



VIA Xsquare

Version 4.9 | November 2023

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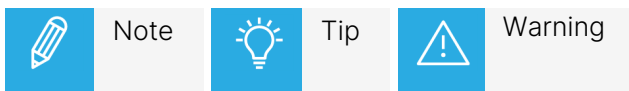
User Manuals on EVS Website

The latest version of the user manual and other EVS product documentation can be found on the EVS documentation portal. The documentation portal can be accessed through the VIA Portal on the following webpage: <https://viaportal.evs.com/>.

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ICONOGRAPHY



What's New?

In the Installation Manual the icon **NEW !** has been added next to the text to highlight information on new and updated features in version 4.9.

Changes linked to new features in VIA Xsquare version 4.9 do not require an update of the installation manual.

The full list of modified and new features in version 4.9 is available in the release notes.



It is essential to acquire the new VIA licenses in order to run the XTAccess 4.0 and higher servers with VIA Xsquare 4.0 and higher versions. Please contact EVS Support to do this.



It is highly recommended to perform a DB backup of your Xsquare 3.x software before upgrading to VIA Xsquare 4.0 and higher versions.

1. VIA Xsquare Overview

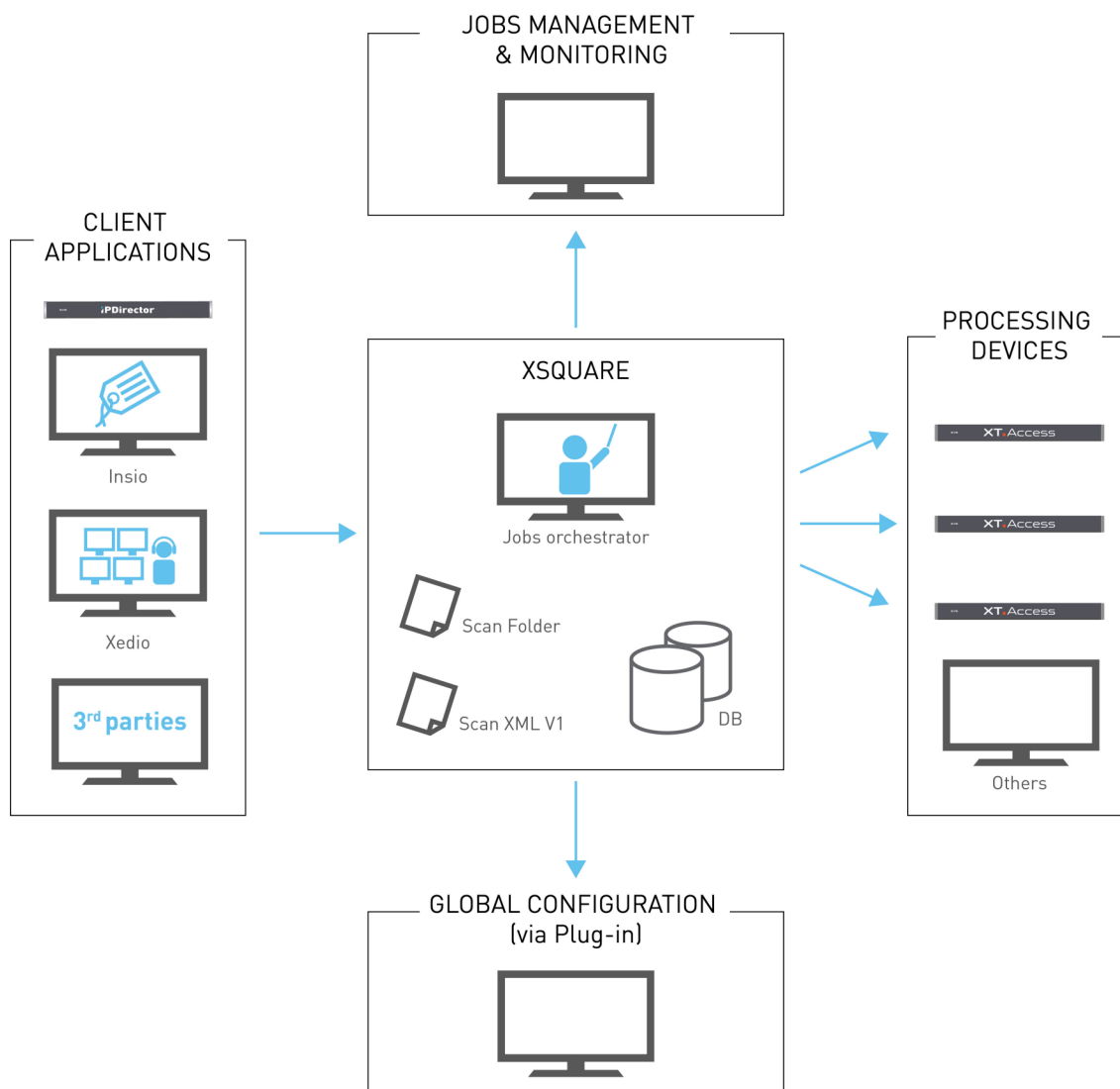
The VIA Xsquare solution is an orchestrator, which receives job requests and dispatches them (taking into account load balancing, JOB API, etc.) to the best VIA Xsquare agent, i.e. a VIA Xsquare agent available and able to manage the requested job (transcoding, rewrapping, etc).

VIA Xsquare agents are **XTAccess** applications.

All jobs for XTAccess will go through VIA Xsquare, which is the central point to control XTAccess. XTAccess is no longer directly visible to users therefore.

The main advantages of this architecture are the following:

- One global Orchestrator for all jobs
→ improvement of jobs load balancing, dispatching and management.
- One global configuration tool
→ simplification of the engine configuration as well as the target configuration.
- One global monitoring tool
→ simplification of overall job monitoring
- Additional modules (e.g. Scan Folder) can be added to VIA Xsquare
→ modularity.



Clients (IPD, 3rd party, Xedio, etc.) that want to create a job (transfer of media from A to B) use only a single interface (GUI, API, configuration): **VIA Xsquare.**

2. Requirements

Hardware Requirements

VIA Xsquare has to be installed on a server hardware that meets the following requirements:

- **CPU:** CPU Intel i7
- **RAM:** 8 GB (64 GB recommended)
- **VGA:** 1024x768
- **HDD:** at least 2 GB free space
- **Network:** GigE board

Software Requirements

VIA Xsquare 4.9 is compatible with one of the following operating systems:

- Windows 10 64 bits (recommended windows 10 version LTSC or CBB 1607)
- Windows Server 2016 64 bits

VIA Xsquare 4.9 requires the following software:

- .Net Framework version 7.

3. Software Installation

3.1. Full Installation vs. Light Installation

The following VIA Xsquare installers are provided:

- The VIA Xsquare full installer, to install the complete VIA Xsquare application suite and required EVS services, as well as other software and services required to be able to work with the VIA Xsquare Suite (software requirements).

You should use the full installer for a new installation, an upgrade to a major release (e.g. from version 3.x to 4.x), or when any of the required external software needs to be updated to be compatible with the VIA Xsquare version.

The following executable files are available:

- File compatible with Windows 10 with the following name pattern: `Xsquare_Suite_x.x.x.x_Setupwin10_full_sql2016.exe`.

SQL Server 2016 is used with Windows 10 and is included in this executable.

- File compatible with Windows 10 with the following name pattern: `Xsquare_Suite_x.x.x.x_Setupwin10_full_sql2019.exe`.

SQL Server 2019 is used with Windows 10 and is included in this executable.



Please ensure that you have copied all three installation files, (i.e. the .exe file, along with the files ending with `...-1.bin` and `...-2.bin`), to be able to complete the installation.



It is highly recommended to perform a DB backup of your Xsquare 3.x software before upgrading to VIA Xsquare 4.0. Automatic downgrade from VIA Xsquare 4.0 to Xsquare 3.x is not supported. You will be able to recover a 3.x setup only by uninstalling 4.0, then reinstalling 3.x and restoring the 3.x DB.

- The VIA Xsquare light installer, to upgrade the VIA Xsquare application suite. It includes the VIA Xsquare Suite and other EVS software components, but no external software that may be required, which should be installed before upgrading.

The executable file has the following name pattern: `Xsquare_Suite_x.x.x.x_Setup_light.exe`.

You can use the light installer for a minor upgrade (e.g. from version 4.0 to 4.1) if all required external software is up-to-date on your workstation.



3.2. Installation Types

During the installation process, you will be able to choose from the following installation types:

- **StandAlone setup:** The installer will install VIA Xsquare, XTAccess and all the required software. The installer will also automatically associate XTAccess with VIA Xsquare. This Installation mode will not require further confirmations or information.
- **Orchestrator setup:** The installer will install VIA Xsquare and all the required software but not XTAccess. This Installation mode will not require further confirmations or information.
- **Agent setup:** The installer will install XTAccess and all the required software but not VIA Xsquare. This Installation mode will not require further confirmations or information.
- **Advanced setup:** The installer will show you all the software installed on your computer and you will be able to select manually the software to install.

This Installation mode will require further confirmations and information for each installer. This mode should be used by EVS experts only. In this mode, the following information is displayed:

- version number of installed components;
- version number of components available in the installation package;
- **Install** and **Remove** buttons for each component that make it possible to install or uninstall individual components.

3.3. Installing VIA Xsquare



When you install the FTA for C-Next in the advanced mode, you will need to upgrade .Net framework to version 4.7.

To install the VIA Xsquare Suite using the full installer,

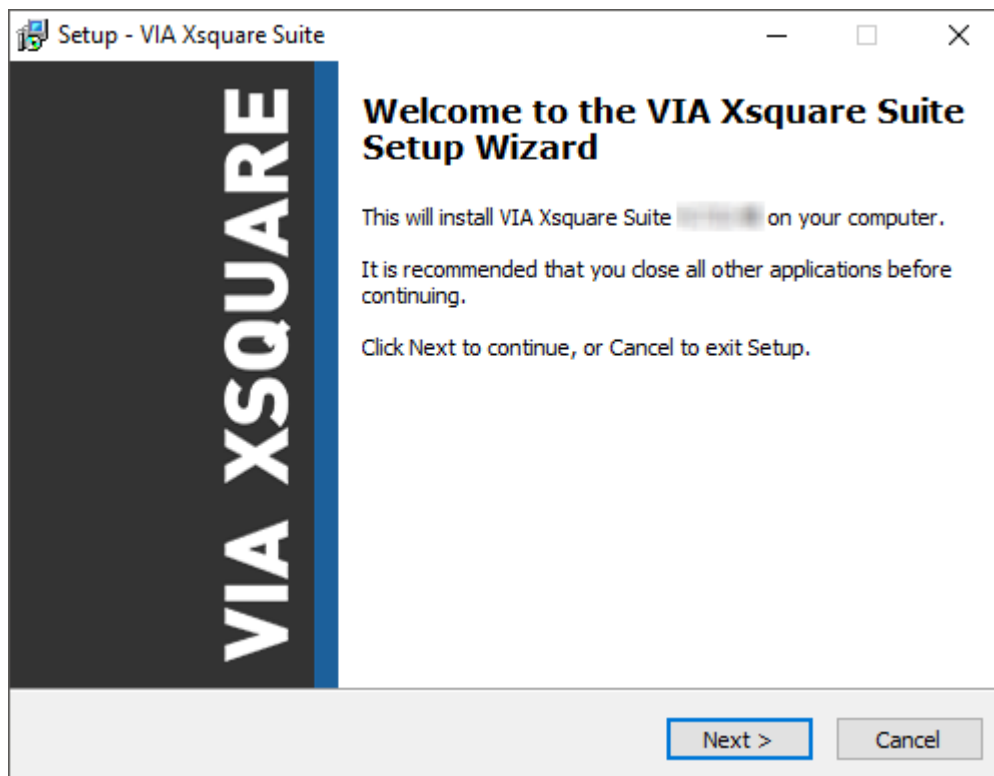
1. Copy the requested installer file in a temp directory (e.g. C:\Install Software\Xsquare\).

See section "Full Installation vs. Light Installation" on page 1 for more information on the various executable files.

2. Double-click the executable file to launch the VIA Xsquare Suite setup wizard.

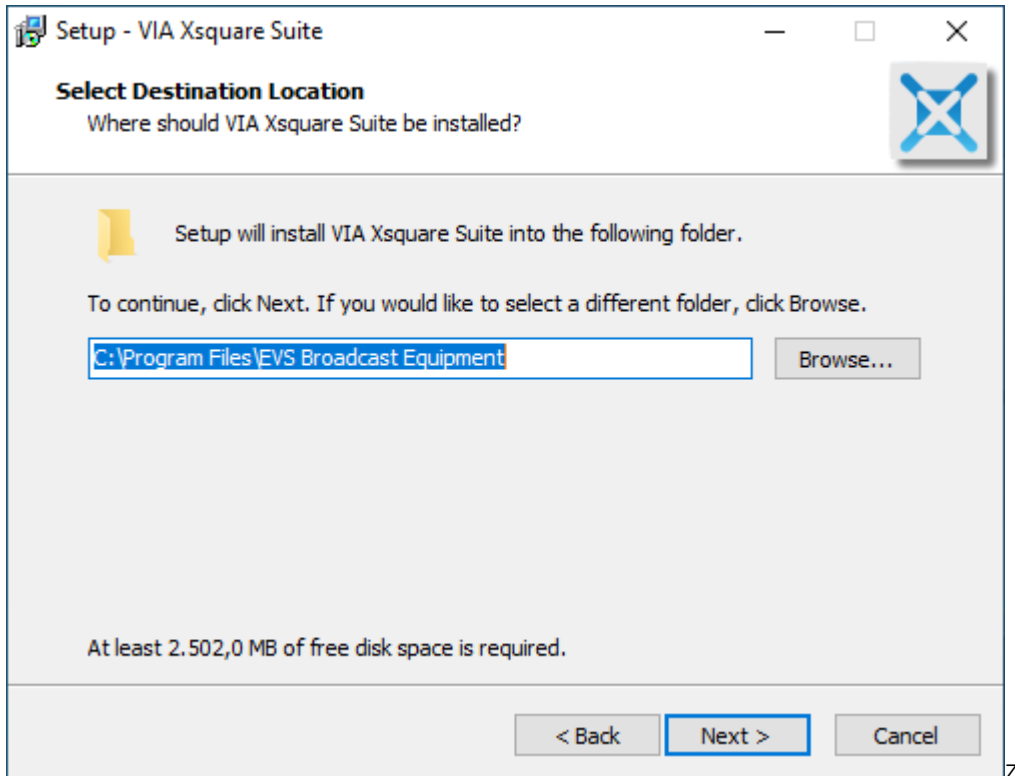
The Welcome window appears.

3. On the Welcome window, click **Next**:



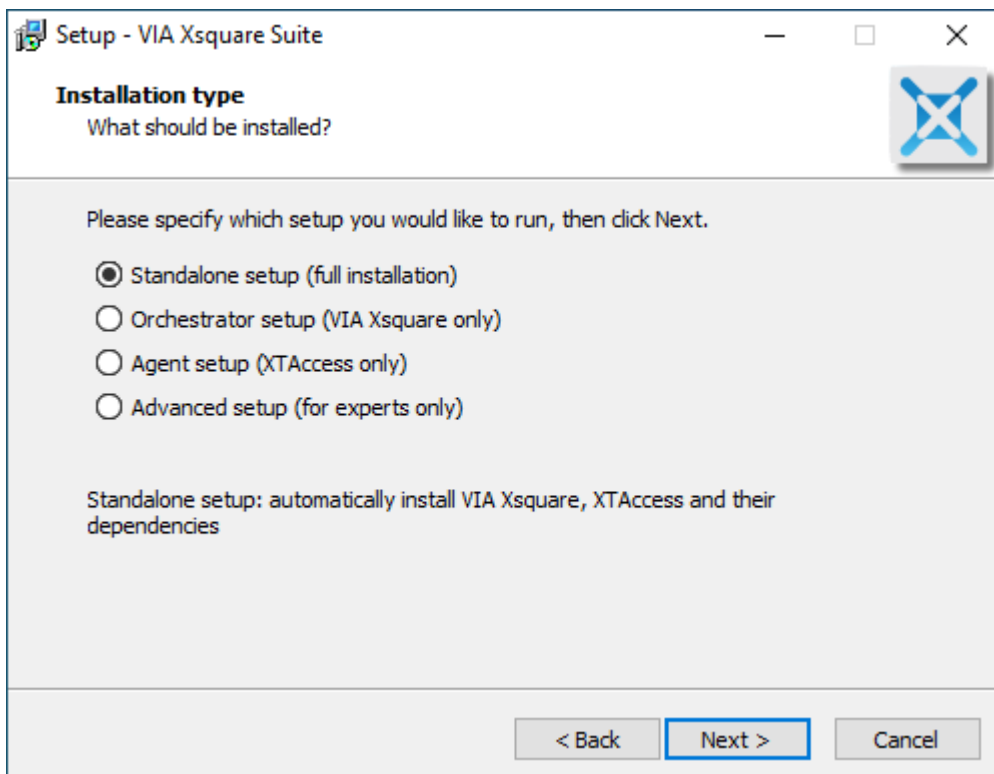
The Select Destination Location window appears.

4. In the Select Destination Location window, select the destination directory to install the new software and click **Next**:



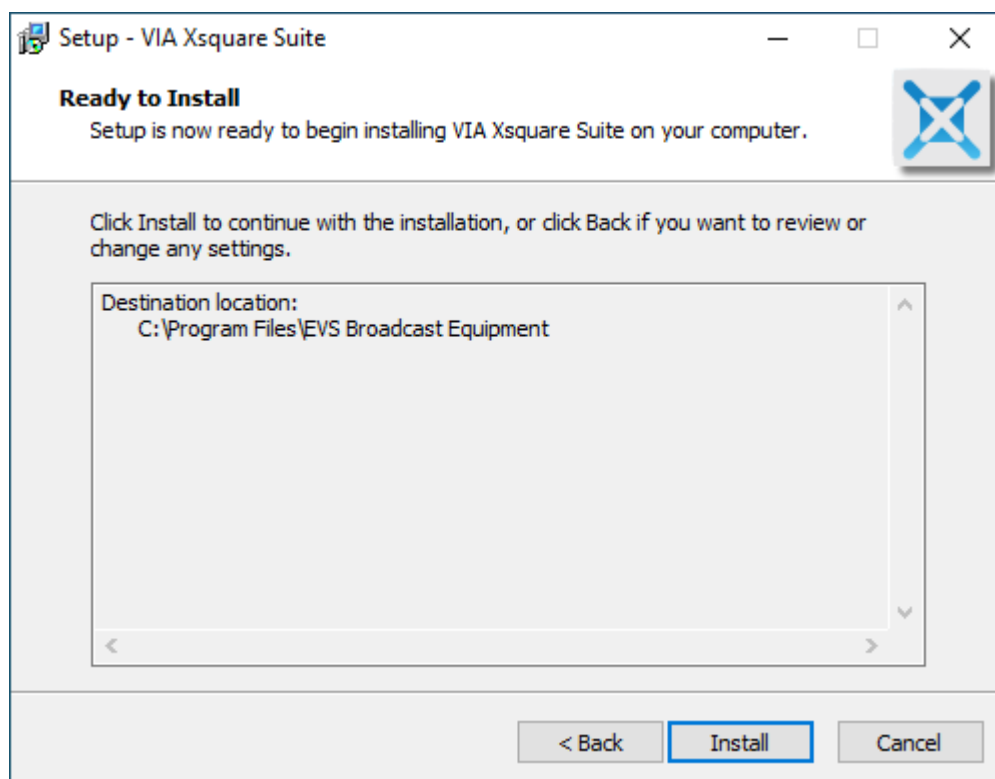
The Installation Type window appears.

5. In the Installation Type window, select an installation type (See section "Installation Types" on page 2) and click **Next**.



The Ready to Install window appears.

6. The Ready to Install window summarizes the selected location for VIA Xsquare, and the database name. Click **Install**.



The Installing window opens.

7. In the Installing window, two behaviors are possible:
 - If you have selected the **Standalone, Orchestrator** or **Agent** setup, the various installation components are called and installed automatically one after the other.

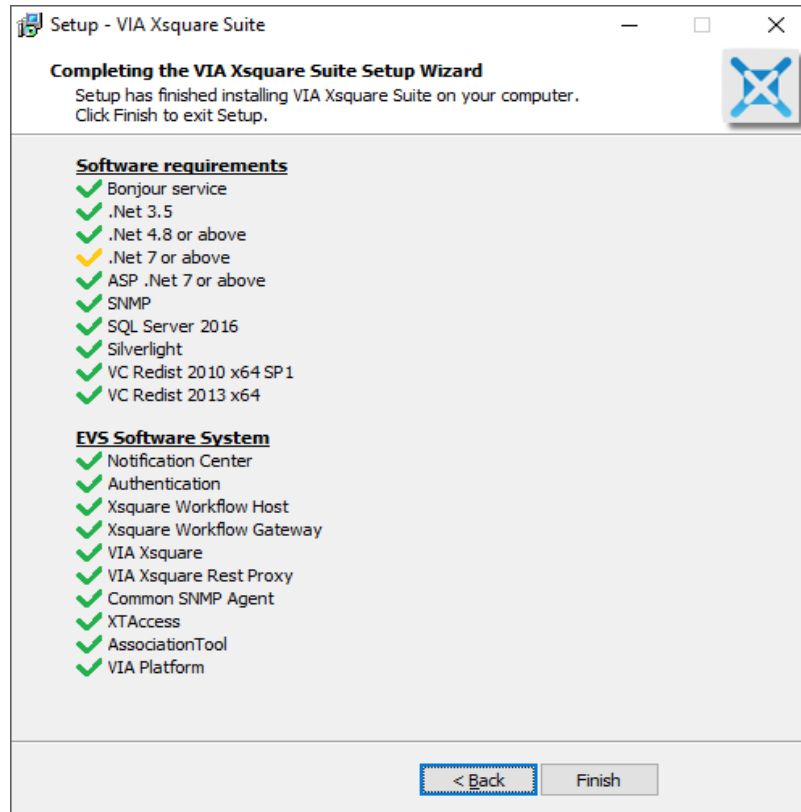
The components are checked as they are installed. If one of the components fails to install, a red cross is displayed next to it. You will have to reinstall the component using an Advanced setup afterwards, or contact your system administrator.



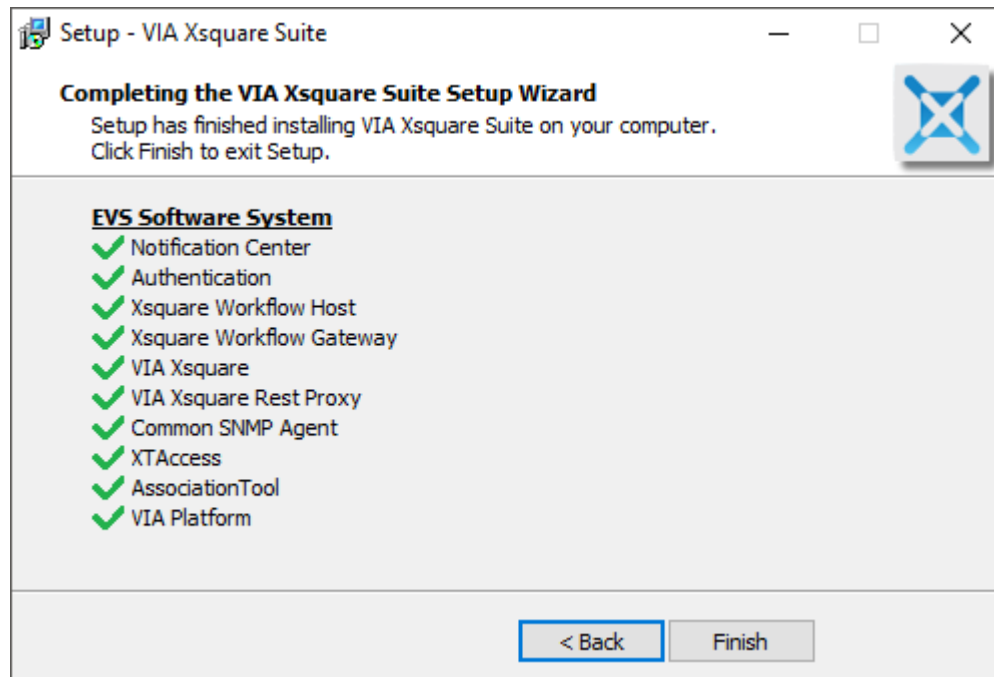
For a full installation, you may be requested to restart your computer once some external software components have been installed.

When your computer has restarted, launch the VIA Xsquare installation wizard again and continue the installation of the EVS Software System components.

The following screenshot shows the Installing window during a full installation in Standalone mode, when all the components have been upgraded:

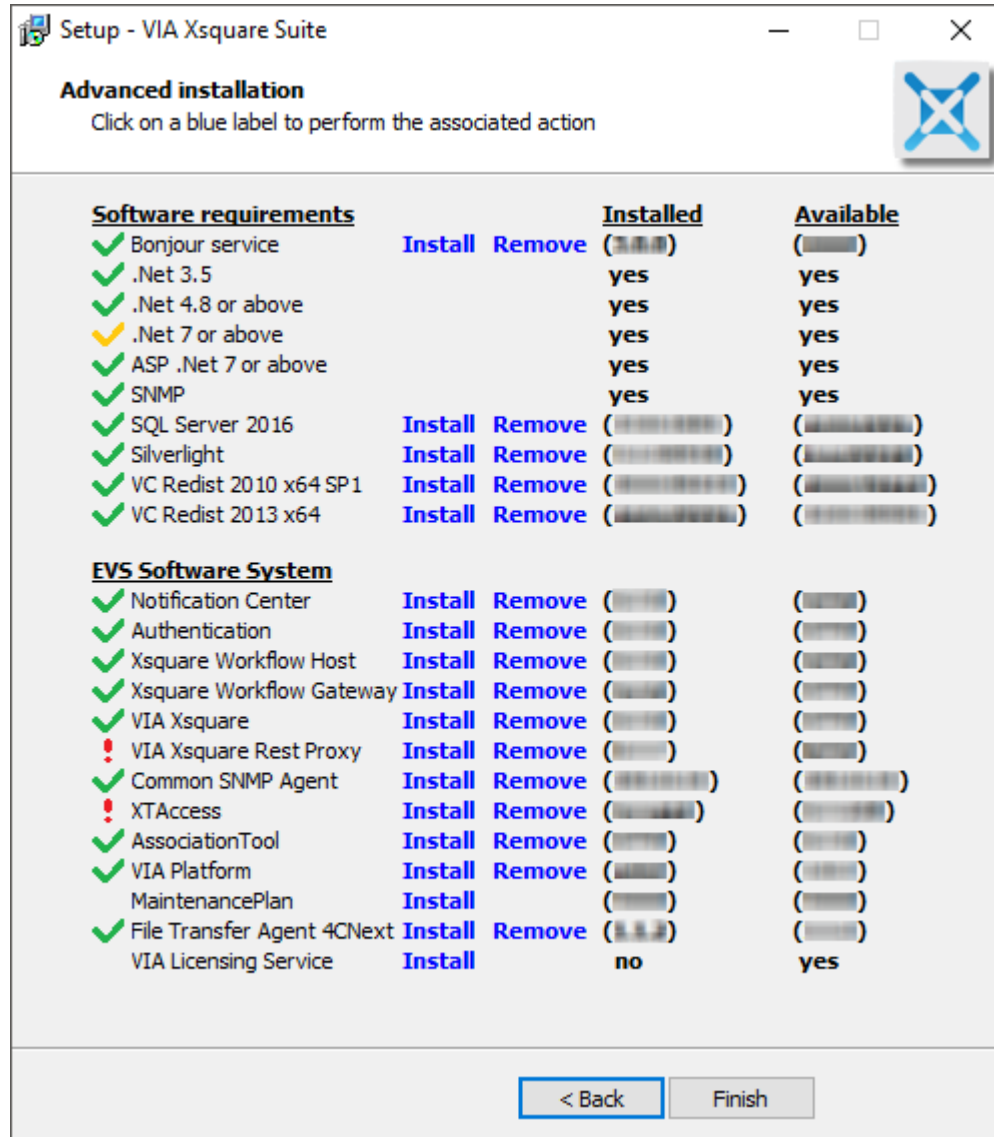


The following screenshot shows the Installation window in a light installation in Standalone mode when all the EVS software components have been upgraded:



- If you have selected the Advanced setup, you need to manually click the **Install** or **Remove** buttons next to each installation component to install the upgraded version or remove it.

The following screenshot shows how the Installing window looks like during a full installation in Advanced mode:



Icon	Description
	Not installed
✓	Last version installed
✓	The installed version is newer than the available version.
!	The installed version is older than the available version.

8. When all the necessary components have been installed, click **Finish**.

Once the installation is complete, the following application shortcuts are created on the desktop:



VIA Xsquare configuration icon:



XTAccess icon:



Association Tool icon:



VIA Licensing Manager icon:

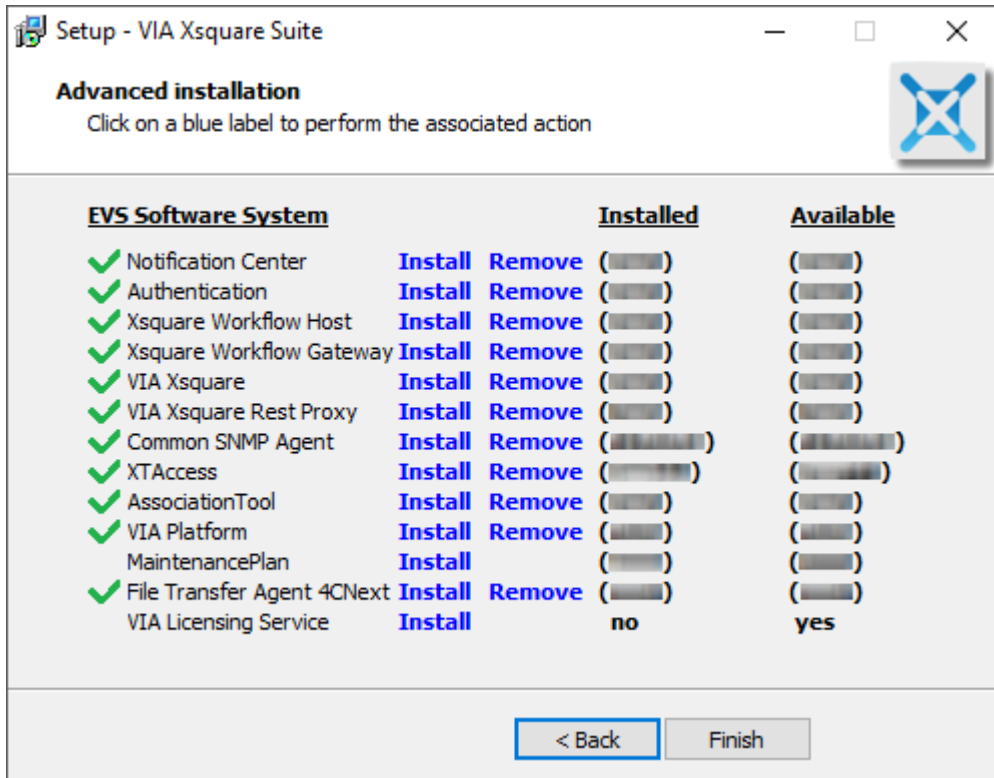


When VIA Xsquare is running, XTAccess always needs to be started. The small XTAccess icon in the notification area (right) of the taskbar is displayed when the application is open.

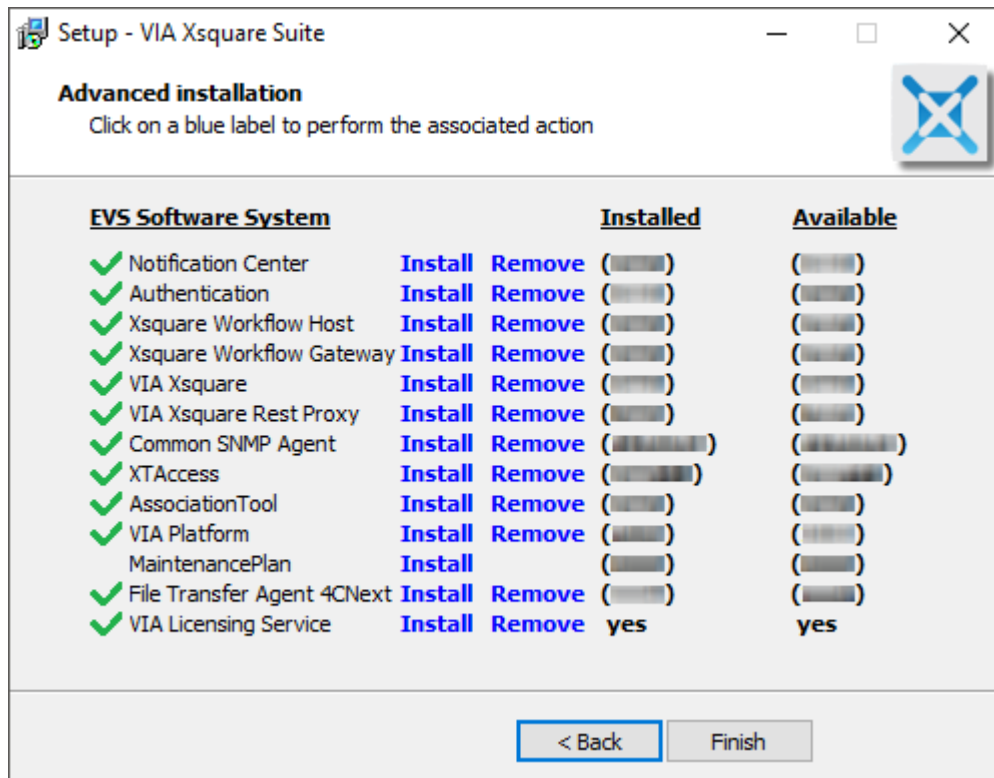
3.4. Installing VIA Licensing Service

To install the VIA Licensing Service using the light installer in Advanced mode,

1. Launch the VIA Xsquare light installation wizard and follow the installation steps 1 to 3 as described in the main installation procedure in section "Installing VIA Xsquare" on page 3.
2. In the Installation Type window, select **Advanced Setup** and click **Next**.
3. In the Advanced Installation window, select **Install** next to **VIA Licensing Service**.



4. In the Advanced Installation window of the VIA Xsquare Suite installer, you will see the VIA Licensing Service is now installed. Click **Finish** to exit the installer.



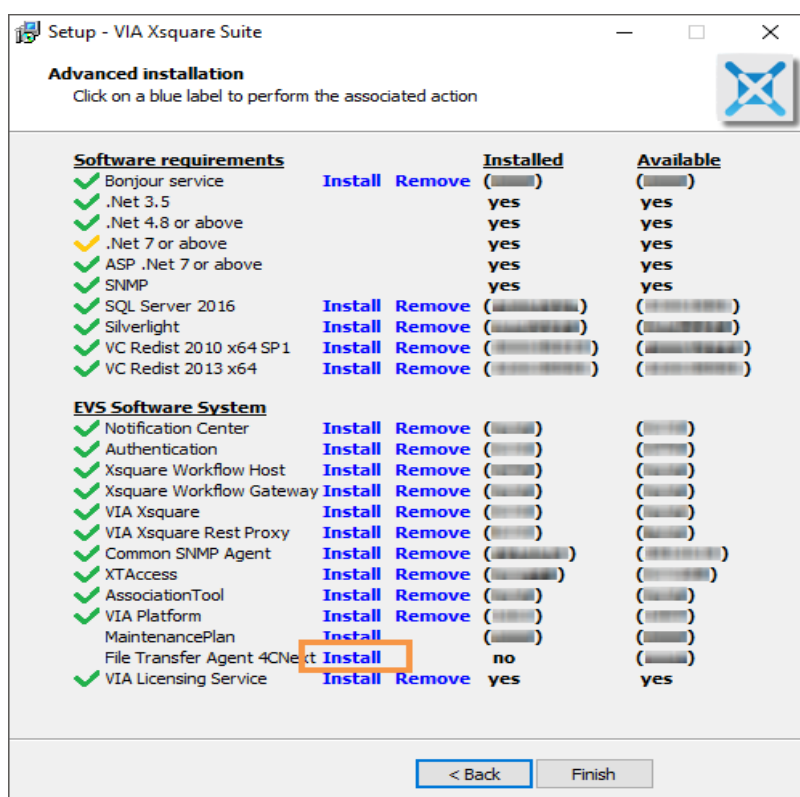
To manage licenses, please refer to chapter "VIA Licensing Management" on page 16.

3.5. Installing FTA for C-Next

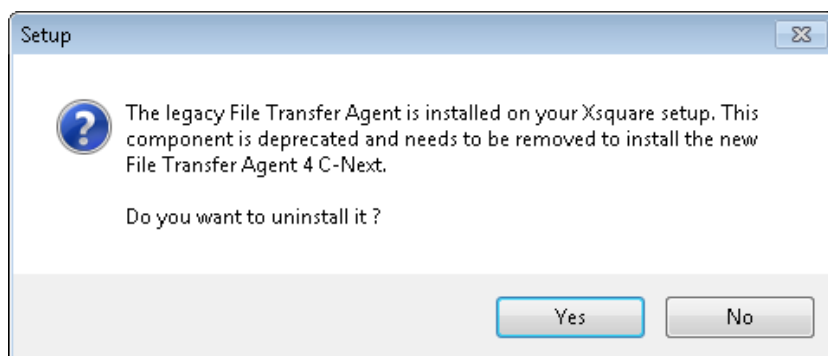
If you need to upgrade VIA Xsquare, first launch the appropriate VIA Xsquare installer to upgrade the whole VIA Xsquare Suite, and potentially any required external software.

Once you have upgraded VIA Xsquare, proceed as follows to install the FTA agent:

1. Launch the VIA Xsquare light installation wizard and follow the installation steps 1 to 3 as described in the main installation procedure in section "Installing VIA Xsquare" on page 3.
2. In the Installation Type window, select **Advanced Setup** and click **Next**.
3. In the Advanced Installation window, select **Install** next to **File Transfer Agent 4CNext**.

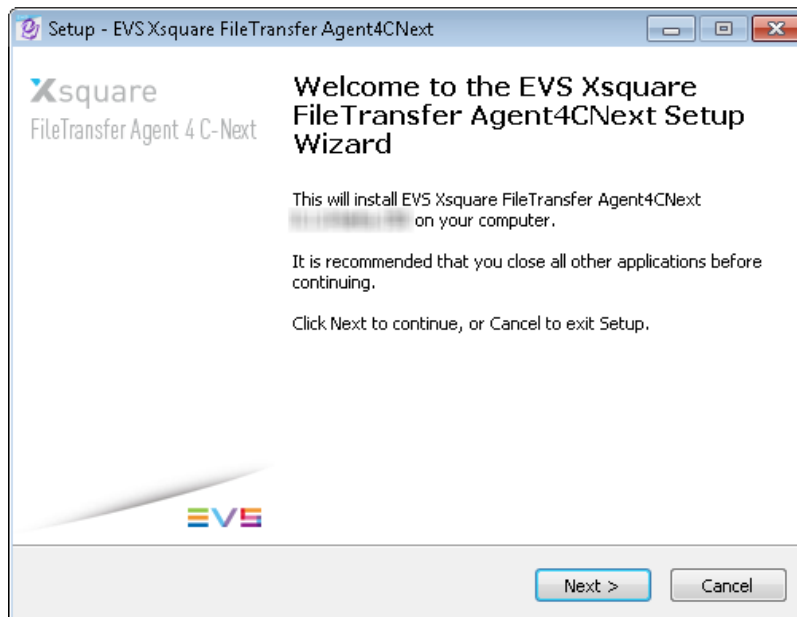


4. If a legacy File Transfer Agent is still installed on your VIA Xsquare setup, you will be asked to uninstall it. Click **Yes** to do so:

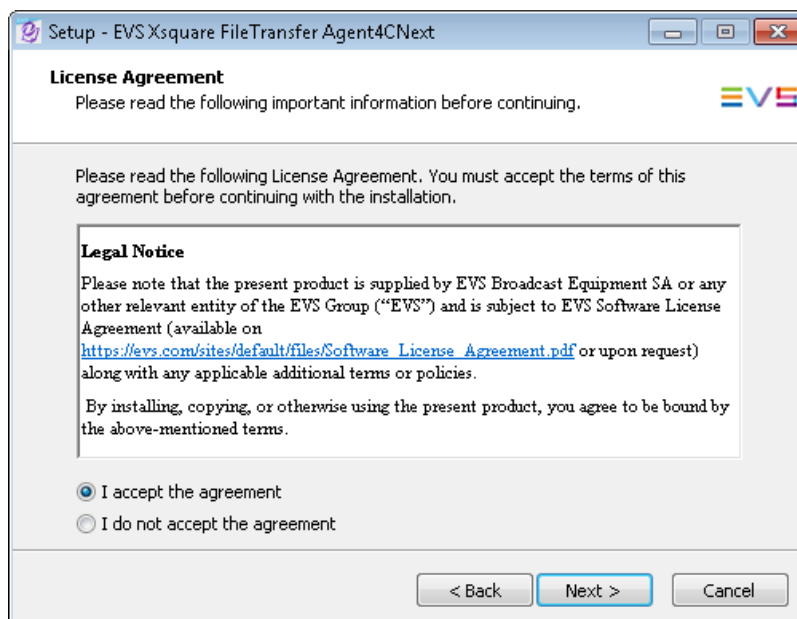


The File Transfer Agent Setup wizard opens.

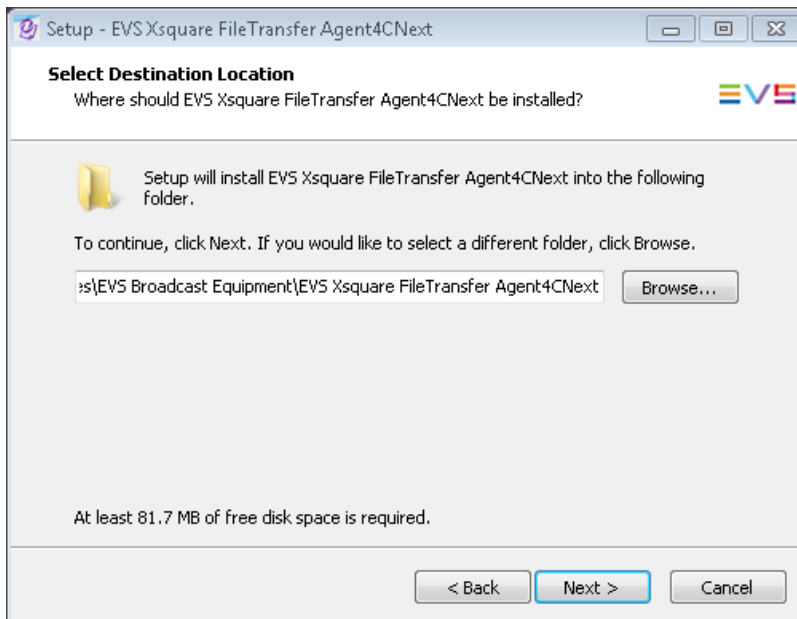
5. In the Welcome window, click **Next**.



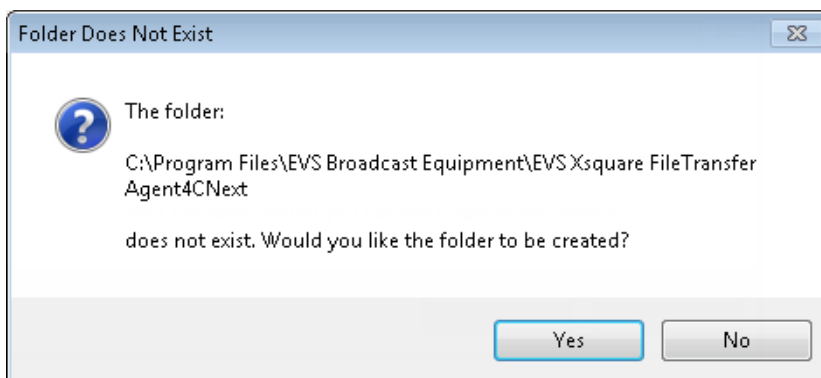
6. In the License Agreement window, read the agreement and accept it:



7. In the Select Destination Location window, select the destination directory to install the FTA for C-Next and press **Next**:

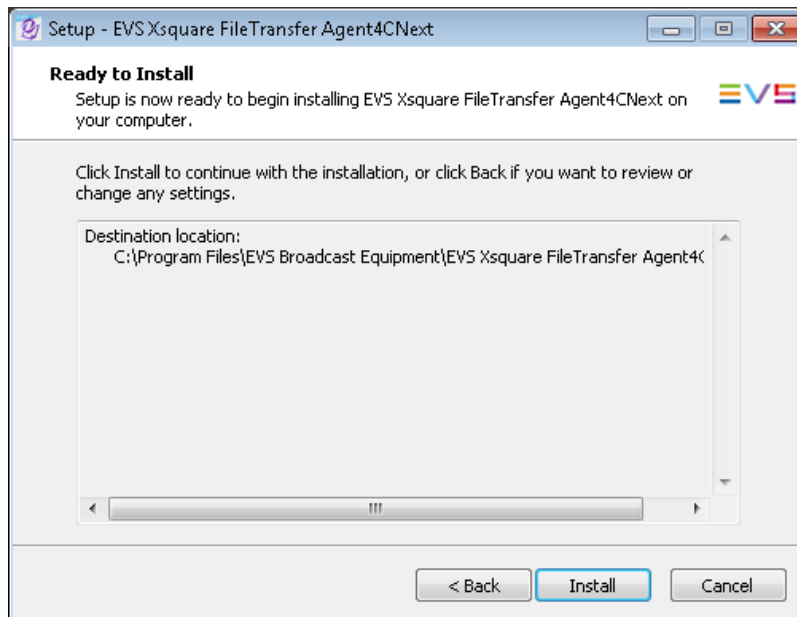


8. If you install the FTA for C-Next for the first time, click **Yes** in the following message to confirm you want to create the specified folder:

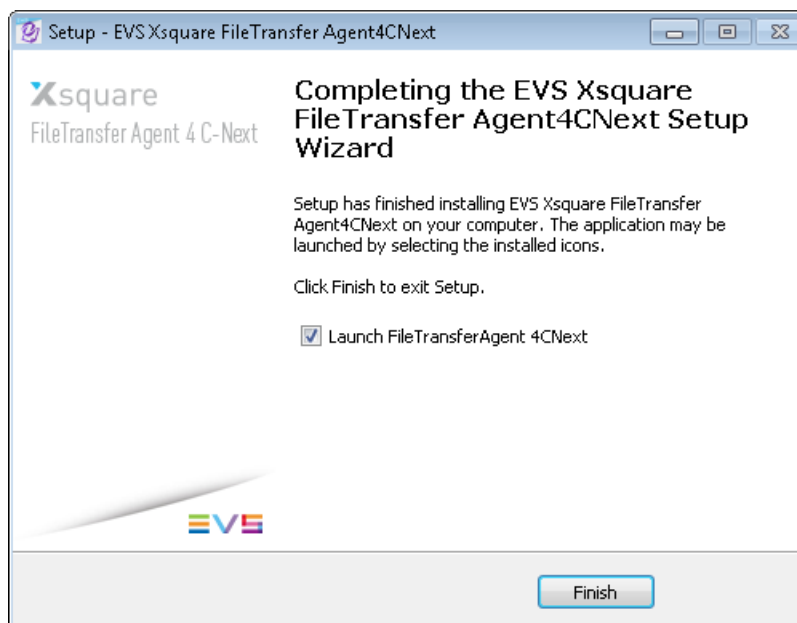




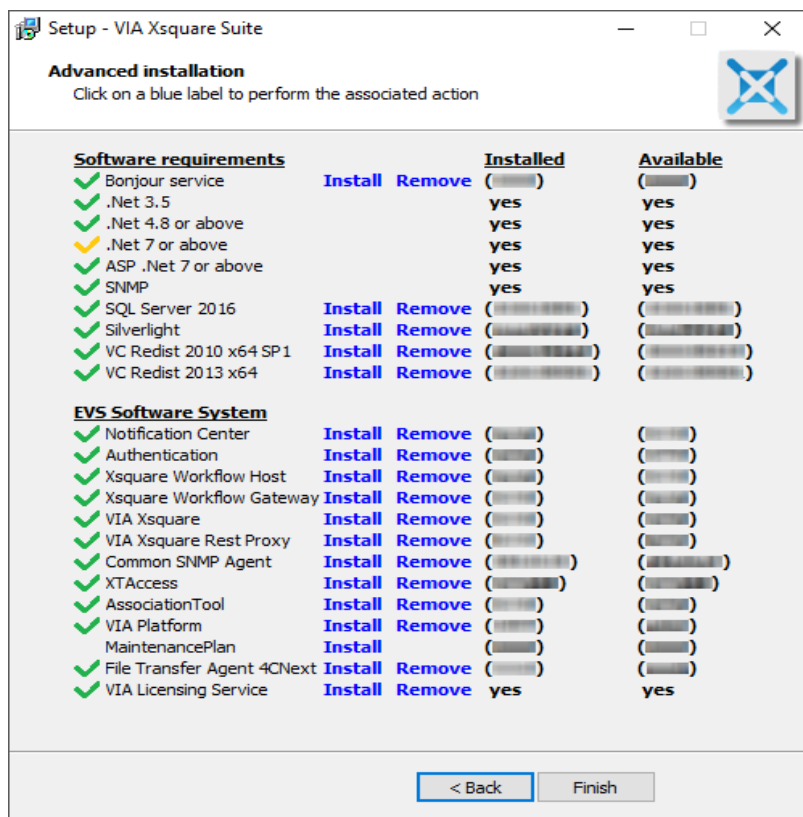
9. In the Ready to Install window, click **Install**.



10. When the installation is over, the Completing the Installation window opens. Click **Finish** in this window:



11. In the Advanced installation window of the VIA Xsquare Suite installer, you will see the FTA for C-Next is now installed. Click **Finish** to exit the installer.



Once the installation is complete, the following application shortcut is created on the desktop:

FTA4CNext icon:



When VIA Xsquare is running, the FTA4CNext needs to be started. The small FTA4CNext icon in the notification area (right) of the taskbar is displayed when the application is open.



Refer to the VIA Xsquare User Manual, section "Setting up a File Transfer Agent for C-Next" for detailed information on how to configure an FTA for C-Next.



4. VIA Licensing Management

Introduction

To perform basic tasks (grab, delete, move and copy jobs and create metadata), no VIA License is necessary. Destination Licenses are needed for rewrapping and transfers between XS- and XT-VIA servers. For transcoding, miscellaneous video processing, EDL rendering and SDR/HDR static conversion jobs, Advanced licenses are also required on the XTAccess servers, in addition to the Destination licenses.

For SDR/HDR dynamic conversion, a Premium license is required together with the Destination and Advanced licenses.

For frame rate conversions, a dedicated Frame Rate Conversion license is required (XTA-FRC-OPT) together with the Destination and Advanced licenses.



The number of licenses required will depend upon the number of concurrent jobs that have to be performed, and the number of destinations in these jobs.

Available Job Types	No License	Destination License	Destination + Advanced License	Destination + Advanced + Premium License	Destination + Advanced + Frame Rate Conv License
Grab, delete, move, copy, create metadata	✓	✓	✓	✓	✓
Ingest to Avid (AAF or Interplay)	Covered by EVS Avid Tools pricing				
Rewrap	✓	✓	✓	✓	✓
Transfer to/from XS/XT-VIA (no transcoding, or proxy backup)		✓	✓	✓	✓
Transcoding			✓	✓	✓
Misc. video processing (logo, burn TC, audio matrix, etc.)			✓	✓	✓
EDL rendering (smart or with transcoding)			✓	✓	✓
SDR/HDR static conversion			✓	✓	✓
SDR/HDR dynamic conversion				✓	
Frame rate conversion (4.x)					✓

How to Install a VIA License



Please refer to the VIA Platform manual to find out how to access the VIA Platform web application and use the VIA Licensing Manager service to request and install licenses on the relevant servers.

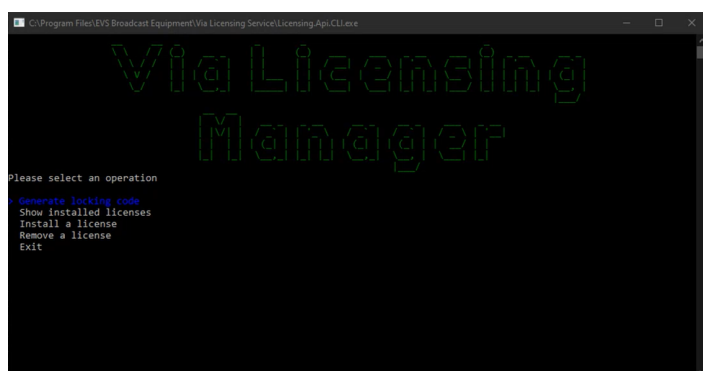
The command line procedure is also available and can be used if necessary for support.

1. Open the VIA Licensing Manager through the **Windows Start** menu:

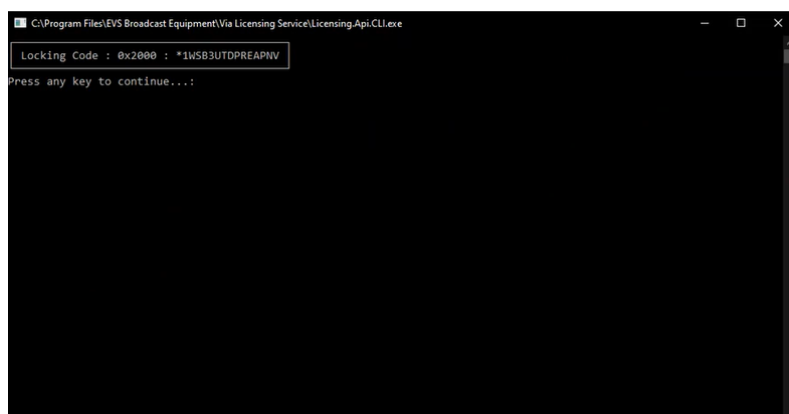
or browse to:

C:\Program Files\EVS Broadcast Equipment\Via Licensing Service\Licensing.Api.CLI.exe

The following panel opens where you can select from the 5 menu options to perform the various steps.

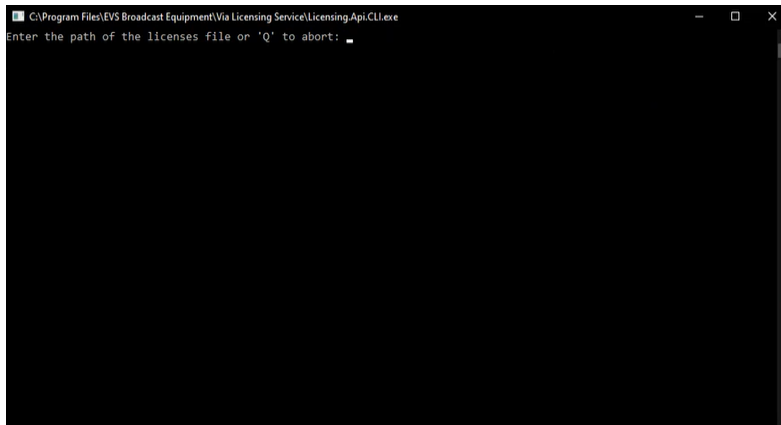


2. Generate the locking code by selecting **Generate Locking Code**. The screen will display the device's unique locking code. You should send this code to EVS support, in order to receive the specific license file for this device.

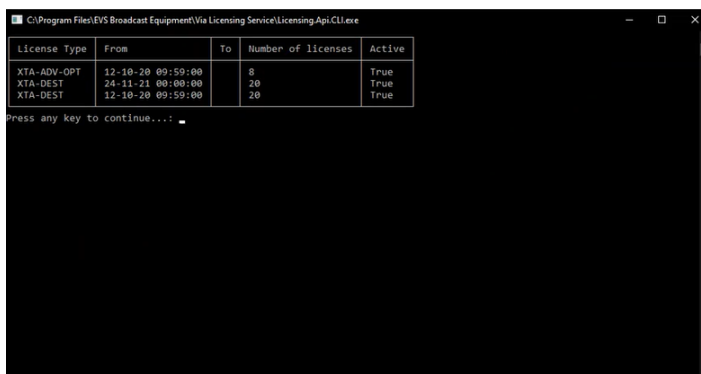




- The license can then be installed by entering **Install a license** and either dragging & dropping the file or entering the file path here.



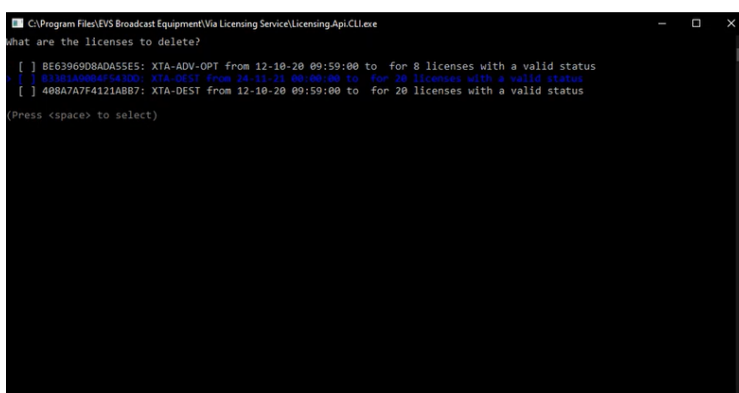
- Once the licenses are installed, they can be displayed by selecting **Show installed licenses**.



In the first row in the above image for example, we can see that there are 8 permanent Advanced licenses which have been valid since 12/10/2020 on the device.

It is also possible to check the number and type of installed licenses on each server in the Licenses column of the Orchestration panel. The maximum number of available licenses can also be checked in the relevant columns here.

- Licenses can be removed from the list by selecting **Remove a license** and editing the list as required.



List of Codes

The following types of licenses are currently available:

VIA Xsquare Destination Licenses

- **XTA-20DEST-FLEX**: pack of 20 destinations (for 1 XTA), annual subscription
- **XTA-5DEST-GO**: pack of 5 destinations (for 1 XTA), permanent license.

VIA Xsquare Advanced Licenses

- **XTA-ADV-OPT-FLEX**: Advanced option per destination, annual subscription.
- **XTA-ADV-OPT-GO**: Advanced option per destination, permanent license.

VIA Xsquare Premium Licenses

- **XTA-PREM-OPT-FLEX**: Premium option per destination, annual subscription.
- **XTA-PREM-OPT-GO**: Premium option per destination, permanent license.

VIA Xsquare Frame Rate Conversion Licenses

- **XTA-FRC-OPT-FLEX**: Frame rate conversion option per destination, annual subscription.



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