PXIE Module

SOFTWARE INSTALLATION QUICK START GUIDE

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Units of Measurement

Units of measurement in this publication conform to SI standards and practices

Version: 2.01

Contents

1   Conventions

Before using the instrument described in this manual, take note of the following conventions:

✿ WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in **death or serious injury**. Do not proceed unless the required conditions are met and understood.

✍ CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in **minor or moderate injury**. Do not proceed unless the required conditions are met and understood.

✿ CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in **component damage**. Do not proceed unless the required conditions are met and understood.

⚠ IMPORTANT

Refers to information about this product that you should not overlook.

▤ NOTE

Indicates some information that requires your attention or some extra information for the current topic.

2   Software installation information for PXIe modules

2.1   Cohesion Installer

⚠ **IMPORTANT**

The software must be installed on the PXIe Controller for the PXIe Chassis in which the Quantifi Photonics modules will be installed, or the controller PC in the case of a MXI setup.

Minimum System Requirements: 64bit OS, Windows 7 or above.

Recommended System Requirements: 64bit Windows 10.

The Cohesion Installer is a **single installation package** that contains all the required drivers and software, to support and control Quantifi Photonics modules on the PXIe Platform.

2.1.1   Installation overview

For the PXIe Controller to communicate with the module installed in the chassis, software and driver installations are necessary. These are contained in the **Cohesion Installer** package.

- CohesionDriver: Drivers for Quantifi Photonics PXIe Modules
- CohesionSCPI: VXI11 compliant server for remote SCPI communication
- CohesionUI: Web-based Graphical User Interface

⚠ **IMPORTANT**

It is recommended that you **save all work and close any open programs** before attempting to install the required software packages above.
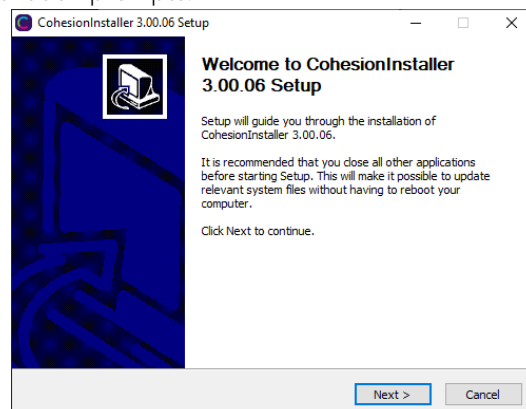
### 2.1.2   Installation process

Windows 10 64 bit:

1. Locate and run the installer **CohesionInstaller-3.XX.XX.exe** from the provided USB media device (or download from the Quantifi Photonics [website)](#).
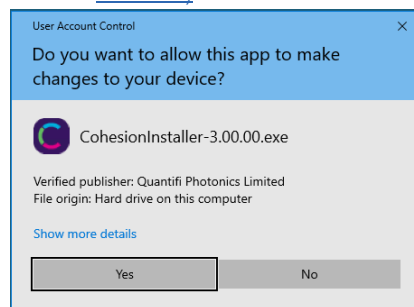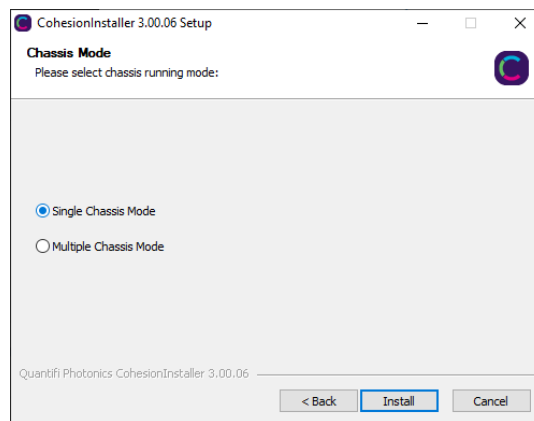

2. Follow the on-screen installation prompts.

3. Continue with the installation by following the on-screen installation prompts. Choose the default installation type – CohesionUI with Apache.
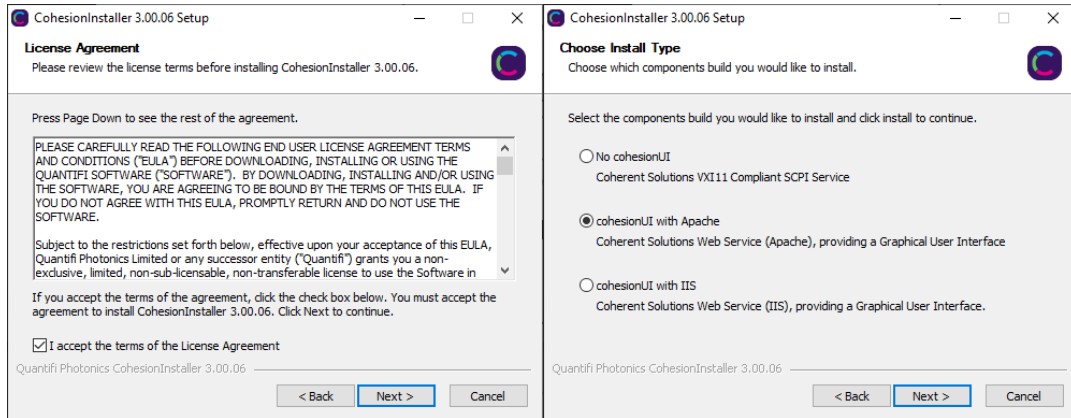

4. Installation will continue with the **Chassis Mode** selection. The default setting is **Single Chassis Mode**. If unsure, proceed with the default mode setting.


⚠ **IMPORTANT**

To operate in Multiple Chassis Mode, additional hardware modules are required. The Chassis Mode can be changed at any time, so it is recommended to select **Single Mode** until all other configuration requirements have been met.

5. NI installation window will prompt the user for Device Driver installation. Follow the installation prompts and in the final stage choose Restart Later. If no drivers need to be installed, click Cancel.
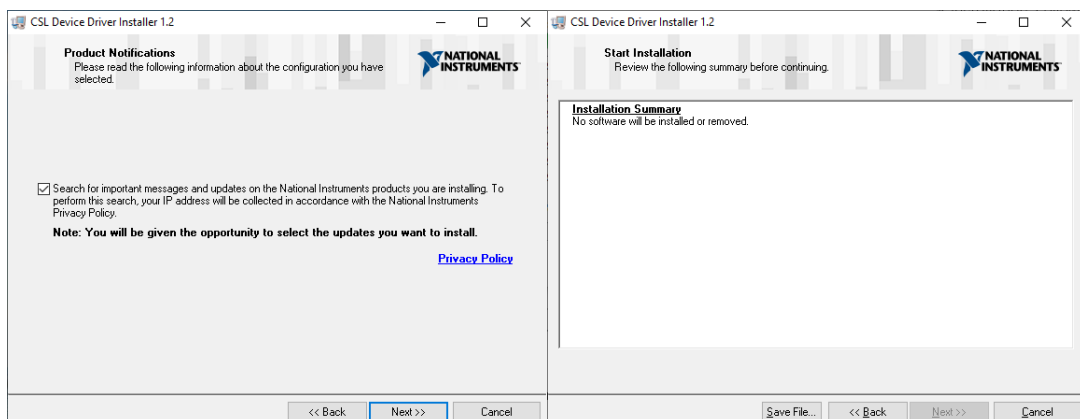
6. At the end of the installation, **it is recommended to select the Reboot now** option, and click **Finish** to complete the installation process.
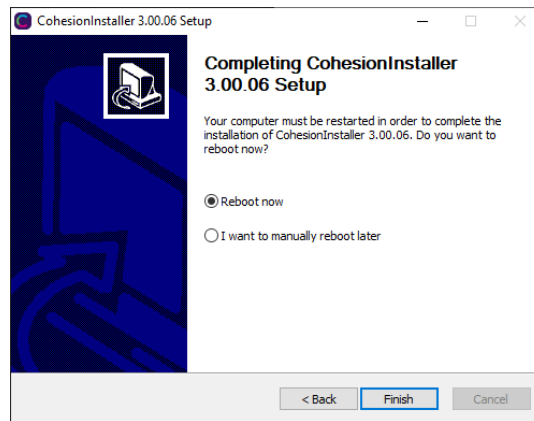
7. Windows Security Alert may prompt the user for network access. It is **recommended that both options be ticked**, to allow any network configuration.
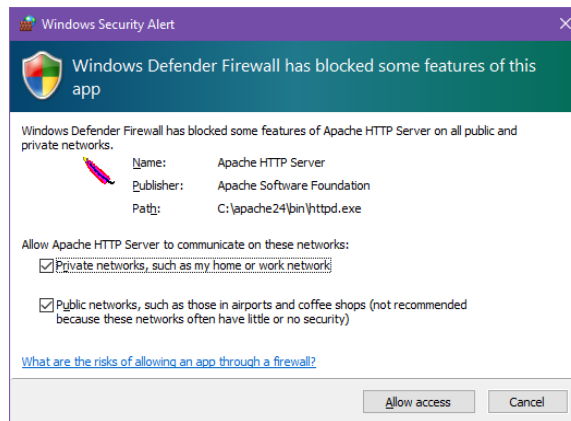
8. After rebooting the system, on startup a User Account Control prompt will be displayed to run the Cohesion Firmware Updater Utility. Click **Yes** and proceed with the application.
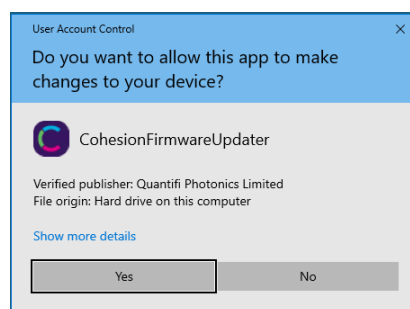
2.2 Quantifi Photonics PXIe system utility applications

Contained within the CohesionInstaller 3.XX.XX are two utility applications:

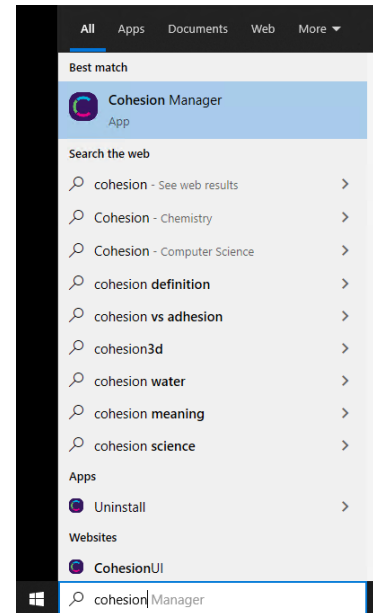- Cohesion Manager
- Cohesion Firmware Updater

2.2.1 Cohesion Manager utility

The Cohesion Manager utility serves as a single window application to give the user an overview of the status of all the Cohesion Software Services running on the system. Cohesion Manager can be accessed via the Windows Start Menu.

Cohesion Manager is designed as a single reference source to check the status of all the running services in one contained window. The utility also allows the user to start or stop the **CohesionDriver service**, **CohesionSCPI service**, or **CohesionUI service** independently.

By default, all these Cohesion Software Services will start automatically on startup of the Windows OS and need to be running to facilitate proper communication with the Quantifi Photonics PXIe modules. If there is an issue in detecting or communicating with the modules, run the Cohesion Manager to check the status of the software services.

- **(Required) CohesionDriver** – The CohesionDriver service which directly manages the installed Quantifi Photonics modules.
- **(Required) CohesionSCPI** – The CohesionSCPI service which is the VXI11 compliant SCPI interface for TCP communication with the installed Quantifi Photonics modules.
- **(Optional) CohesionUI** – An optional web service providing a graphical interface for simplified operation of the installed Quantifi Photonics modules.
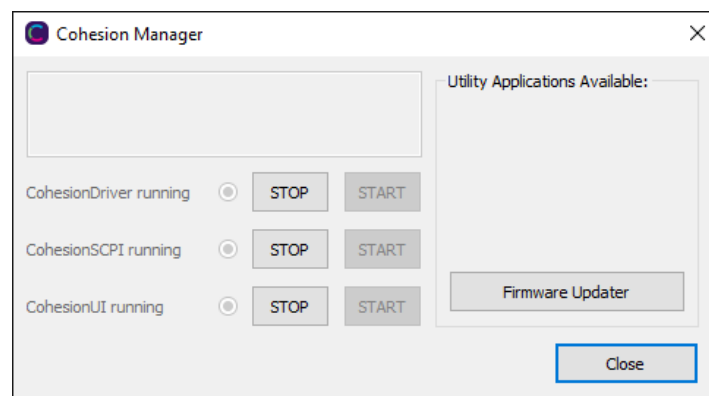
⚠ **IMPORTANT**

The **Driver and SCPI services** need to be running to facilitate communication with any installed Quantifi Photonics module, **therefore they are listed as REQUIRED**.

On the right side of the Cohesion Manager window a list of all the installed Quantifi Photonics system utilities is displayed.

2.2.2   Cohesion Firmware Updater utility

The Cohesion Firmware Updater utility serves as a single window summary application to display the current firmware status of all the Quantifi Photonics PXIe modules installed in the chassis.

The Cohesion Firmware Updater utility can be accessed via the Cohesion Manager application (see Section for more 2.2.1 information).
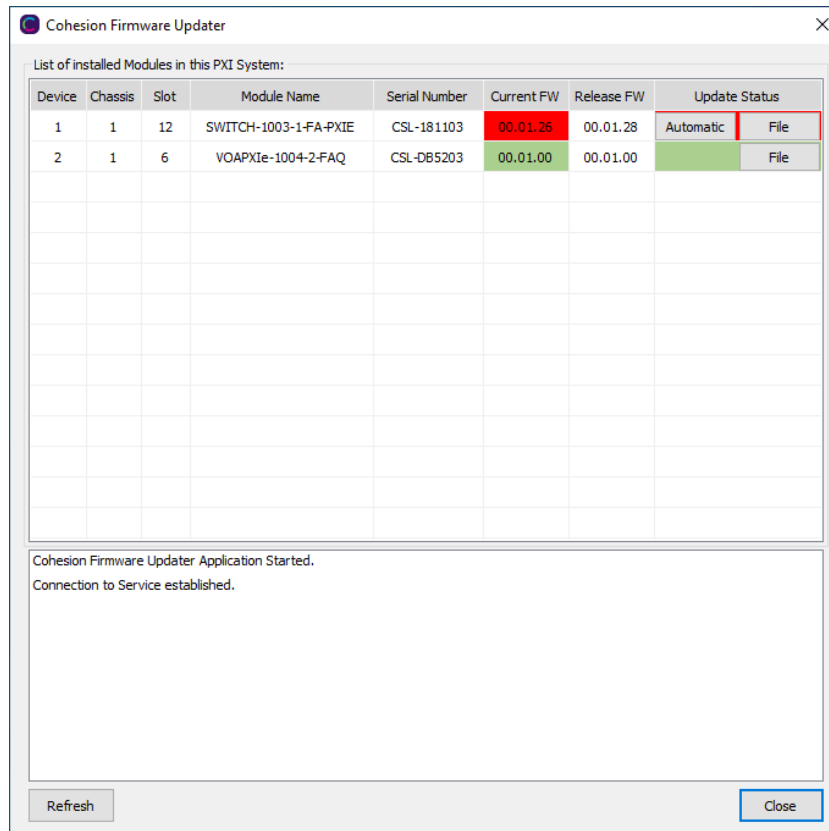

Whenever a new version of the CohesionInstaller is installed on the system, the Cohesion Firmware Updater utility will automatically launch after the system is rebooted. It will show the user the firmware status of all installed Quantifi Photonics modules and allow the user to update the firmware to a new version if applicable.

If a module's firmware is out of date, it is highly recommended to update the firmware to the new available version. Clicking the **Automatic** button will update the module(s) to the latest supported firmware for the installed packages on the system.
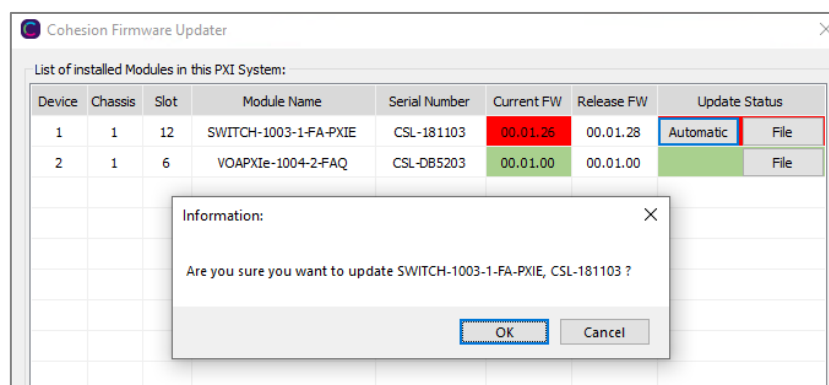
After clicking **OK**, the firmware update progress will be shown in the **Update Status** column.

The **File** button is reserved for updating a module to a specific firmware version if required.
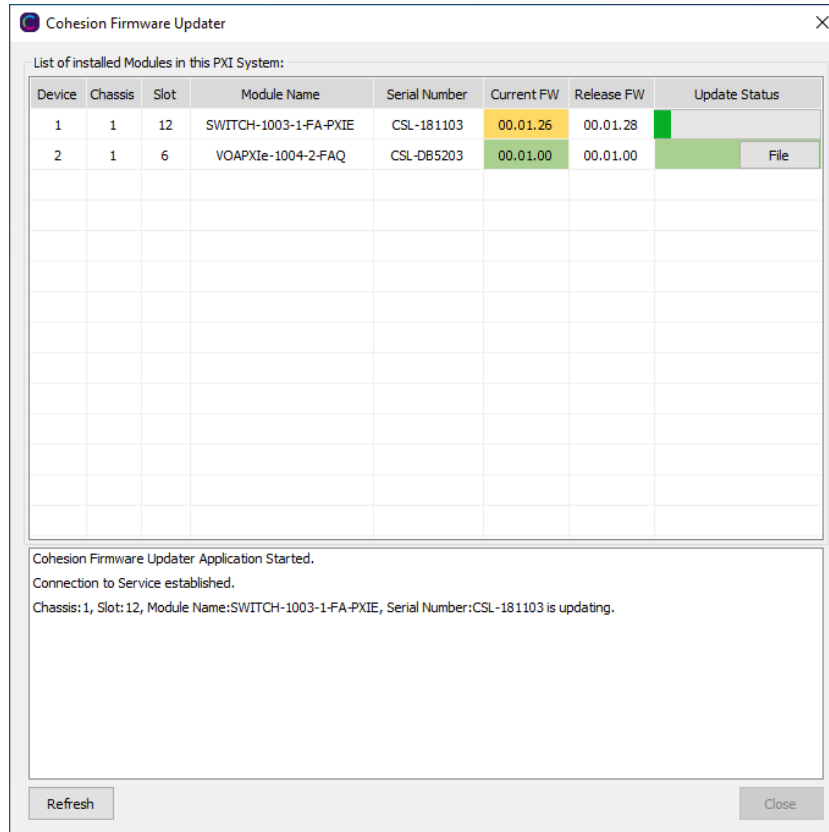
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Measure.
Solve.

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General Enquiries	sales@quantifiphotonics.com
Technical Support	support@quantifiphotonics.com
Phone	+64 9 478 4849
North America	+1-800-803-8872

quantifiphotonics.com

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