SETTING MANUAL

SERVICE TOOL for VRF System

UTY-ASGXZ1 **Ver. 2.0**

CAUTION

Please read the LICENSE AGREEMENT in the manual first.

PART NO. 9708313047

FUJITSU GENERAL LIMITED

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for
“SERVICE TOOL for VRF SYSTEM”

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1. Safety precautions

- Before using Service Tool, read this “SAFETY PRECAUTIONS” thoroughly to ensure the correct operation.
- This section describes the important safety information to operate Service Tool.
- The meanings of “WARNING” and “CAUTION” are explained as follows.

⚠ **WARNING**	This mark indicates the procedures, which might result in the death of or serious injury to the user or service personnel if improperly performed.
⚠ **CAUTION**	This mark indicates the procedures, which might result in personal harm to the user or damage to property if improperly performed.

This manual is for service personnel authorized to use the Service Tool. Always keep this manual in an easily accessible place for use by authorized service personnel.

⚠ **WARNING**
1. When using U10 USB Network Interface, follow the instructions given in the manual that comes with the product.

⚠ **WARNING**
Service Tool can control the air-conditioner system on a personal computer. Be careful not to turn off the power supply of the personal computer, or not to finish the application compulsorily during operation. Otherwise, Service Tool might malfunction. For personal computer used as Service Tool, refer to the instruction manual.

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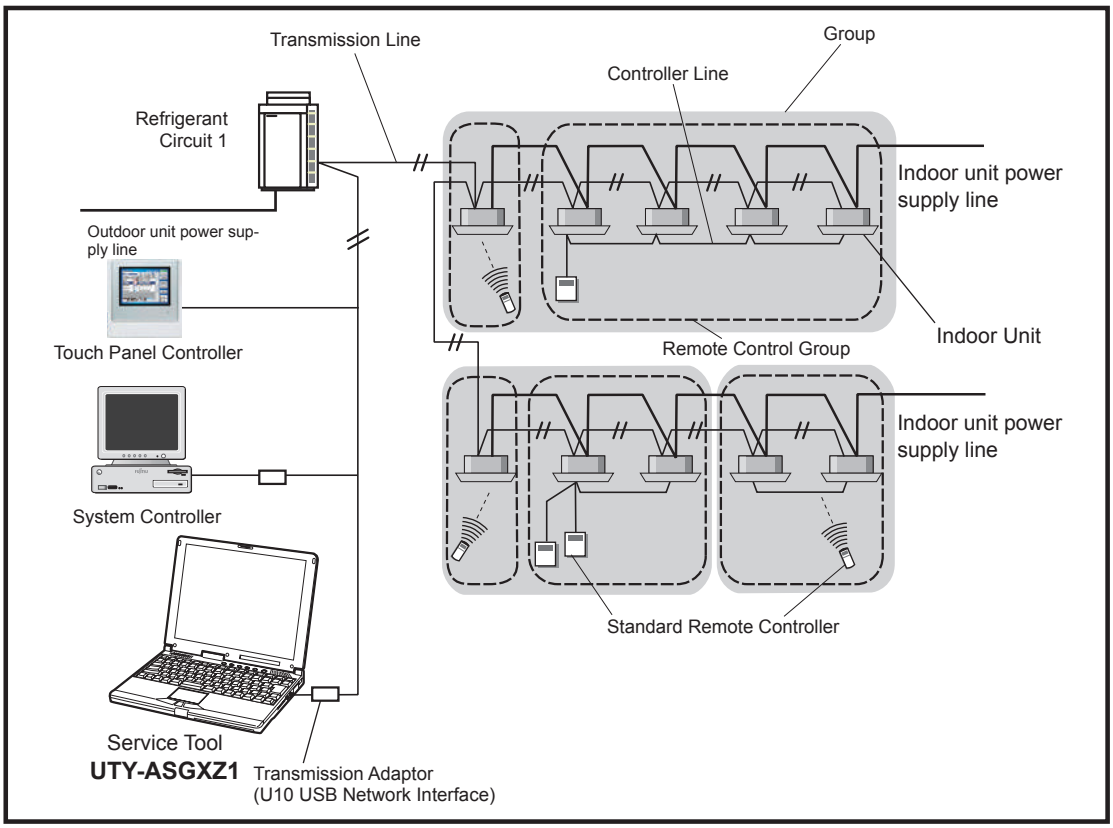
2. Outline



This setting manual explains the setting procedures for the software of Service Tools for the VRF control system.
The use of the service tool allows detailed data about the operating condition of each refrigerant circuit of system that has been installed in the building to be displayed in an easy-to-understand format.
Moreover, it also allows the latest data about pressure and temperature of indoor and outdoor units to be monitored. If there are fluctuations in the conditions, they can be displayed clearly in graph form on a PC screen.
When an error occurs in the transmission line or in an indoor or outdoor unit in the system, details about the error can be displayed on the error history screen for easy assessment of the conditions for fast troubleshooting and resolution.

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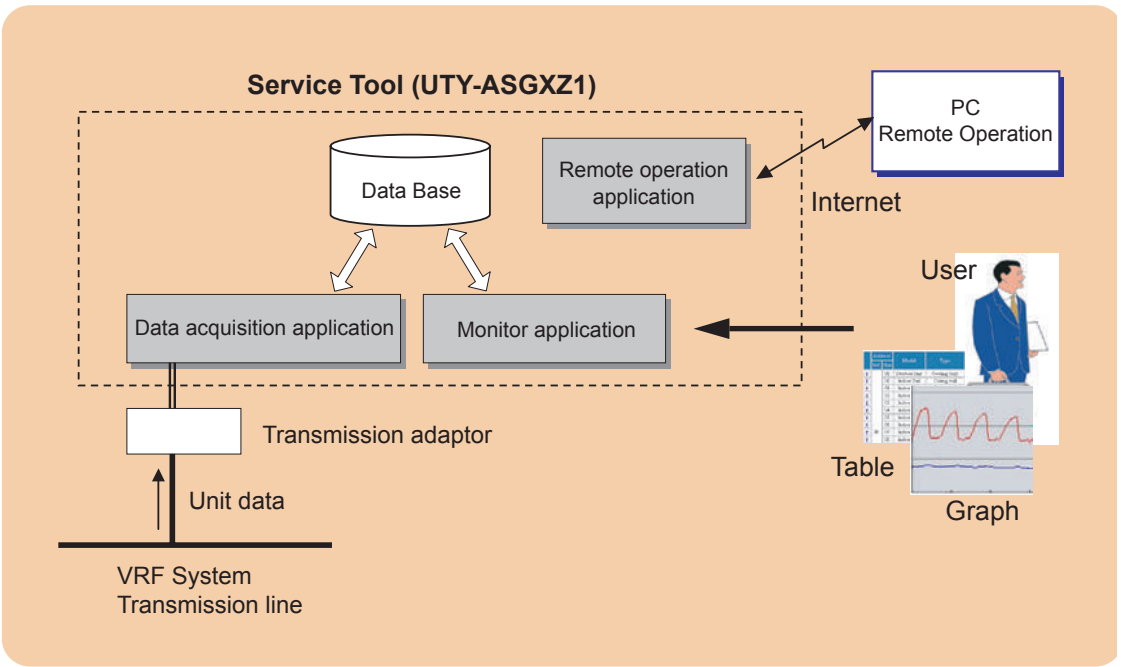
■Software construction

The Service Tool software consists of the Data acquisition application and Monitor application .

The Data acquisition application is a program which is made resident when the Service Tool starts, and exchanges data with the VRF System transmission line. The received Unit data is saved to a Data base.

The Monitor application converts the unit data acquired by “Data acquisition application” to the table or graph and displays them to the PC screen. It also converts operations input from the User and passes them to the Data acquisition application through the Database.
The Remote operation application is the application to perform the remote operation. The Remote operation application operates only when the remote operation mode is valid.



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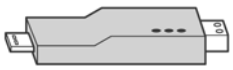
3. Installation

3-1 Precautions

- This product may be updated without prior notice. Since trouble may occur depending on the purchased system, check with your service personnel for updates.
- This product requires the use of one of the following optional transmission adaptors. Procure them in advance.

Name & Shapes	Q'ty	Remark
Transmission Adaptor (U10 USB Network Interface -TP/FT-10 Channel)  (Field Supply)	1	Model : 75010R (Echelon Corporation)

3-2 Recommended specifications

This tool operates in the environment below.

For VRF Side PC (Server)

Operating system	•Microsoft® Windows® 7 SP1 (32/64-bit) Professional •Microsoft® Windows® 8.1 (32/64-bit) Pro •Microsoft® Windows® 10 (32/64-bit) Pro
CPU	1GHz or higher
Memory	1GB or more (Windows® 7, 8.1, 10 32-bit) 2GB or more (Windows® 7, 8.1, 10 64-bit)
HDD	40GB or more of free space
Display	1366 x 768 or higher resolution
Interface	USB port for U10 USB Network Interface and Software protection key
Software required	Adobe® Reader® 9.0 or later

For Remote side PC (client)

Web browser	IE11, Microsoft Edge recommended
Display	1366 x 768 or higher resolution (Set the resolution before use so that the resolution of remote operating PC monitor screen is higher than that of local side PC.)

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3-3 Installation flow

⚠ WARNING!

- Service Tool is tested to install and operate under new Windows environment.
  When program executional environment of Windows is corrupted or abnormal, or other softwares that interfere with the operation of Service Tool is installed or running, Service Tool may not install or run properly. It is usually extremely difficult to detect such conditions, if it occurs.
- Service Tool product is provided with softwares, drivers, components listed below.
  If the same kind of softwares, drivers, components with different version is installed on the same PC, Service Tool may not install or run properly.
  1) Microsoft® .NET Framework
  2) Microsoft® SQL Server® 2014 Express
- If “Program Files” folder is compressed or encrypted, Microsoft® SQL Server® 2014 Express cannot be installed. Release the settings before installation as follows:
  Start “Explorer” → right-click “Program Files” folder → select “properties” → click “Advanced…” → release the check marks of the “Compress or Encrypt attributes”.
- If the computer name and Windows log-in user name are the same, Microsoft® SQL Server® 2014 Express cannot be installed. In this case, change either of the names before the installation is performed.

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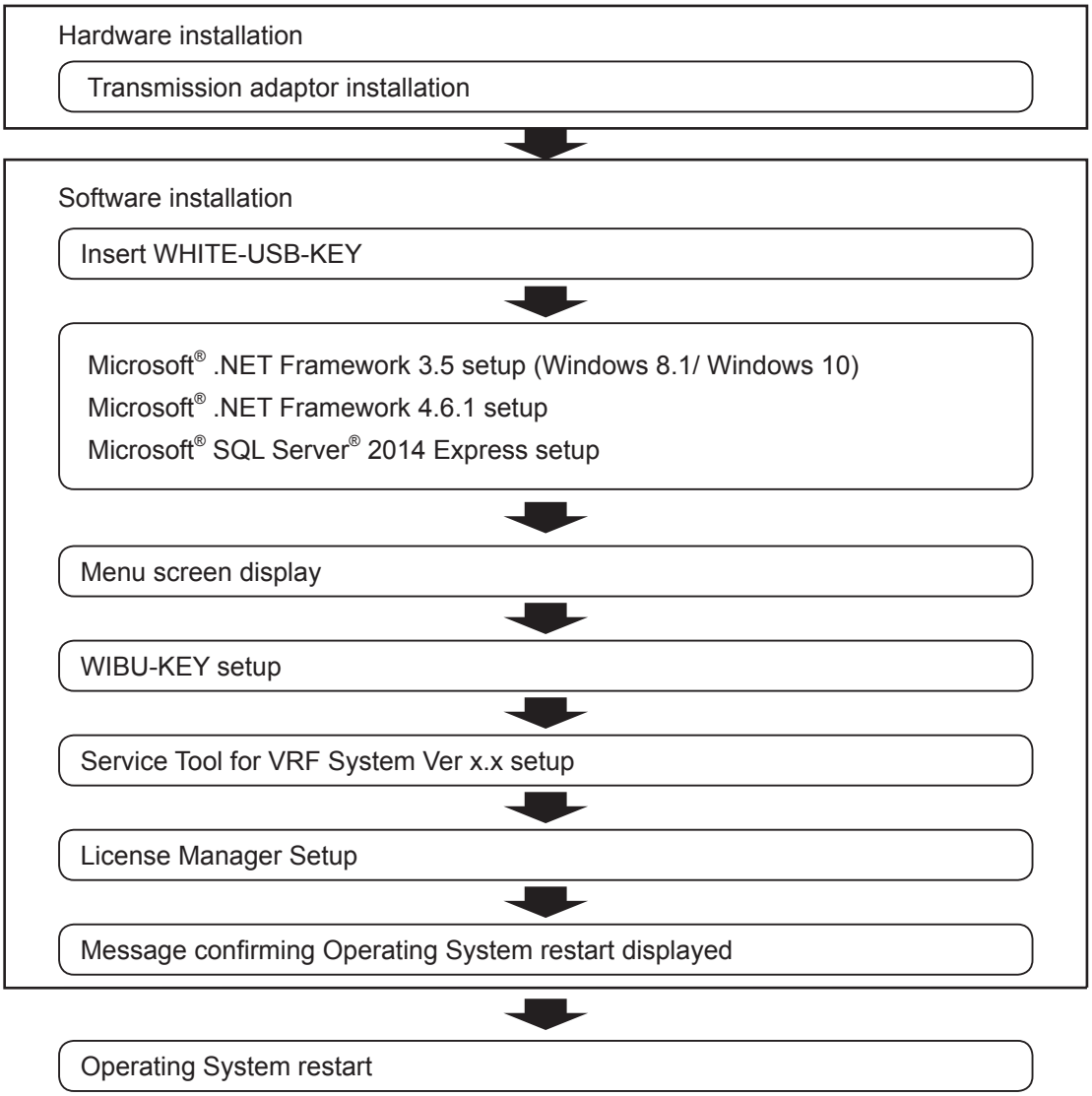

- Have installation performed by a user belonging to the Administrators group.

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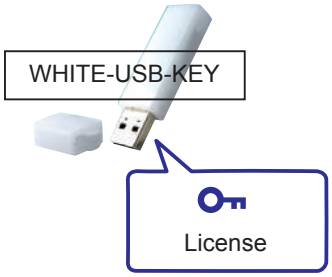
4. Software License

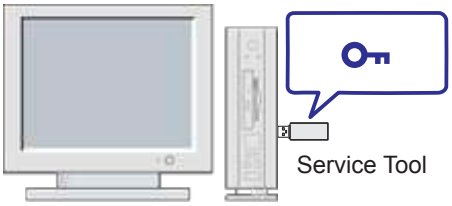
What is software license?

- The software license means the use acceptance of this product in the agreed-upon License Agreement.
- One software license is provided as “License” stored in WHITE-USB-KEY for each purchased product.

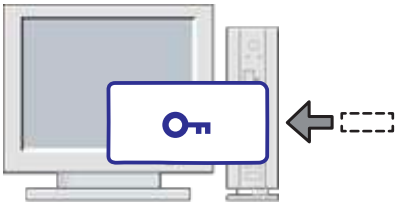


Service Tool

- For the “License” stored in WHITE-USB-KEY, it can be used by inserting WHITE-USB-KEY directly to a PC or it can be moved to a PC using “License Manager for VRF System”. If an option is not used, it is used in one of two methods shown below.



Used by moving WHITE-USB-KEY which stores license to a PC (status at the time of purchase)



Used by moving the license to a PC main unit

Note

- The conventional WIBU-KEY can also be used as it is, but the license of WIBU-KEY cannot be moved to PC. (Only conventional usage method is effective.)
- For details, refer to the manual of License Manager.

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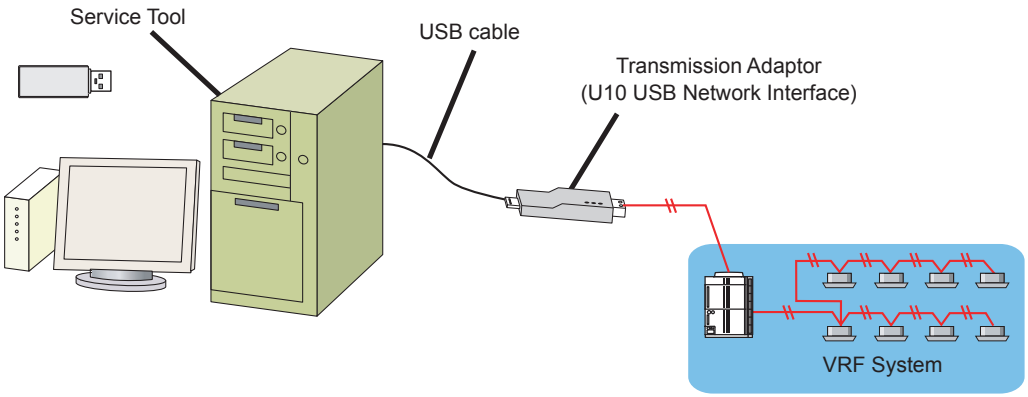
5. Hardware installation

5-1 Transmission adaptor installation

UTY-ASGXZ1



This transmission adaptor U10 USB Network Interface is connected using the USB port of a personal computer.
To use this product, turn on the power of the PC and install necessary drivers / software for this product (BEFORE connecting it to any USB port), following the ***QUICK START*** enclosed with this product.

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5-2 Turning on the power

⚠ WARNING!
Do not turn on the power until all installation work is completed.

Once the wiring has been installed, the power can be turned on. Follow the procedure below for turning on the power.

① Turn on the power for all connected indoor units.

② Turn on the power for all connected outdoor units.

③ Connect U10 USB Network Interface
(Driver must installed following the procedure in “par. 5-1 Transmission adaptor installation” before connecting). *1

Note *1 Make sure that USB equipment (USB hub, etc.) that this product is connected to, is not overloaded (power supplied thru the interface does not exceeds the maximum limit).

④ Turn on the power for Service Tool PC, if it is not yet turned on.

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6. Software Installation & Removal

6-1 Installation Notes

Before starting the installation of this product, check each of the followings.

- Install Adobe® Reader® (Ver. 9.0 or later) prior to the installation. (Adobe® Reader® does not come with this product).
- If one of the following product is already installed, remove it first. Refer to “par. 6-3 Software Removal” for how to remove these products.
  - Service Tool for VRF System (UTR-YSTC) Ver. 3.0 or later
  - Service Tool for VRF System (UTY-ASGX) Ver. 1.0 or later
  - Service Tool for VRF System (UTY-ASGXZ1) Ver. 2.0 or later
  - Web Monitoring Tool for VRF System (UTR-YMSA) Ver. 3.0 or later
  - Web Monitoring Tool for VRF System (UTY-AMGX) Ver. 1.0 or later
  - Web Monitoring Tool for VRF System (UTY-AMGXZ1) Ver. 2.0 or later
- Do not insert WIBU-KEY (Software protection key) enclosed with this product to the PC until product installation is completed.
- You are required to login to the computer as Administrator (or equivalent) to the PC to install this product.
- Stop all running programs before you start the installation.
- If Anti-Virus software product is installed, temporarily disable the software during the installation of this product.

- When the screen resolution is 1366 x 768 pixel, perform the following setting.
  [Windows Taskbar] → Right click → [Properties] → [Taskbar] in the window →
  Check “Auto-hide the Taskbar”.

- To ensure continuous normal operation of this software, set the PC so that it would not go into an energy saving mode such as standby mode, sleep mode or execute hibernation.
  If the PC goes into a standby, sleep mode or execute hibernation, this software may not function properly.
  To avoid going into the energy saving or hibernation, perform the following settings.

  Right click the desktop to select “Display settings” and click “Power & Sleep” to set the “Sleep” to “Never”.
  * If there is no setting item for “Sleep”, close the window without setting any items.
    As for the "Turn off the display" setting of Windows, you can configure it as usual.

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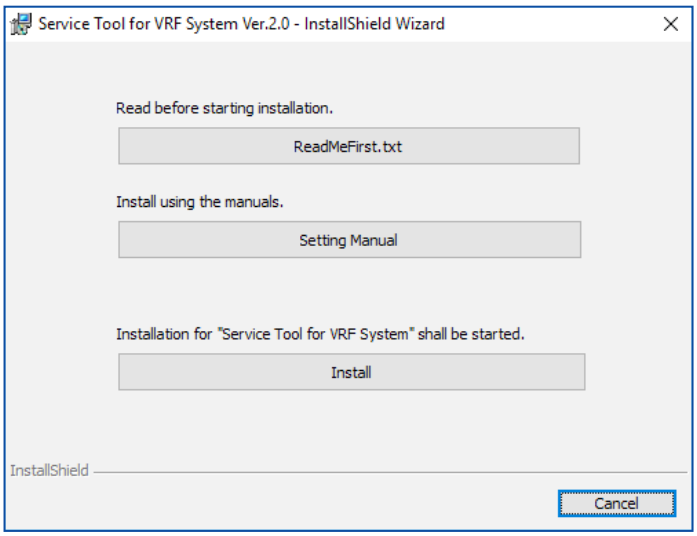
6-2 Software Installation

① Insert the WHITE-USB-KEY for the “Service Tool for VRF System Ver. x.x” into the USB port of the PC you are about to install.

② Double click the “setup.exe” stored in the root directory of the WHITE-USB KEY drive with the mouse.
After that, the following installation menu screen is displayed.
To continue installation, click the [Install] button.

* Before starting installation, always check the contents of the Setting Manual.

* The following programs are installed according to the PC environment before the following screen is displayed. (It takes a little time to do it.)
• Microsoft® .NET Framework 3.5 (for windows® 8.1 and 10, see *.) & Microsoft® .NET Framework 4.6.1
• Microsoft® SQL Server® 2014 Express



Note

Before beginning installation, close all of the applications not related to the installation (Explorer, etc.).
This is done to prevent the installation from being stopped due to the installation screen becoming hidden behind the other application screens during the installation.

* Install .NET Framework using the chosen method (for Windows 8.1 and 10 only).

The following screen will not be displayed for Windows other than 10. Even for Windows 10, it will not be displayed if .NET Framework has already been installed.

- Install Online (when the PC is connected to internet)
  Select “Install from Internet” and click [Install] button.
  .NET Framework 3.5 will be downloaded from Microsoft site and will be installed.

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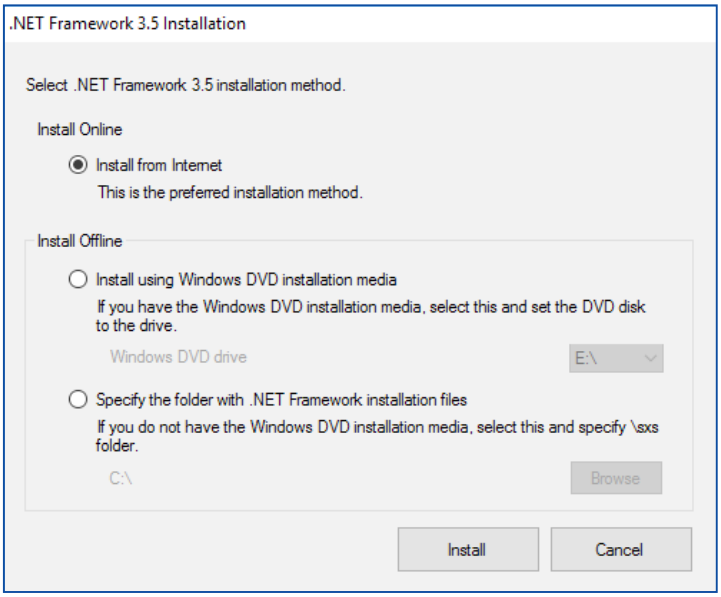
- Install Offline (when the PC is not connected to internet)
  When the PC is not connected to the internet, the installation media of the Windows 10 you are using is required to install .NET Framework 3.5. Please have the media ready before continuing the following steps.

  If you have the installation DVD of the Windows you are using, select “Install using the installation DVD of the Windows you are using”. If you have other types of Windows installation media, check that the “sxs” folder that holds the .NET Framework components exists within that media, and select ”Specify the folder with .NET Framework installation files”.

  - Install using the installation DVD of the Windows you are using
    Insert the installation DVD of the Windows you are using to the DVD drive.
    Select that drive and click [Install] button.
    When the installation of .NET Framework 3.5 completes, a message “Set the System Tool DVD installation media” is displayed. Insert the SERVICE TOOL DVD again.

  - Specify the folder with .NET Framework installation files
    Specify the “sxs” folder and click [Install] button.
    (The “sxs“ folder is where the .NET Framework components are stored).
    Ex. D:\windows8\sources\sxs



Note Installation of .NET Framework 3.5 requires few minutes to complete. Do no operate the screen until the installation is completed.

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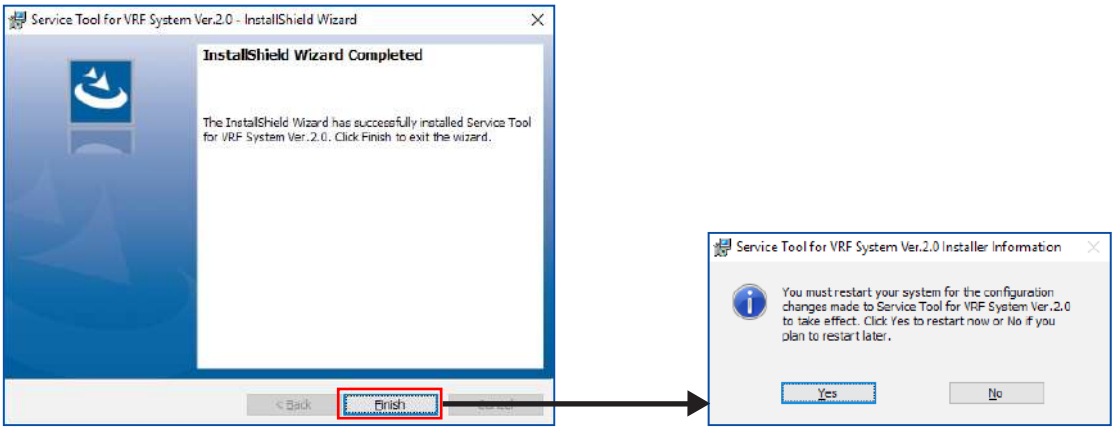
③ After installation starts, follow the direction on the screen, which will guide you through the installation.

Note If Windows is rebooted during the installation, execute the installation again from ②.

④ When installation program ends, “Windows Restart Confirmation Message” will appear. Complete the remaining setup procedures according to the description in the Setting Manual displayed on the screen first.



⑤ After all the setup is completed, restart the Windows®.

Note

- Operation to be performed after inserting WIBU-KEY (Software protection key) and when the “Found New Hardware Wizard” screen appears.
  1 From the 3 Windows Update Options, select “No, not this time”. Then click [Next] button to continue. This dialog may not always show.
  2 Select “Install the software automatically (Recommended).”. Then click [Next] button to continue.
  3 When completion dialog appears, click [Finish] button.
- When installing on Windows® 7 , 8.1, or 10, you may be asked for permission to continue with the operation.
  In such cases, select “continue”.
- Some operation may take long time . Please wait at least a couple of minutes.

- For the License Manager, refer to the manual of License Manager.

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6-3 Software Removal

Before executing this procedure, be sure to stop the Service Tool program if it is running.
Also, make sure that WIBU-KEY is not inserted to the PC.

6-3-1 Windows® 7, 8.1 and 10

① Open [Start] → [Control Panel] → [Program and Features] and then remove the following programs.

* For Windows® 7, 8.1, and 10, [Control panel] → set the view mode to “Large Icons” or “Small Icons”.

② Select the program to be removed from the list below and click [Uninstall] button.

- When updating this tool

Target software	Program name
Service Tool	Service Tool for VRF System Ver x.x
Web Monitoring Tool	Web Monitoring Tool for VRF System Ver x.x

- When deleting all including the software related to this tool
  (When stopping use, etc.)

Target software	Program name
Service Tool	Service Tool for VRF System Ver x.x
Web Monitoring Tool	Web Monitoring Tool for VRF System Ver x.x
Microsoft® SQL Server® 2014 Express For Removal, perform the contents of *1 in advance.	Microsoft® SQL Server® 2008 Setup Support Files Microsoft® SQL Server® 2012 Native Client Microsoft® SQL Server® 2014 Microsoft® SQL Server® 2014 Setup(English) Microsoft® SQL Server® 2014 Transact-SQL ScriptDom Microsoft® VSS Writer for SQL Server® 2014 SQL Server Browser for SQL Server® 2014
U10 USB Network Interface driver	Echelon Open LDV x.x
WIBU-KEY	WIBU-KEY Setup (WIBU-KEY Remove)

Note

- Programs to be deleted depends on the version of Service Tool or Web Monitoring Tool that is already installed. Not all of the programs listed above may appear.
- If you have removed Microsoft® SQL Server® 2014 Express, make sure that you have deleted the following installation folder.
  [Target folder] C:\Program files\Microsoft SQL Sever\MSSQL12.SQLEXPRESS
  When OS is 64 bit, the folder is C:\Program files(x86)\Microsoft SQL Server\MSSQL12.SQLEXPRESS.

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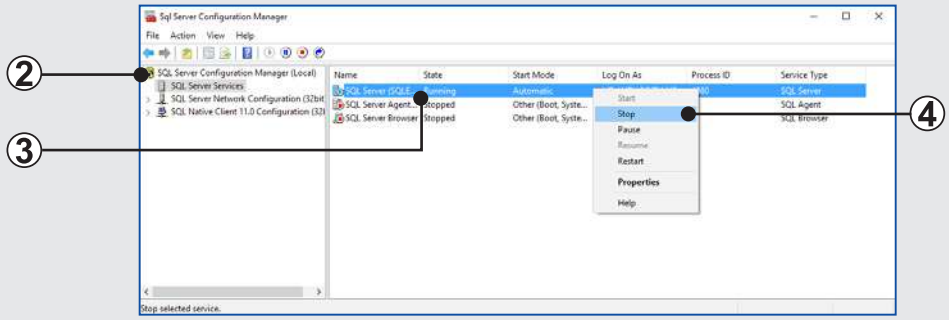
*1

① Select the menu items in order of “start” → “All Programs” or “All apps” → “Microsoft SQL Server 2014” → “SQL Server Configuration Manager”.

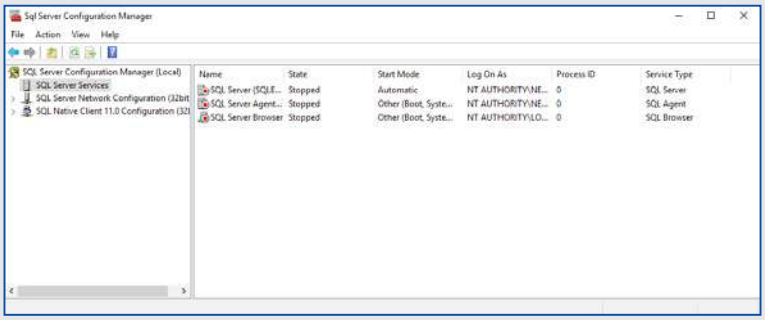
② Select “SQL Server Services”.

③ Right-click “SQL Server (SQLEXPRESS)”.

④ Select “Stop”.



⑤ When [×] is clicked, “SQL Server Configuration Manager” is completed.



Note When updating this tool, this operation is unnecessary.

③ Restart the Windows.

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7. Troubleshooting

No.	Question Answer
1.	When an error, etc. occurs at SQL Server 2014 installation while this application is installed
	For the identification of reason and the countermeasures, check the contents of log file in the following folder. C:\Program Files\Microsoft SQL Server\100\Setup Bootstrap\Log When OS is 64 bit, the folder is C:\Program Files(x86)\Microsoft SQL Server\100\Setup Bootstrap\Log.
2.	The following error message is displayed during installation of this tool and installation is not complete. What should I do? “Error 1722.There is a problem with this windows Installer package. A program run as part of the setup did not finish as expected. Contact your support personnel or package vendor. Action [application name], location:”
	Wintrust.dll is re-registered by the following procedure. • Start the Command Prompt of Windows. Start → All Programs → Accessories → Command Prompt * Start the Command Prompt by “Run as administrator” of the right click menu. • Enter the following command and press the Enter key. regsvr32 Wintrust.dll Press Enter key

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