

SMARTVIEW WEB EMS QUICK INSTALLATION

3.3 Install WEB EMS

3.3.1 Introduction

WEB EMS is delivered as a single ~300MB Windows "exe" file. The "ems_full.exe" is the complete installation file which includes the MS-SQL Server Express Edition 2019 and OpenJDK JAVA binaries. The "ems.exe" is an 'upgrade or patch' file which is incrementally released with new product support, function additions and/or fixes. WEB EMS may be delivered on USB Pen Drive (Physical Media) or it may be downloaded from CTC Union's servers. The installation process will follow these basic steps:

1. Run the "ems_full.exe" program as administrator. (right click, select 'run as administrator')
2. Ensure the check boxes are checked to install MS-SQL and to create a desktop shortcut.
3. Follow the prompts until the program is installed.
4. Start Web EMS server; Using a local browser, login to localhost (127.0.0.1)
5. Install license file or run in evaluation mode.

3.3.2 WEB EMS Windows Installer

Insert the USB flash drive into your PC's USB port. Open the drive folder and right-click the "ems_full.exe" icon, choose 'Run as administrator'. Optionally, if you have downloaded and unzipped the installation set to local disk, browse to and right-click the "ems_full.exe" program and choose 'Run as administrator'.

1. USB Distribution

The USB drive has the windows installation file which includes the 64bit 1.8 OpenJDK Runtime Environment Binaries and Microsoft's free MS-SQL Server 2019 Express in English. Open the USB drive and right-click the "ems_full.exe" icon and choose 'Run as administrator'.

2. Download

The download file is a ZIP file (the unzip process will ensure the download has no errors). Use extraction software, such as 7-Zip (or WinZip™), to extract the "ems_full.exe" file to the local drive. After being unzipped the "ems_full.exe" can be run (right-click and choose 'Run as administrator') directly.

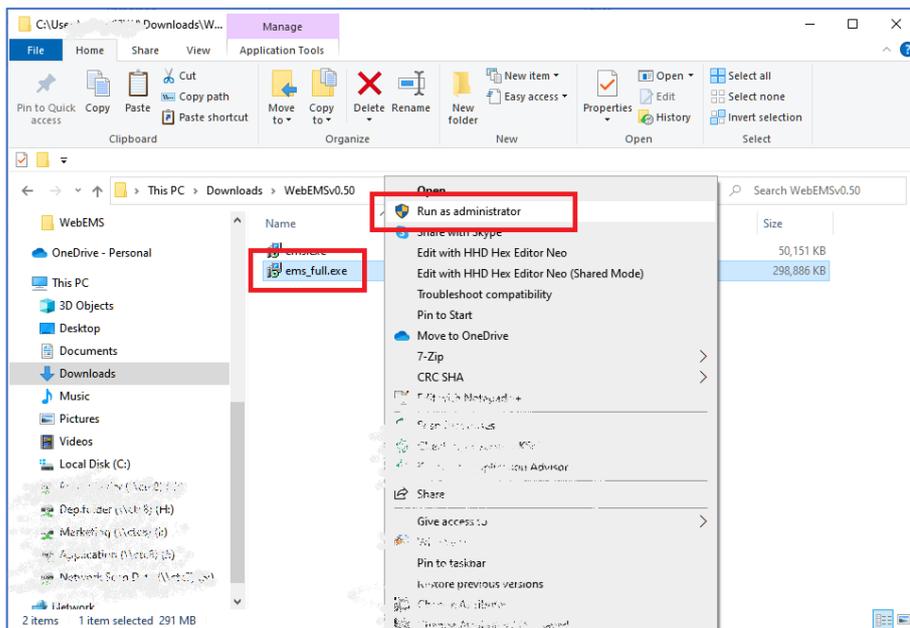


Fig. 3.1 Installation folder, ready to install Web EMS.

3.3.3 WEB EMS Install Screen

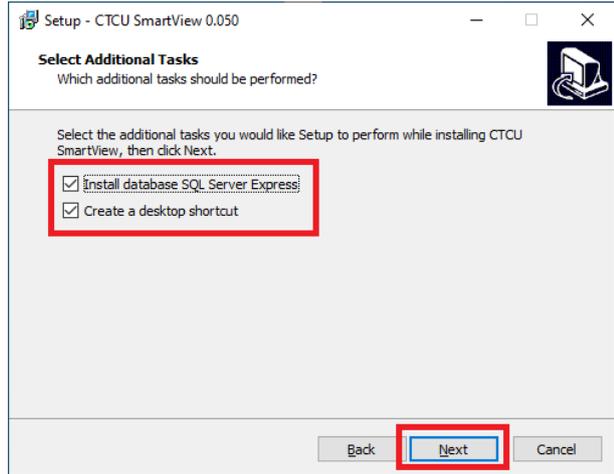
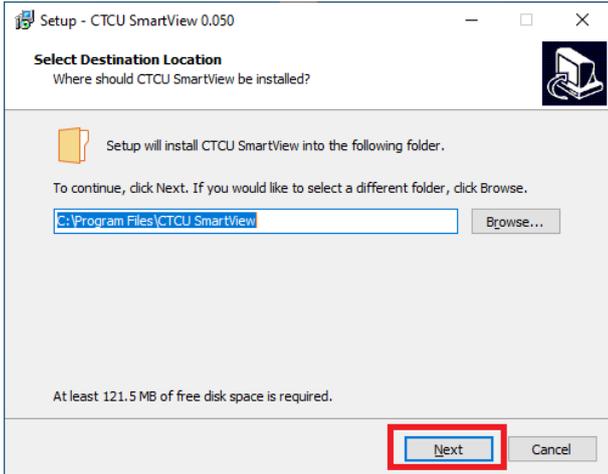


Fig. 3.2 The default installation folder is under Program Files. Fig. 3-3 Enable both checkboxes and click 'Next'.

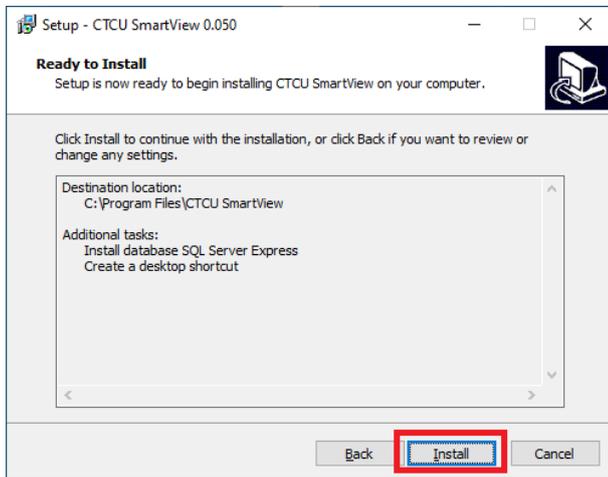


Fig. 3.4 Setup is ready, click 'Install'.

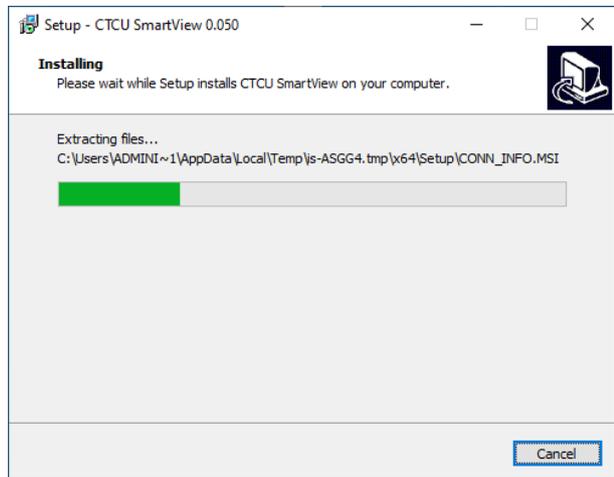


Fig. 3.5 Progress bar while installing.

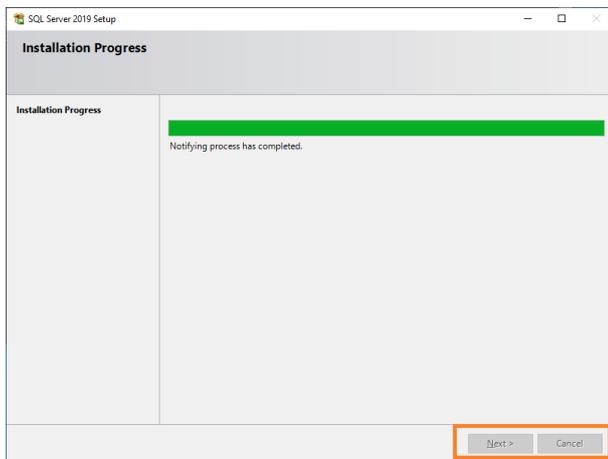


Fig. 3.6 MS-SQL Server is installed automatically.

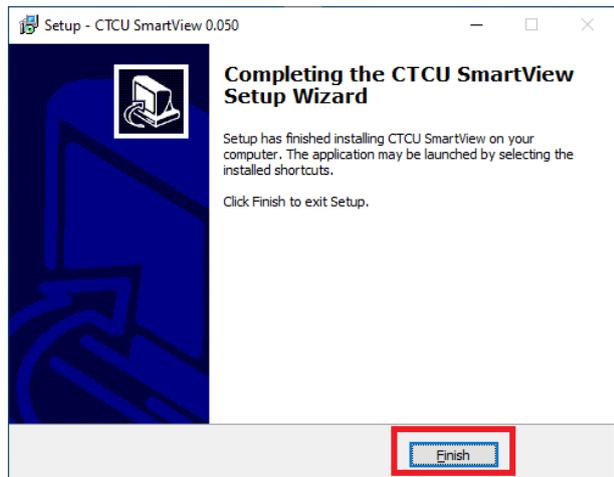


Fig. 3.7 When setup is complete, click 'Finish'.

3.3.4 About Java Run Time Environment

The EMS Broker (server) is written in JAVA™ programming language. Java was an open programming language developed by Sun Microsystems and volunteer programmers. The idea was to have a programming language that would be portable across different hardware processors and operating systems and not require re-compiling of the source program on each platform. Oracle now controls this closed programming language, while the OpenJDK project continues the free open source JAVA released by Sun Microsystems in 2005.

SmartView Web EMS includes the 64-bit OpenJDK version "8.0.2820.8" and places the runtime binaries within the CTCU Smartview program folder. It doesn't matter if the host computer has Java or not or what the Java version installed is. Web EMS will always use its own 64bit OpenJDK version "8.0.2820.8" binaries for maximum stability and compatibility. There is no need to separately install JDK/JRE on the host computer.

3.3.5 SQL Server Install

WEB EMS relies on **Microsoft** MS-SQL database to store all information. Unattended installation is the supported default. This means Web EMS installs MS-SQL Server when the "Install database SQL Server Express" checkbox is checked (default). Please refer to the detailed instructions in Appendix A for manual installation of SQL Express 2019. Refer to your Microsoft documentation when installing your own SQL Server and reference our installation procedures, as the server must be installed with a "Default Instance" and in "Mixed-Mode".

3.3.6 Updating

CAUTION: WEB EMS version is tightly matched to firmware versions of CTC Union products. Prior to doing any upgrading of WEB EMS, please ensure all ND (Network Devices) are properly upgraded and compatible with the new WEB EMS version (refer to the included Product_Support.PDF with any SmartView version). There is no method to "down grade" the WEB EMS except to re-install the previous version as changes are made to the database through upgrade and cannot be rolled back. Making a backup of the database and of the entire WEB EMS folder will aid in doing a quick recovery. **Please see the Appendix on the methods to perform a complete backup of the WEB EMS system and database before performing WEB EMS upgrade.**

Find the latest Upgrade Tool from CTC Union's download area.
<https://www.ctcu.com.tw/download/WebEms/>

IMPORTANT: Make sure all clients are logged and the Web EMS server is shutdown prior to doing any Upgrade.
Hint: Right-Click on the WebEMS taskbar icon and select Stop Service.

The Upgrade Tool will be distributed as a 'ZIP' file. After extraction, move the "ems.exe" file to the server. Next, 'right-click' on the 'ems.exe' file and select 'Run as Administrator'.

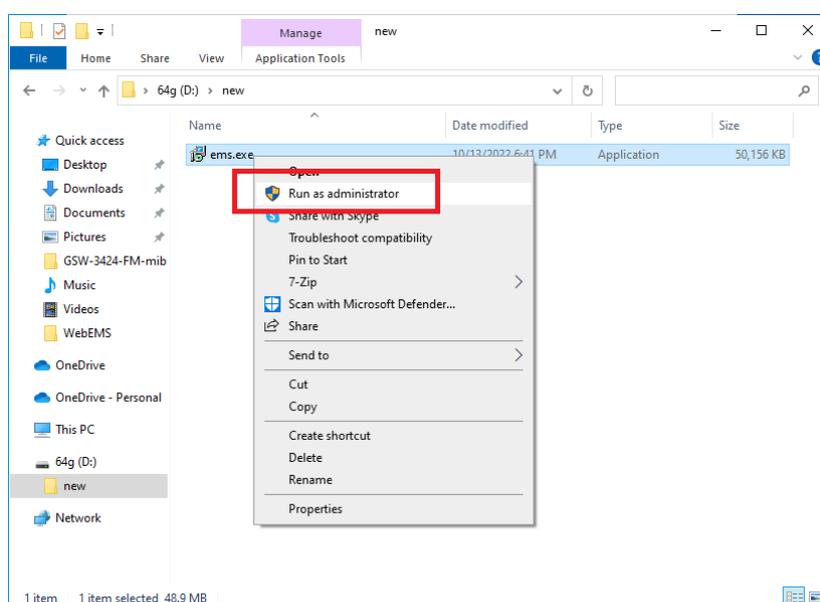


Fig. 3.8 Upgrade ems.exe file from extracted Upgrade ZIP file.

The Setup will start. Follow and click on the prompts.

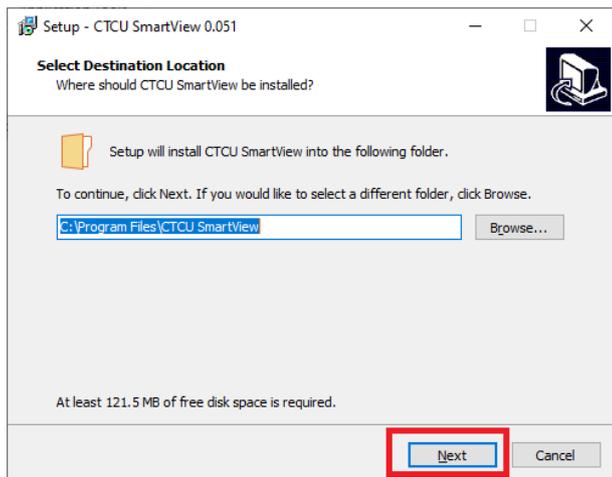


Fig. 3.9 Install to default folder, click 'Next'

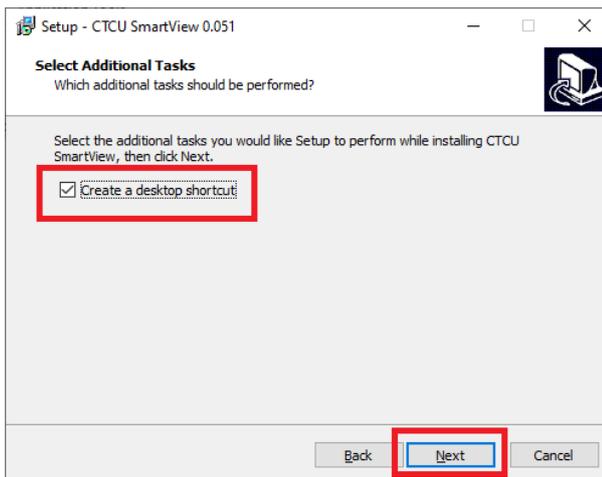


Fig. 3.10 Create shortcut and click 'Next'

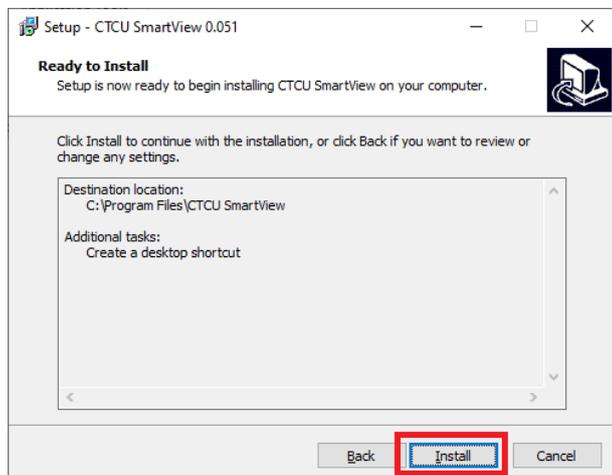


Fig. 3.11 Ready to install, click 'Install'

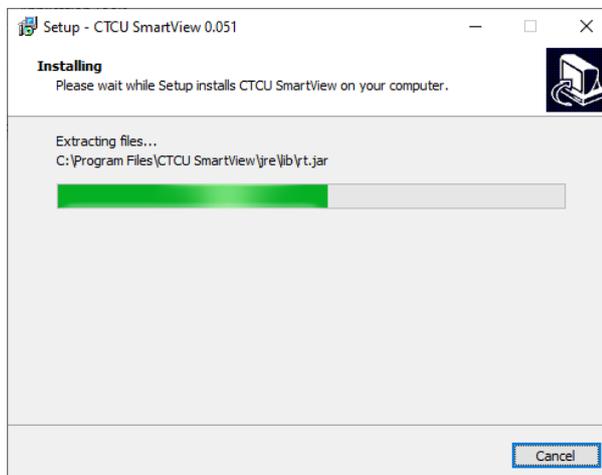


Fig. 3.12 Installation progress bar

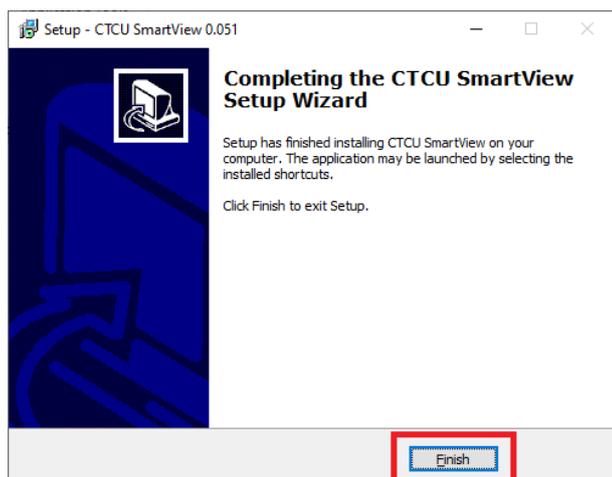


Fig. 3.13 Finish

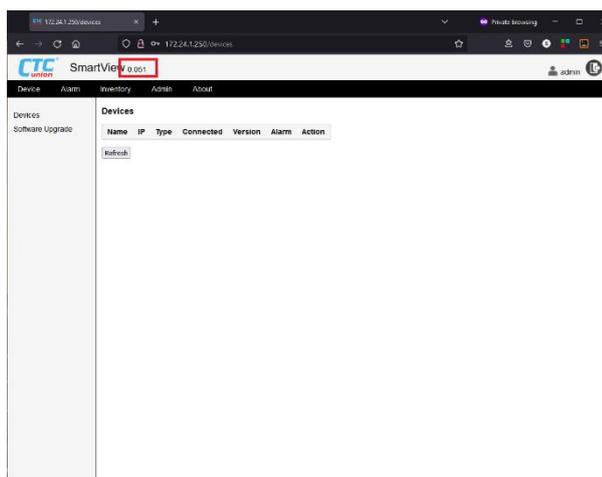


Fig. 3.14 Start server, open client, login, check version.

Warning: Under Windows Vista and above (Windows 7, 8, 8.1, 10, 11), unless the logged in user is the Administrator, or the upgrade is NOT run as the administrator, the upgrade may fail to write the new files into the protected program files folder.

3.3.7 Start the Web EMS Server

Located on the desktop is the SmartView icon.
Double-click the icon to start the server.



Fig. 3.15 Desktop Icon

Alternately, click the 'Windows Start' button and browse to CTCU SmartView, click "Start Service".

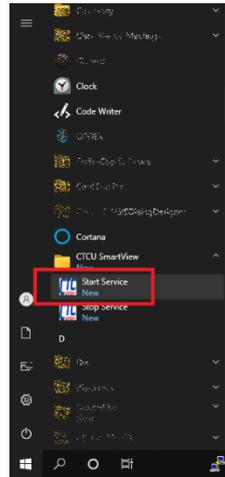


Fig. 3.16 Windows Start Menu

The first time that the SmartView Server is started, the *Windows Defender Firewall* will issue a pop-up. Be sure to allow the OpenJDK Platform binary to communicate on at least the Domain network and the Private network. Failure to do this will limit web browser client access to localhost only.

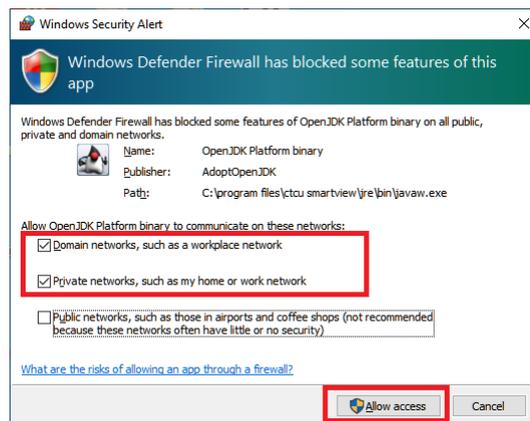


Fig. 3.17 Windows Security Alert

3.3.8 Stop Web EMS Server

Located on the Taskbar (bottom-right of desktop) is the "CTC" icon. Right-click it and select "Stop Service".



Fig. 3.18 Windows Taskbar

Alternately, click the 'Windows Start' button and browse to CTCU SmartView, click "Stop Service".

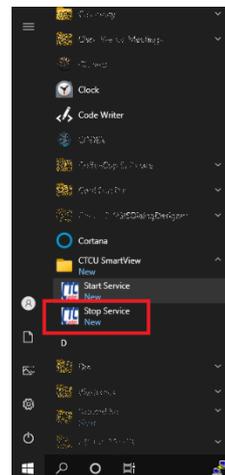


Fig. 3.19 Stop via Start Menu

3.3.9 Uninstalling SmartView WEB EMS

On an occasion when WEB EMS must be un-installed, the uninstall methods are outlined here.

1. Prior to uninstalling, **make a backup copy of the license file (SN.txt)** located in the \Program Files\CTCU Smartview folder. This file can be re-installed or manually copied back in a new installation on the same PC. However, it WILL be deleted during the uninstall. **Stop the Web EMS Service** (see 3.3.8)

2. Perform Uninstall through the Window's Control Panel.

Press the Windows key + R and in the popup type in 'control' and [Enter] (or click OK).

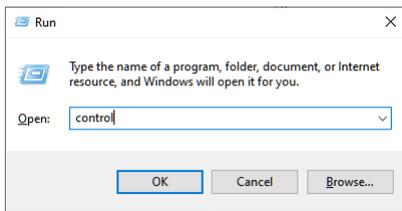


Fig. 3.20 Run 'popup'

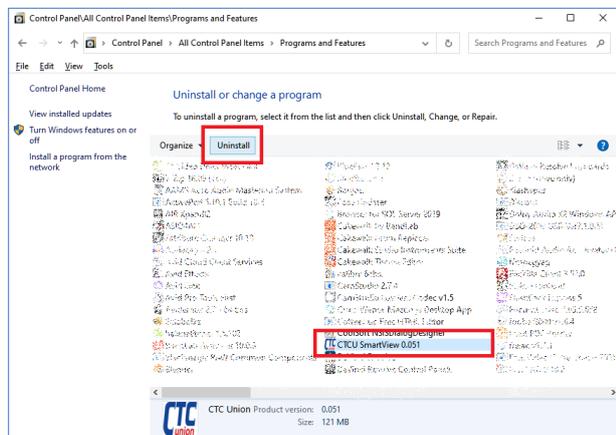
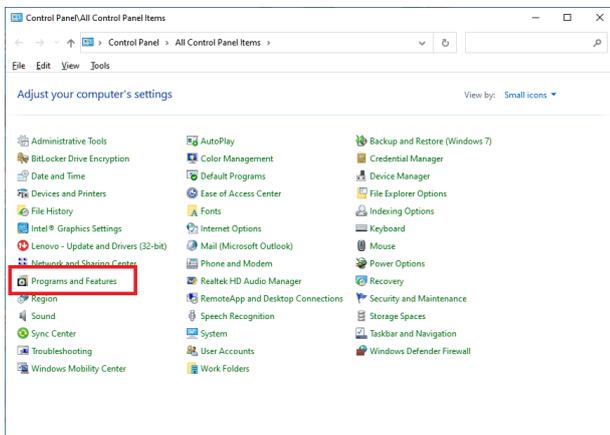


Fig. 3.21 Control Panel Items, select *Programs and Features*

Fig. 3.22 Select the *CTCU SmartView* & Uninstall

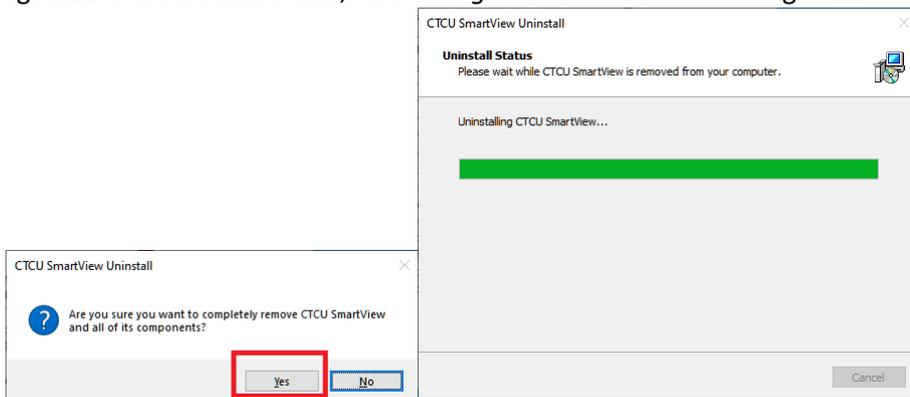


Fig. 3.23 Confirm

Click Yes to confirm.

Fig. 3.24 Status

Observe the uninstall status.

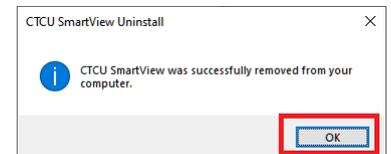


Fig. 3.25 Success

Acknowledge the removal.

3. An alternate method is to browse to \Program File\CTCU SmartView and double-click unins000.exe

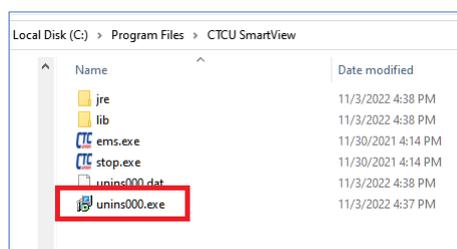


Fig. 3.26 Using unins000.exe

3.3.10 Uninstalling MS SQL Server 2019 Express

Use the *Control Panel > Programs and Features* again.

Uninstall all items related to the *SQL server*.

Reboot the computer and delete the \Program Files\Microsoft SQL Server folder.

<End>