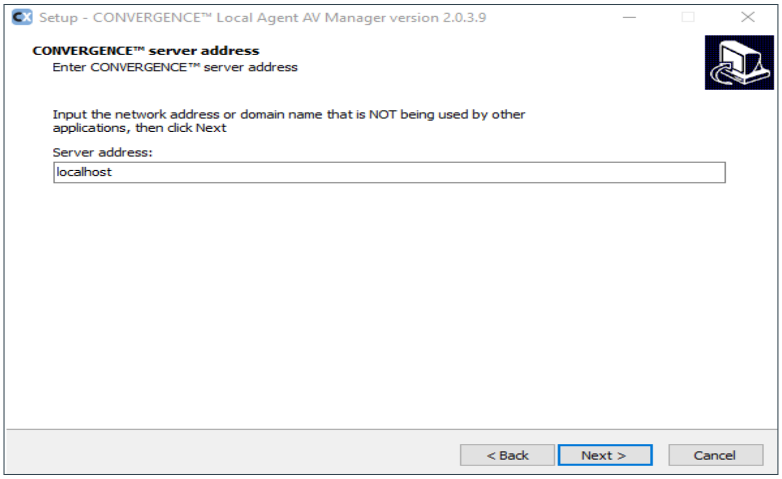
HTTPS protocol

The installer displays the CONVERGENCE server address dialog window, with "localhost" in the server address box.

6.7 If you plan to use AV Local Agent as a standalone service, add users, reset passwords, or have it send email alerts, replace "**localhost**" with the network address or domain name to be accessed from the machine on which you are installing.

Alternatively, if you *only* plan to have Local Agent AV Manager connect to your organization's central hub the Cloud AV Manager or an Enterprise AV Manager, you need not change the Server address from *localhost*.

Click Next >.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

CONVERGENCE™ server address

Enter CONVERGENCE™ server address

Input the network address or domain name that is NOT being used by other applications, then click Next

Server address: localhost

The installer displays a different window depending on what protocol you selected.

If you selected HTTP, the installer displays the Automatic update CONVERGENCE window.

Go to step 6.12.

If you selected HTTPS, the installer displays the Server keystore information window.

Proceed to step 6.8.

6.8 On the Server keystore information window, **select the desired option** as follows:

If you want to import an existing keystore:

a. **Click** that **radio button** and then **click Next.**

The installer displays the Select Keystore Location window.

b. **Go to step 6.10.**

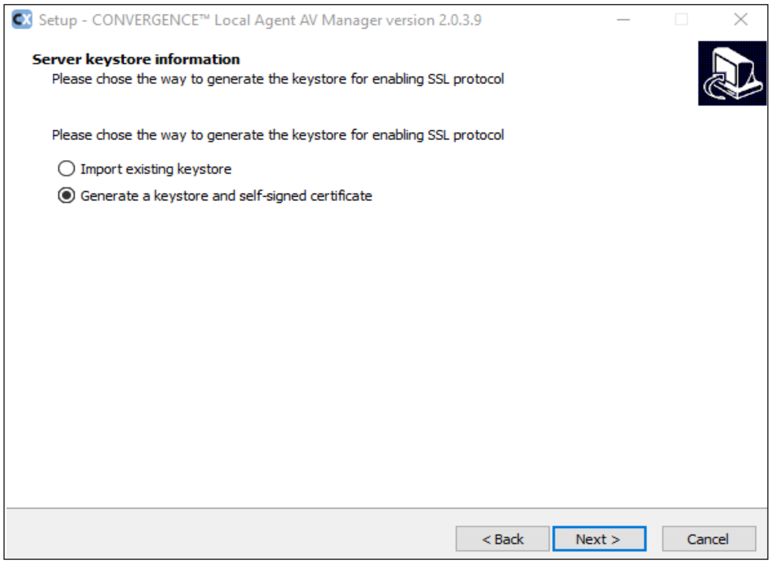
or

If you want the installer to generate a keystore and self-signed certificate:

a. **Click** that **radio button** and then **click Next**.

The installer displays the Server keystore self-signed certificate generation window.

b. **Proceed to step 6.9**



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Server keystore information

Please chose the way to generate the keystore for enabling SSL protocol

Please chose the way to generate the keystore for enabling SSL protocol

○ Import existing keystore

● Generate a keystore and self-signed certificate

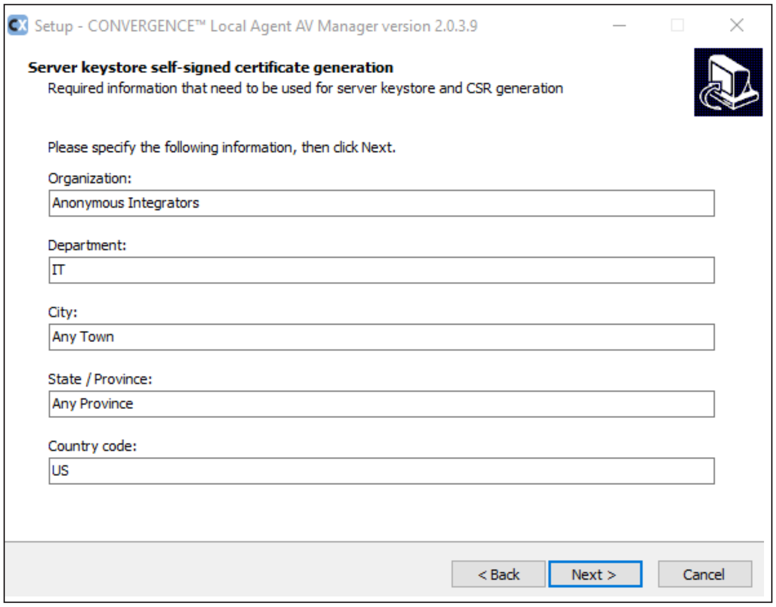
6.9 For each of the input boxes, **enter information.**

Note: To proceed with the install, you must enter information in every input box

Then **click Next**.

The installer displays either the Custom HTTP port window or the Custom HTTPS port window.

Go to step 6.13.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Server keystore self-signed certificate generation

Required information that need to be used for server keystore and CSR generation

Please specify the following information, then click Next.

Organization: Anonymous Integrators

Department: IT

City: Any Town

State / Province: Any Province

Country code: US

6.10 On the Select Keystore Location window,

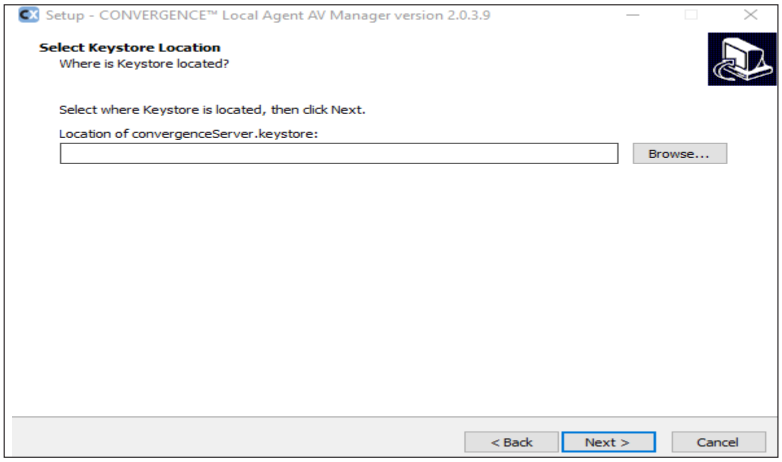
Enter the **location** of the keystore,

or

Click Browse, navigate to the keystore file, and **click OK.**

Click Next.

The installer displays the Keystore password window.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Select Keystore Location

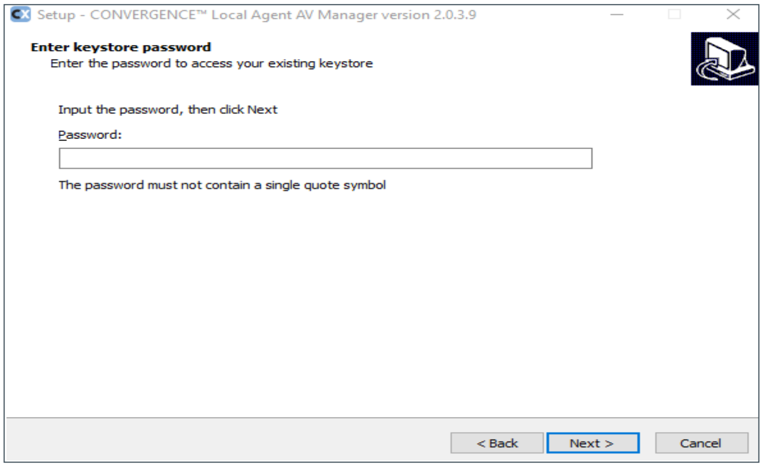
Where is Keystore located?

Select where Keystore is located, then click Next.

Location of convergenceServer.keystore:

6.11 **Enter** the **keystore password.**

Then **click Next.**



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Enter keystore password

Enter the password to access your existing keystore

Input the password, then click Next

Password:

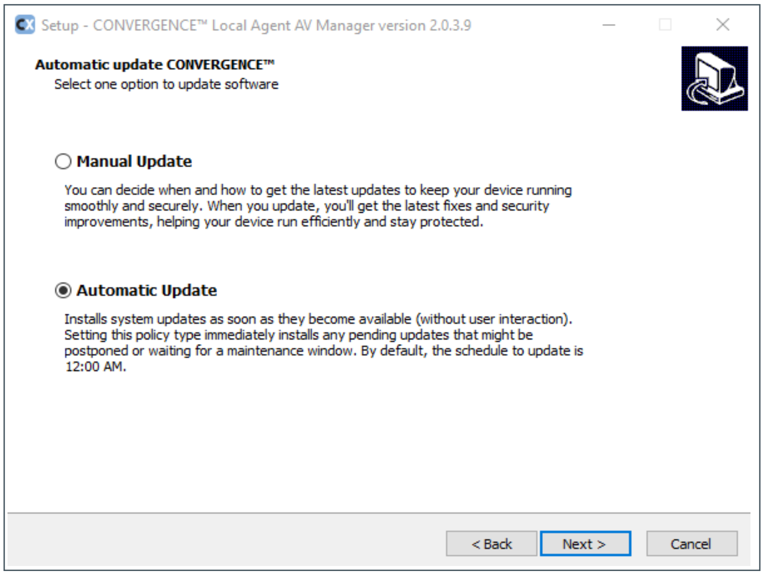
The password must not contain a single quote symbol

The installer displays either the Custom Custom HTTPS port window.

Go to Step 6.13.

6.12 On the Automatic update CONVERGENCE window, **click** the **radio button** of your preferred method to update software.

The software displays the Custom HTTP port window.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Automatic update CONVERGENCE™

Select one option to update software

○ **Manual Update**

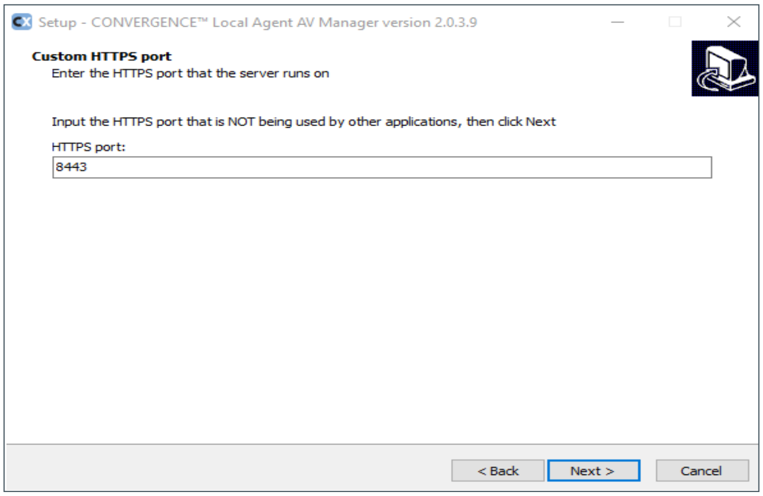
You can decide when and how to get the latest updates to keep your device running smoothly and securely. When you update, you'll get the latest fixes and security improvements, helping your device run efficiently and stay protected.

● **Automatic Update**

Installs system updates as soon as they become available (without user interaction). Setting this policy type immediately installs any pending updates that might be postponed or waiting for a maintenance window. By default, the schedule to update is 12:00 AM.

6.13 On the Custom **HTTP** port window or the Custom **HTTPS** port window, enter the port number as follows:

- The port must be an integer in range [0-65535].
- For HTTP, the recommended ports are 80 or 8080 (the default).
- For HTTPS, the recommended ports for HTTPS are 443 or 8443 (the default).
- Ports 80 and 443 do not require that users enter the port with your website's URL.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Custom HTTPS port

Enter the HTTPS port that the server runs on

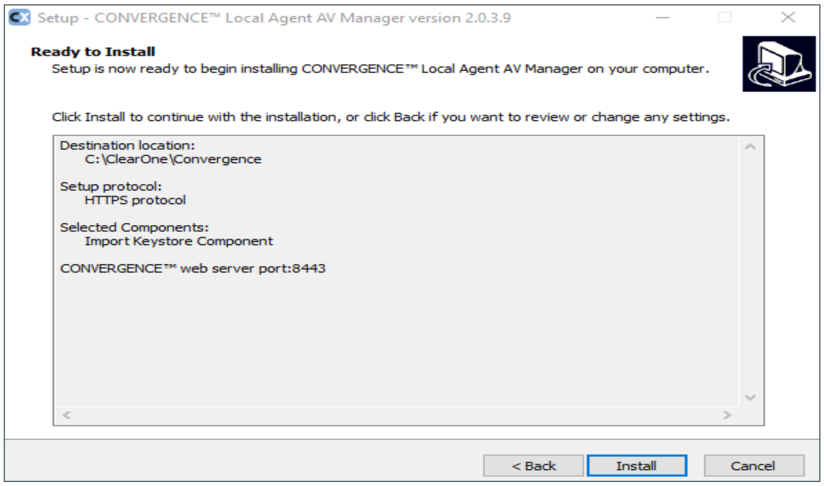
Input the HTTPS port that is NOT being used by other applications, then click Next

HTTPS port: 8443

Click Next.

The installer displays the Ready to install window.

6.14 **Click Install**.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Ready to Install
Setup is now ready to begin installing CONVERGENCE™ Local Agent AV Manager on your computer.

Click Install to continue with the installation, or click Back if you want to review or change any settings.

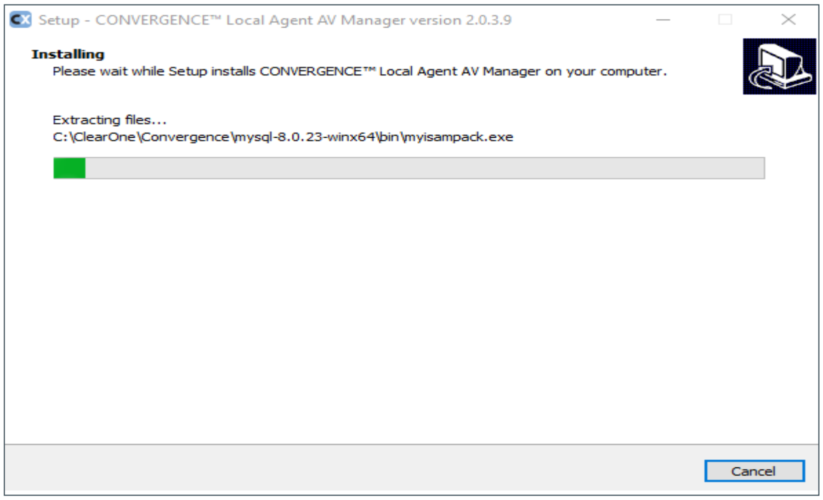
```
Destination location:
      C:\ClearOne\Convergence

Setup protocol:
      HTTPS protocol

Selected Components:
      Import Keystore Component

CONVERGENCE™ web server port:8443
```

The installer displays the Installing window.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Installing
Please wait while Setup installs CONVERGENCE™ Local Agent AV Manager on your computer.

Extracting files...
C:\ClearOne\Convergence\mysql-8.0.23-winx64\bin\myisampack.exe

After the installation is complete, the installer displays the Information window which includes release notes and usage notes.

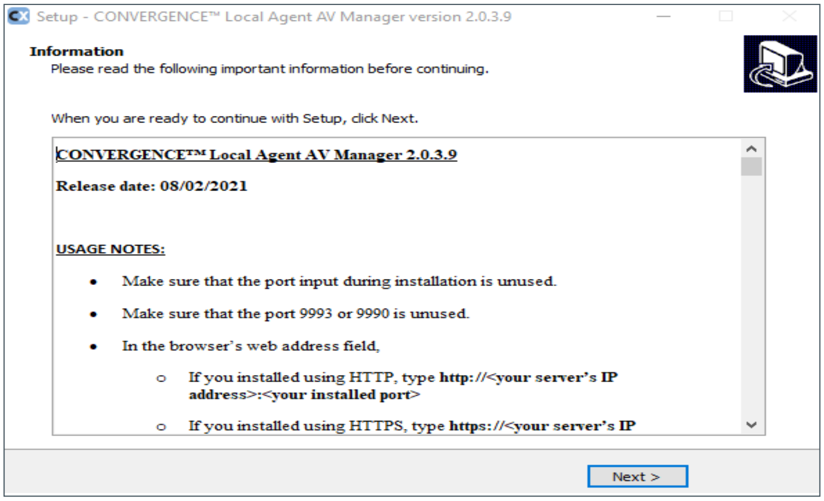
6.15 **Read the release and usage notes**.

Then **Click Next**.

*The installer displays a different **Completing the CONVERGENCE Local Agent AV Manager Setup Wizard** window based on whether or not this is the first installation or a reinstallation.*

If this is a reinstallation, ***go to step 6.20.***

If this is the first installation, **proceed to step 6.16**.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Information
Please read the following important information before continuing.

When you are ready to continue with Setup, click Next.

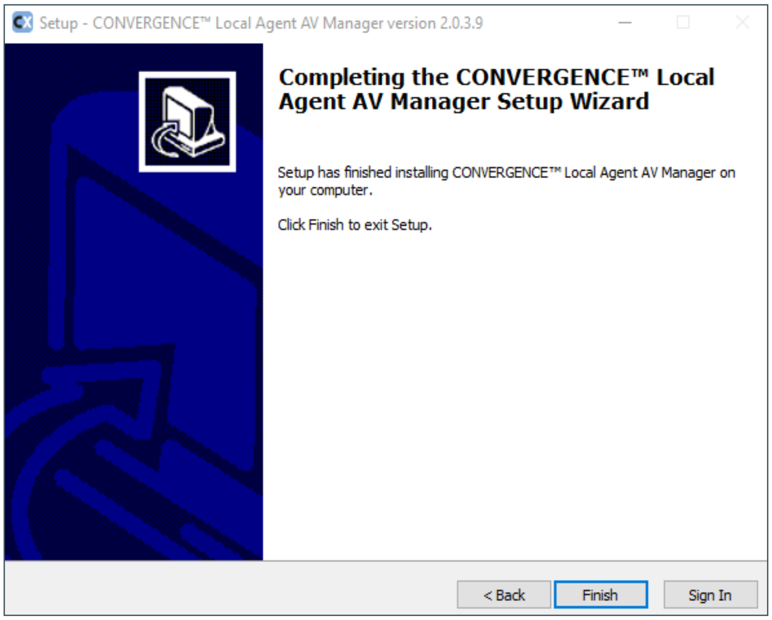
CONVERGENCE™ Local Agent AV Manager 2.0.3.9

Release date: 08/02/2021

USAGE NOTES:

- Make sure that the port input during installation is unused.
- Make sure that the port 9993 or 9990 is unused.
- In the browser's web address field,
  - If you installed using HTTP, type **http://<your server's IP address>:<your installed port>**
  - If you installed using HTTPS, type **https://<your server's IP**

6.16 On the Completing the CONVERGENCE AV Local Agent AV Manager Setup Wizard window, **click Sign In**



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Completing the CONVERGENCE™ Local Agent AV Manager Setup Wizard

Setup has finished installing CONVERGENCE™ Local Agent AV Manager on your computer.

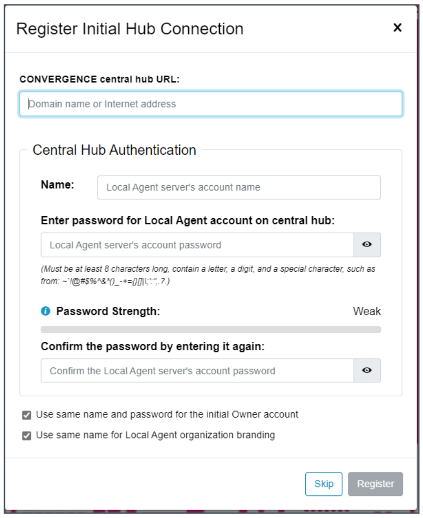
Click Finish to exit Setup.

CONVERGENCE Local Agent displays the Register Account window.

6.17 **Enter the information requested** in the input boxes.

Take note of your username and password.

Then **click Register**.



Register Initial Hub Connection

CONVERGENCE central hub URL:

Domain name or Internet address

Central Hub Authentication

Name: Local Agent server's account name

Enter password for Local Agent account on central hub:

Local Agent server's account password

(Must be at least 8 characters long, contain a letter, a digit, and a special character, such as from: ~`!@#$%^&()_-+={}[]|\;':",.?.)*

Password Strength: Weak

Confirm the password by entering it again:

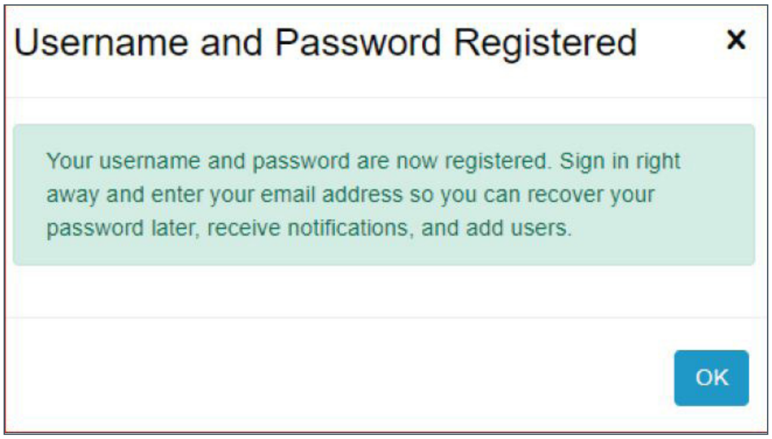
Confirm the Local Agent server's account password

☑ Use same name and password for the initial Owner account

☑ Use same name for Local Agent organization branding

*CONVERGENCE Local Agent displays a **Username and Password Registered** window.*

6.18 **Click OK**.

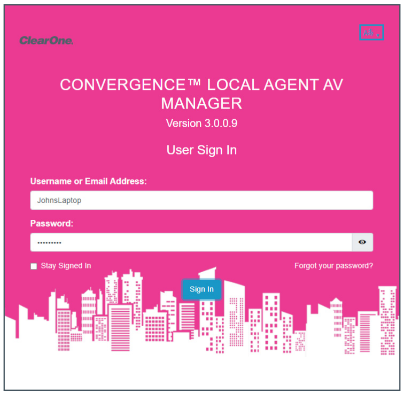


Username and Password Registered

Your username and password are now registered. Sign in right away and enter your email address so you can recover your password later, receive notifications, and add users.

CONVERGENCE Local Agent displays the User Sign In portal.

6.19 No need to sign in. But you may if you want to do more set up to use the Local Agent as a standalone AV Manager. If your Local Agent Server account is also set up, after a few moments the server should sign into your organization on Cloud or Enterprise.



CONVERGENCE™ LOCAL AGENT AV MANAGER
Version 3.0.0.9
User Sign In

Username or Email Address: JohnsLaptop
Password: ••••••••••

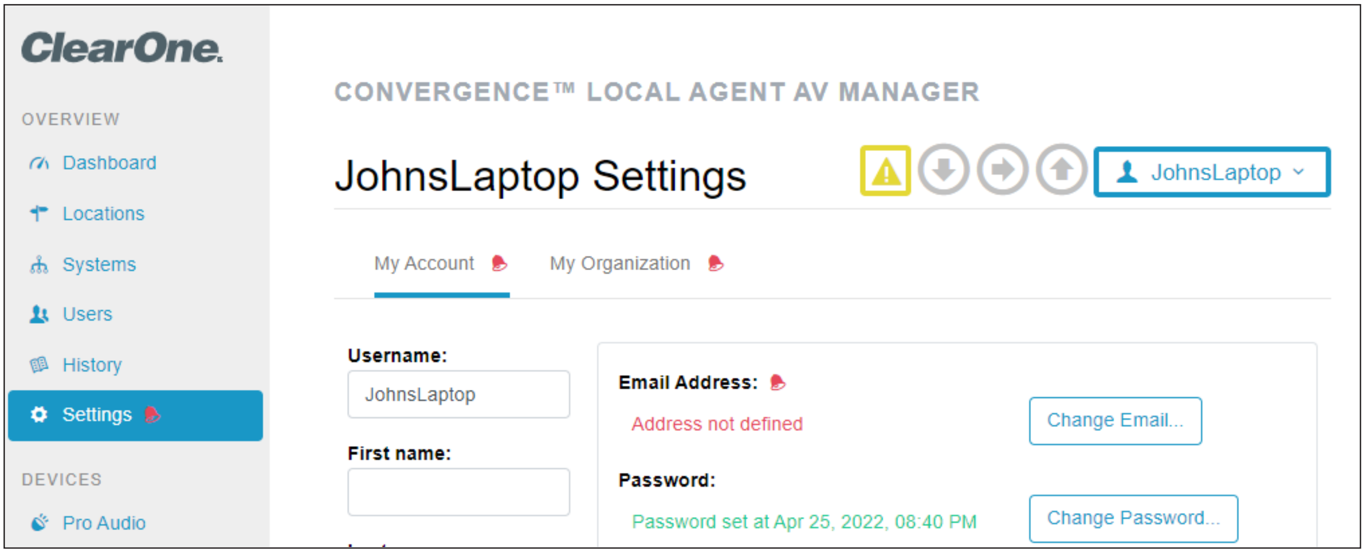
□ Stay Signed In
Forgot your password?

CONVERGENCE Local Agent displays the Settings > My Account view.

If you have signed in with your registered username and password, notice the red alarm symbols.🔔.

They indicate areas where **you may need to take further action**.

If you plan to use Local Agent AV Manager as a standalone service, add users, reset passwords, or have it send email alerts, then you must take further action to turn off the red alarm symbols.



CONVERGENCE™ LOCAL AGENT AV MANAGER

JohnsLaptop Settings

My Account 🔔 My Organization 🔔

Username: JohnsLaptop

First name:

Email Address: 🔔
Address not defined

Password:
Password set at Apr 25, 2022, 08:40 PM

However, if you *only* plan to have Local Agent AV Manager connect to your organization’s central hub in Cloud AV Manager or Enterprise AV Manager, you may ignore the red alarm symbols.

For detailed instructions about Settings see the online Help, available when you sign in. Under the navigation bar’s SUPPORT section, **click Help**. The Help page appears. In the navigation bar under OWNER, **click Setting Up the Local Agent Organization.** To connect to Cloud AV Manager or Enterprise AV Manager, see **Sign into a Central Hub**.

Note the following:

- After installation, your browser may require a few moments to display the CONVERGENCE Local Agent Dashboard.
- If after an update your browser displays a blank web page, click your browser’s refresh icon.
- If the browser is running on the server, you can type “localhost” for your server’s IP address.

- If during the installation process you selected **HTTPS** and you did **not** use a valid certificate, your browser displays a security warning page. Regardless, you can usually “push through” to the server’s webpage.

If this is a reinstallation:

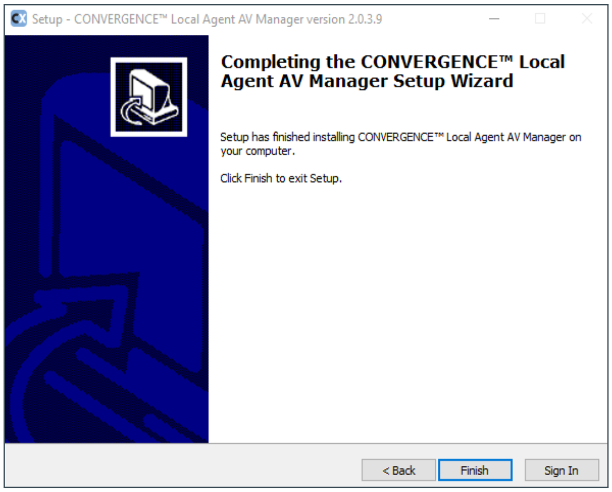
6.20 **Click Finish** or **Sign In**.

*If you click **Sign In**, the Setup Wizard window closes.*

The system then displays the User Sign In window.

*If you click **Finish**, the Setup Wizard closes.*

When you want to sign in to CONVERGENCE Local Agent, **complete step 6.21**.



Setup - CONVERGENCE™ Local Agent AV Manager version 2.0.3.9

Completing the CONVERGENCE™ Local Agent AV Manager Setup Wizard

Setup has finished installing CONVERGENCE™ Local Agent AV Manager on your computer.

Click Finish to exit Setup.

6.21 **Open** an **HTML browser**, such as Edge, Safari, or Chrome.

In the browser’s web address field:

If you selected HTTP, type the following:

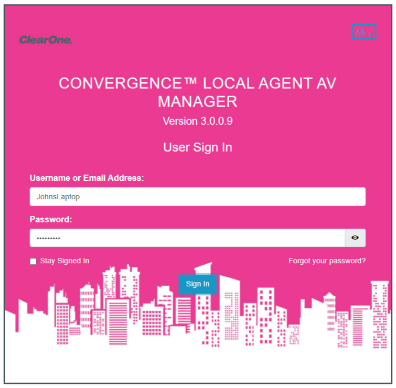
http://<your server’s IP address or domain name>**:**<port number>

or

If you selected HTTPS, type the following:

https://<your server’s IP address or domain name>**:**<port number>

Use the port number you entered in the previous steps.



CONVERGENCE™ LOCAL AGENT AV MANAGER

Version 3.0.0.9

User Sign In

Username or Email Address: JohnsLaptop

Password: ··········

□ Stay Signed In

Note: You do **not** need to type the colon and port number if you chose the default ports 80 or 443.

Press Enter.

Your browser displays the User Sign In portal.

Note: If CONVERGENCE AV Network Manager, version 1.1 was previously installed, use “admin” for the username and sign in with the password you used for the Administrator.

If you forgot the password, and you configured a notification email server, as well as an email address for the Administrator, you can click on “Forgot your password?” to reset it.

Otherwise you will have to delete or move out the files in the database folder identified in the Appendix at the end of this guide, and restart the server.

Then you can enter a new username and password as an initial owner. All previously entered data will be lost.

7. Appendix

7.1 Important Folders

Here are some folders used by CONVERGENCE that you, as a system administrator, might find useful:

Folder	Location
Old database	C:\Windows\System32\config\systemprofile\h2
MySQL database	<INSTALL_FOLDER>\Convergence\mysql-8.0.23-winx64\data
Server's log	<INSTALL_FOLDER>\Convergence\wildfly-x.x.x.x\standalone\log
Configuration backup	C:\Windows\System32\config\systemprofile\Convergence\ConfigurationBackup
Downloaded firmware	C:\Windows\System32\config\systemprofile\Convergence\Firmwares

7.2 ClearOne Contacts

Headquarters

5225 Wiley Post Way Suite 500
Salt Lake City, UT 84116

Sales

Tel: +1.801.975.7200
sales@clearone.com

Headquarters

Tel: +1.801.975-7200

Technical Support

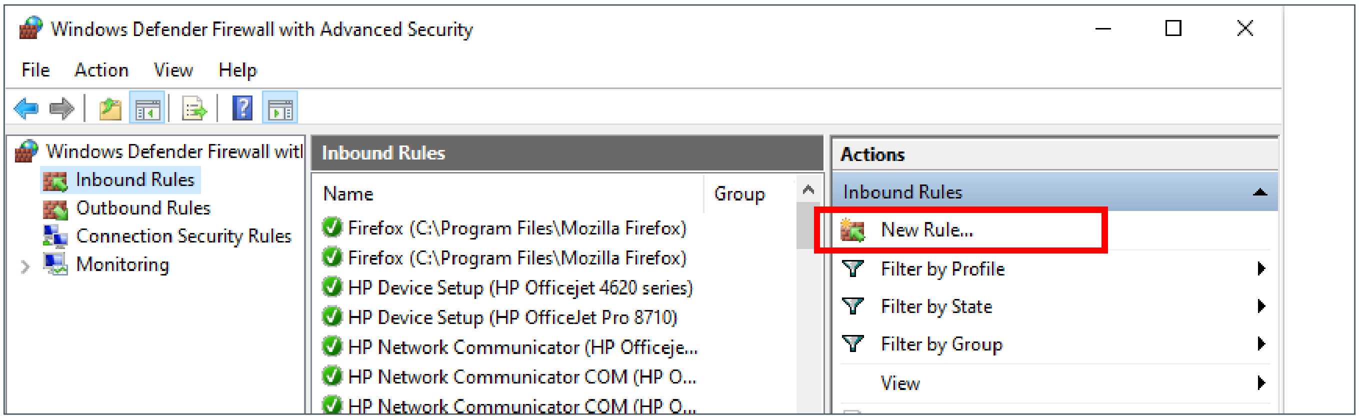
Tel: +1.801.974.3760
audiotechsupport@clearone.com

7.3 How to Add Network Port Firewall Rules in Windows

To open needed Web and FTP ports on the server's firewall (Windows), complete the following steps:

1. **Open the following location**:

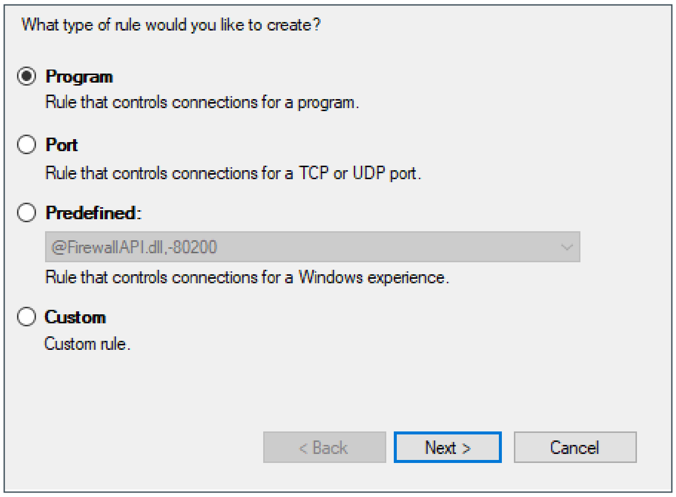
   Windows Control Panel >
   System and Security >
   Windows Defender Firewall >
   Advanced Settings >
   Inbound Rules


Windows Defender Firewall with Advanced Security
File
Action
View
Help
Windows Defender Firewall witl
Inbound Rules
Outbound Rules
Connection Security Rules
Monitoring
Inbound Rules
Name
Group
Firefox (C:\Program Files\Mozilla Firefox)
Firefox (C:\Program Files\Mozilla Firefox)
HP Device Setup (HP Officejet 4620 series)
HP Device Setup (HP OfficeJet Pro 8710)
HP Network Communicator (HP Officeje...
HP Network Communicator COM (HP O...
HP Network Communicator COM (HP O...
Actions
Inbound Rules
New Rule...
Filter by Profile
Filter by State
Filter by Group
View

2. Under Actions, **click New Rule**.

   A New Inbound Rule Wizard window opens.

3. **Select Port**. Then **click Next**.



What type of rule would you like to create?

● **Program**
Rule that controls connections for a program.

○ **Port**
Rule that controls connections for a TCP or UDP port.

○ **Predefined:**
@FirewallAPI.dll,-80200
Rule that controls connections for a Windows experience.

○ **Custom**
Custom rule.

   The Protocol and Ports window opens.

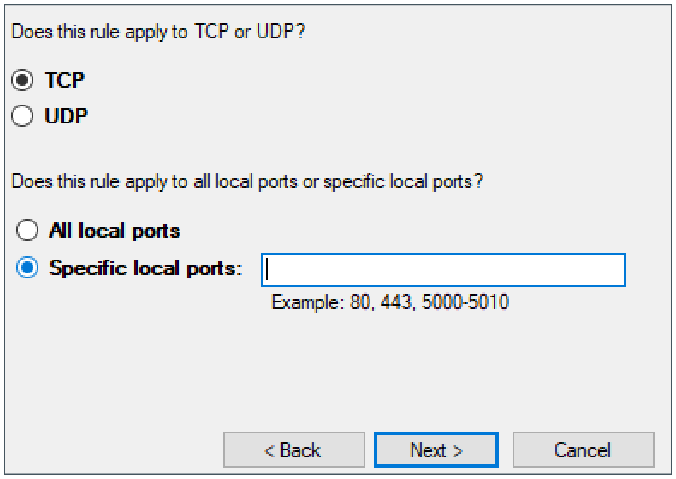
4. Do the following:

   a. Under "Does this rule apply to TCP or UDP?" **select TCP.**

   b. Under "Does this rule apply to all local ports or specific local ports?" **click** the **Specific local ports radio button.**

   c. In the Specific local ports field, **type one or more** of the following that apply to the rule:

   - 80 (optional - access as default HTTP web server)
   - 443 (optional - access as default HTTPS web server)
   - 8080 (optional - access as an HTTP web server, must enter port)
   - 8443 (optional - access as an HTTP web server, must enter port)
   - 21 (FTP - required for firmware and software downloads)
   - 9001-65000 (Pro Audio device port range - required for operation)



Does this rule apply to TCP or UDP?

● **TCP**

○ **UDP**

Does this rule apply to all local ports or specific local ports?

○ **All local ports**

● **Specific local ports:**

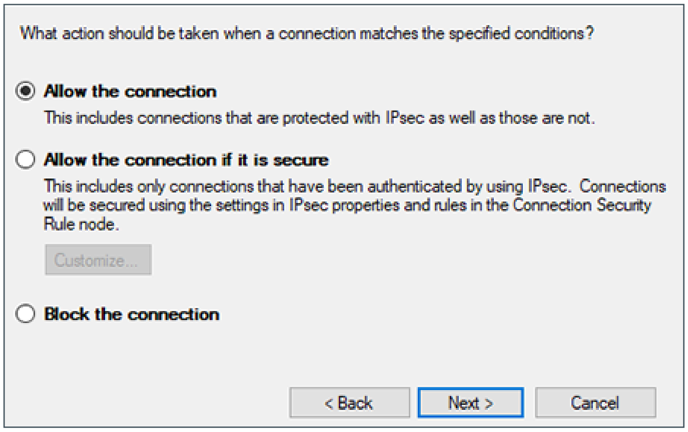
Example: 80, 443, 5000-5010

   d. **Click Next**.

   The Actions window opens.

5. **Click** the **Allow the connection radio button.**

   Then **click Next**.



What action should be taken when a connection matches the specified conditions?

● **Allow the connection**
This includes connections that are protected with IPsec as well as those are not.

○ **Allow the connection if it is secure**
This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node.

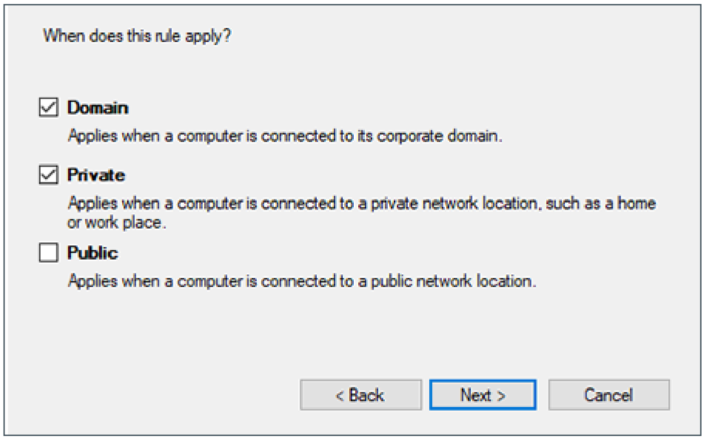
○ **Block the connection**

   The Profile window opens.

6. If the Web server is not to be exposed to the Internet, **click the Public check box** to remove the check mark.

   Leave the Domain and Private check boxes selected.

   Then **click Next**.



When does this rule apply?

☑ **Domain**
Applies when a computer is connected to its corporate domain.

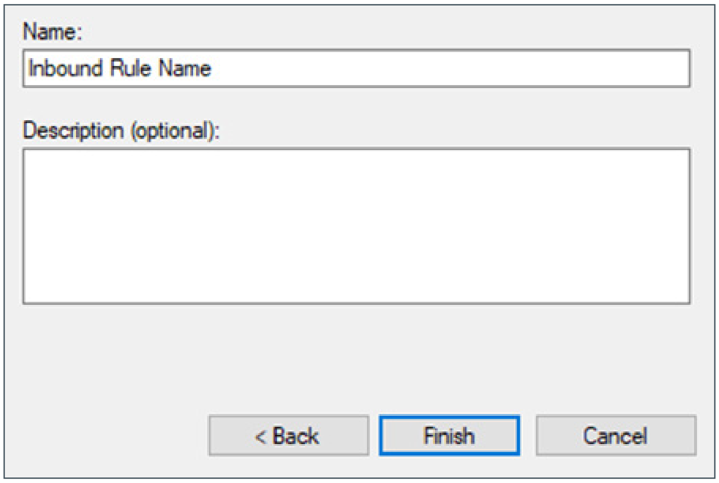
☑ **Private**
Applies when a computer is connected to a private network location, such as a home or work place.

☐ **Public**
Applies when a computer is connected to a public network location.

The Name window opens.

7. **Type a Name** and **Description** (optional).

   Then **click Finish**.



Name: Inbound Rule Name

Description (optional):