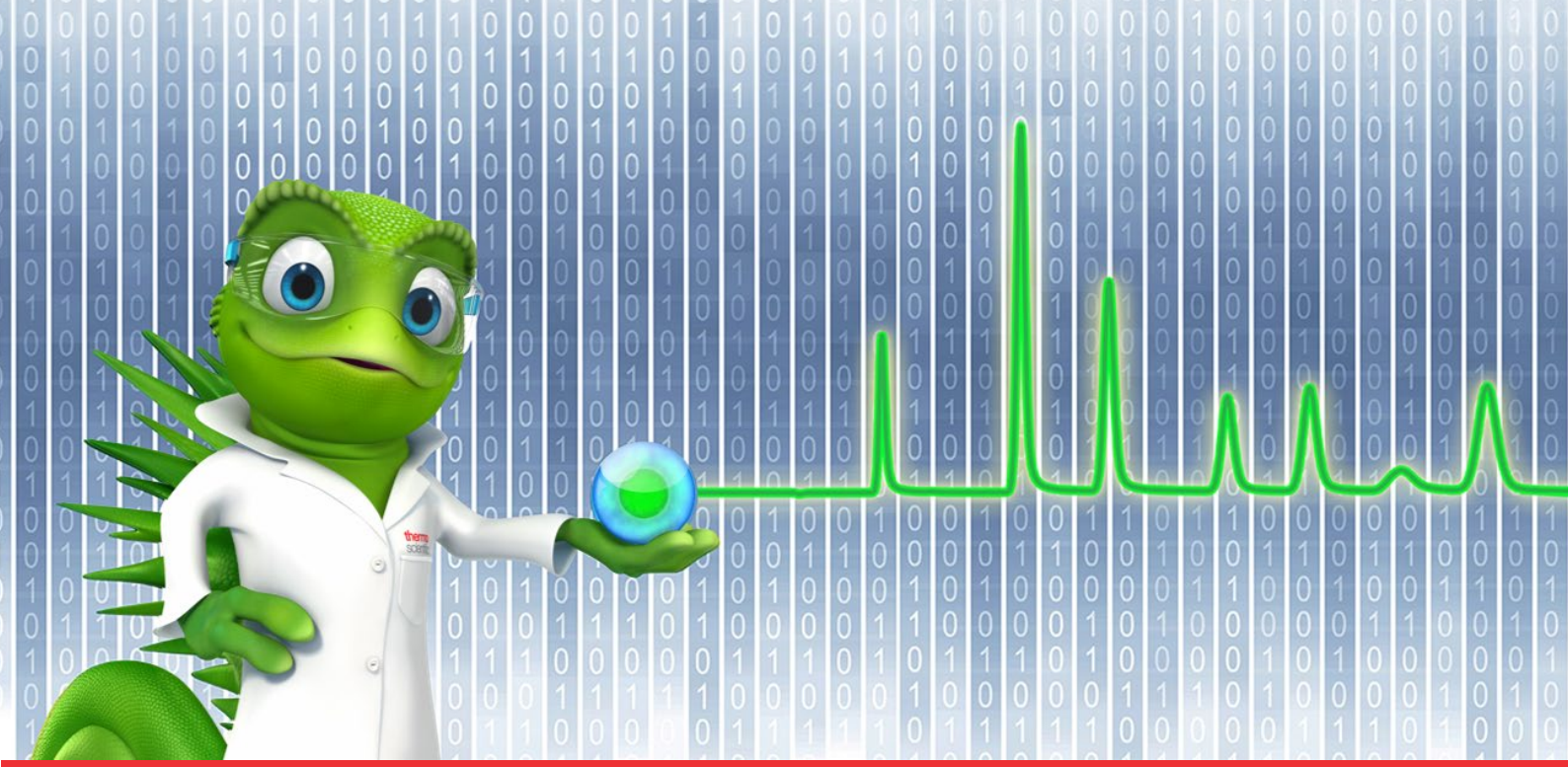

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# SCIEX PA 800 Plus Driver

## Installation Guide

Software Version 1.0

thermoscientific

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**Document History**

Revision: 1.0, original document

Software version 1.0

**For Research Use Only. Not for use in diagnostic procedures.**

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# 1 About the Documentation

## 1.1 About this Document

The SCIEX PA 800 Plus driver provides an interface for controlling the SCIEX PA 800 Plus Capillary Electrophoresis system with the Chromeleon software.

This guide describes the hardware and software requirements for installing the software and configuring your chromatography system.

## 1.2 Document Conventions

The following formatting is used throughout the document to indicate text with special importance.

**Caution:** Indicates text that must be followed carefully to avoid potential problems.

**Note:** Indicates information of special interest.

**Tip:** Indicates information that will help you to use the software more efficiently.

☑ Indicates a requirement that must be met.

## 1.3 Related Documents

In addition to this installation guide, the following documentation is available:

- *SCIEX PA 800 Plus Driver Release Notes*
- *SCIEX PA 800 Plus Driver Quick Start Guide*

The SCIEX PA 800 Plus Driver PDF documents are provided on the SCIEX PA 800 Plus Driver installation disk in the folder **Documents**, and also from the Windows start menu via **Start** > **SCIEX PA 800 Plus Driver** > **Documents**.

The following Chromeleon 7 documentation is available via **Start** > **Thermo Chromeleon 7** > **Documents**::

- *Chromeleon 7 Installation Guide*
- *Chromeleon 7 Quick Start Guide*
- *Chromeleon 7 Online Help*

# 2 System Requirements/Compatibility

## 2.1 Supported Chromeleon versions

The SCIEX PA 800 Plus Driver has been validated for use with the following versions of Thermo Fisher Scientific Chromeleon:

- Chromeleon 7.2.10 Mud and later
- Chromeleon 7.3.1 and later

## 2.2 Supported Chromatography Instruments & Modules

The SCIEX PA 800 Plus Driver facilitates the control within Chromeleon of the SCIEX PA 800 Plus system equipped with a PDA, UV or LIF detector.

## 2.3 PC Hardware Requirements

The PC hardware that is needed for the SCIEX PA 800 Plus Driver is determined by the requirements of the Chromeleon software. For details, please refer to documentation of the Thermo Fisher Scientific Chromeleon CDS.

For normal PCs, the following configuration is recommended:

| | | |
|---|---|---|
| Processor | Recommended: | Quad Core Desktop CPU |
| RAM | Recommended: | 16 GB or higher |
| Hard Disk | Recommended: | 30 GB |
| **Optical Drive** | DVD | |
| **Display** | Recommended: | 1440 x 900 or higher resolution |
| **USB Port,**<br>**RS232 Serial Port, PCI Slot** | Thermo Scientific modules: | 1 or more additional port(s) |
| Refer to the *Chromeleon 7 Online Help* for further information about specific modules.<br>(For information about connecting Thermo Scientific chromatography modules see the documentation of the module to be connected.) | | |

**Note:** Thermo Fisher Scientific can only guarantee the correct operation of SCIEX PA 800 Plus Driver if both the above requirements and the hardware and software requirements of the Chromeleon software are met.

## 2.4 Supported Operating Systems

The choice of operating system depends on both the requirements of the Chromeleon software (including Feature Releases or Service Releases) and the requirements of SCIEX PA 800 Plus Driver.

SCIEX PA 800 Plus Driver is compatible with:

- Windows 10 Enterprise and Windows 10 Pro, x64 (English version)
- Windows Server 2016 (x64 English)

**Note:** The option *Turn on fast startup (recommended)* should be disabled in the Windows 10 shutdown settings. This ensures that the Chromeleon Instrument Controller Service is stopped correctly on system shutdown and prevents potential instrument connection issues when the computer is powered up again.

## 2.5 Installed Third-Party Software

### 2.5.1 Microsoft .NET Framework

The SCIEX PA 800 Plus Driver requires Microsoft .NET Framework, versions 3.5 SP1.

### 2.5.2 Windows Monthly Rollups and Security-only Updates

For optimum security, it is recommended that you keep your systems up to date with the latest Windows Monthly Rollups and Security-only updates. However, there is always a risk that an update may affect operation of the software.

**Note:** Thermo Fisher Scientific does not formally validate Windows Monthly Rollups or Security-only updates. Installation and testing of Monthly Rollups and Security-only updates is the responsibility of the respective installation site. Compatibility with every Monthly Rollup or Security-only update cannot be guaranteed.

Install Monthly Rollups and Security-only updates as soon as practicable to keep the window of vulnerability as small as possible. You should briefly test the Monthly Rollup or Security-only update in the context of the laboratory's installation and operating procedures.

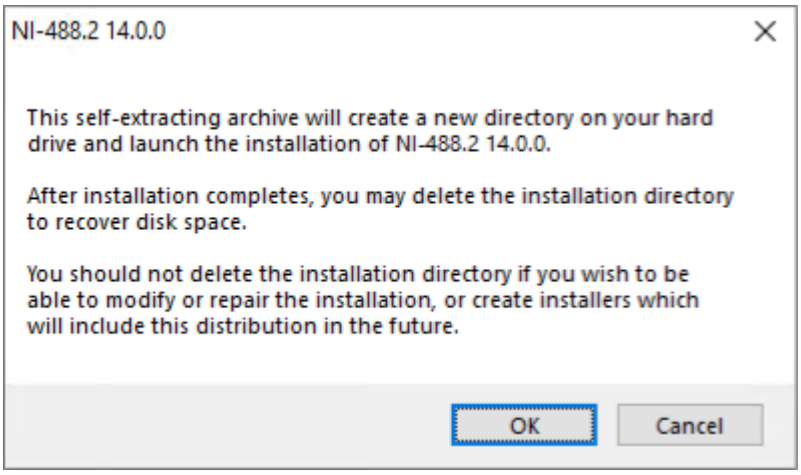
### 2.5.3 National Instruments GPIB Drivers

On a system that will control the instrument, the SCIEX PA 800 Plus Driver requires National Instruments GPIB driver version 14.0.0.

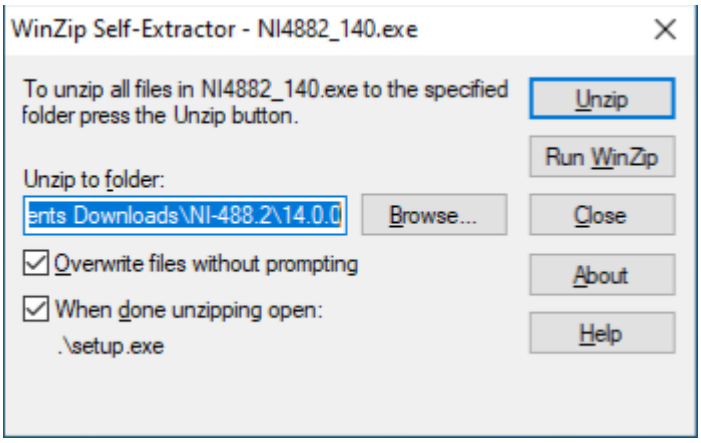
To install the National Instruments GPIB drivers:

1. Log onto Windows as a user with full local administrator privileges.
2. Insert the SCIEX PA 800 Plus Driver DVD into the appropriate drive.

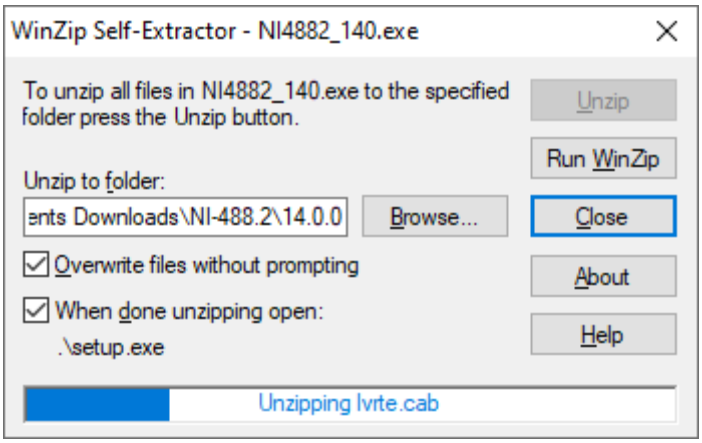
3. Double-click **NI4882_140.exe** in the root folder:



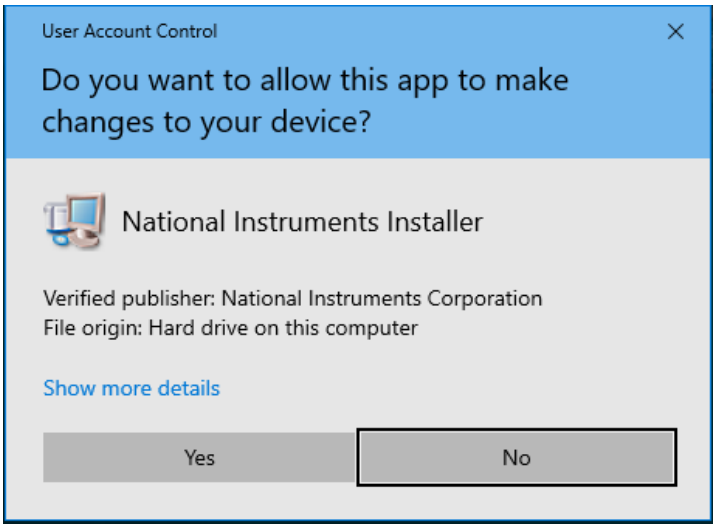

4. Click **OK**:



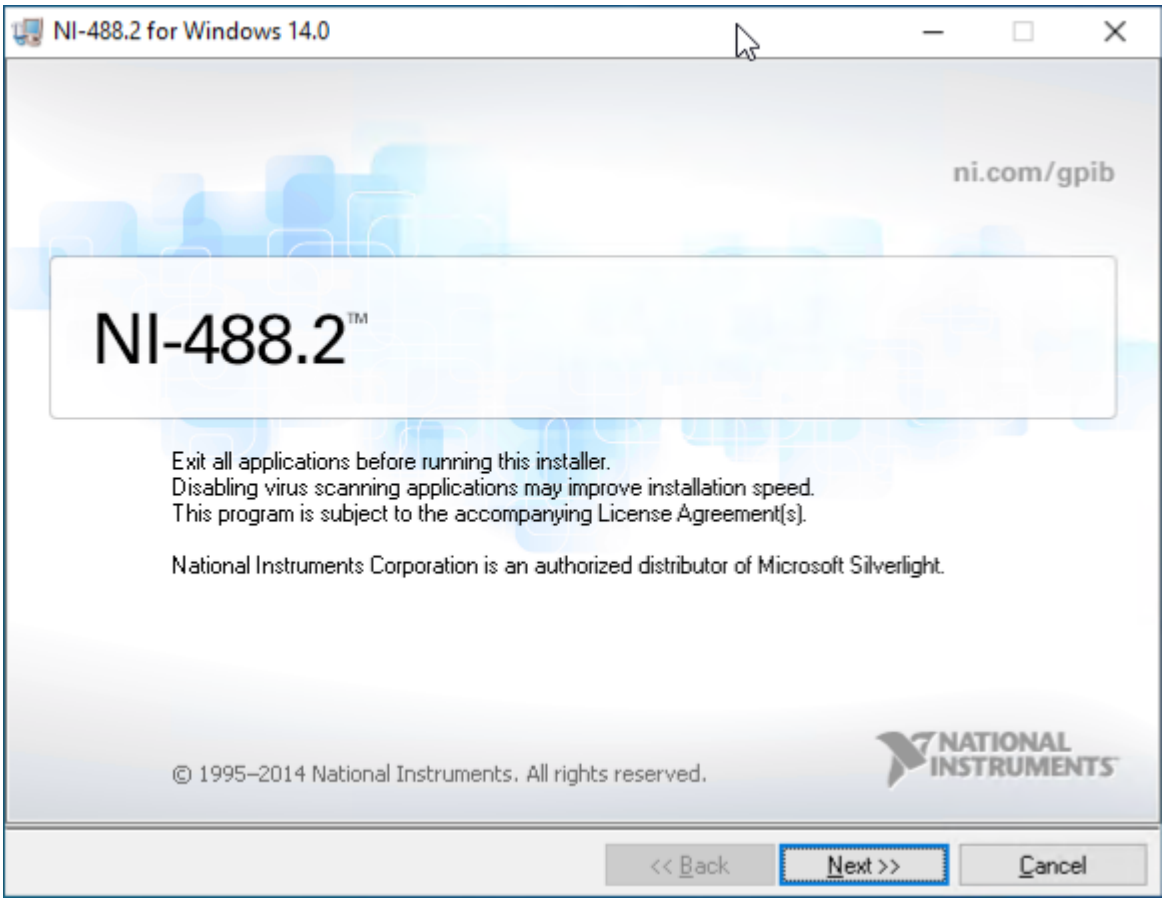

5. Click **Unzip**. The files will be extracted:



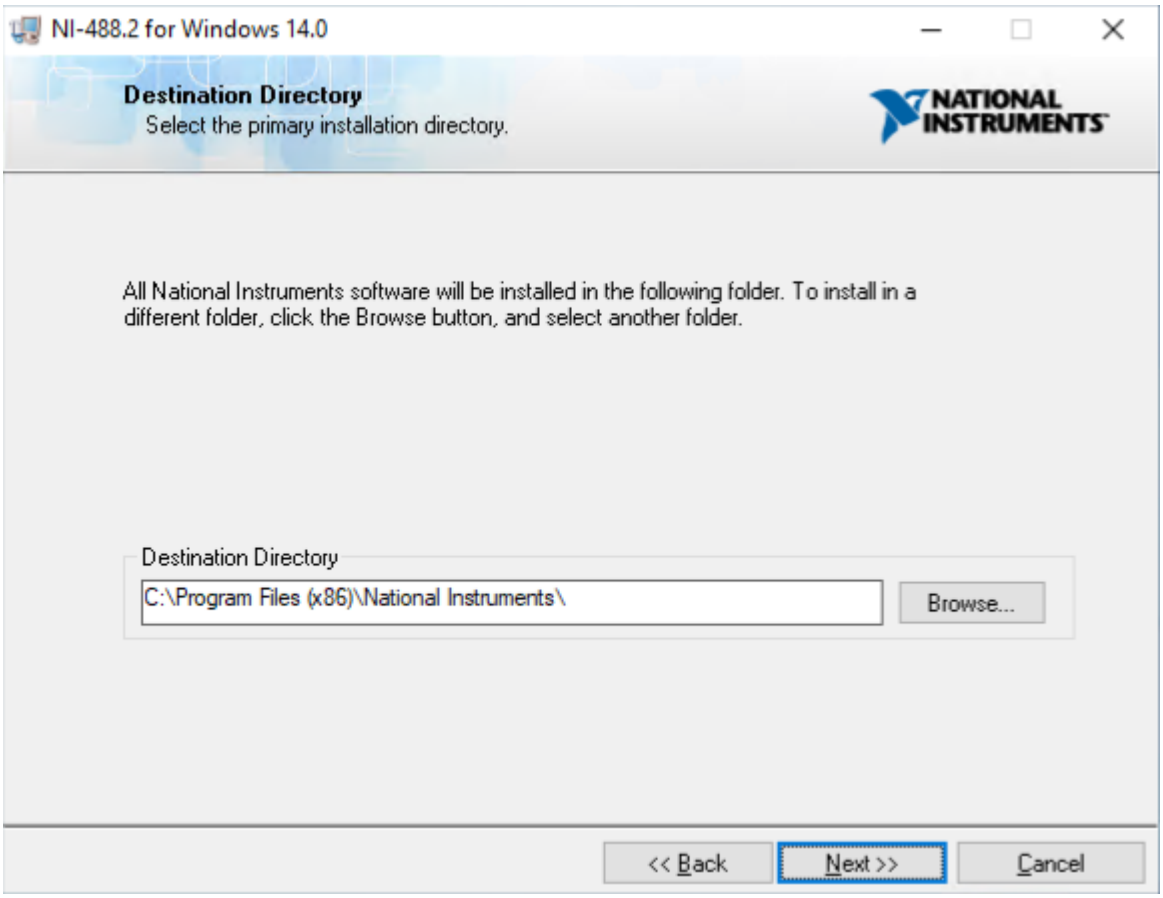
6. The National Instrument installer starts:



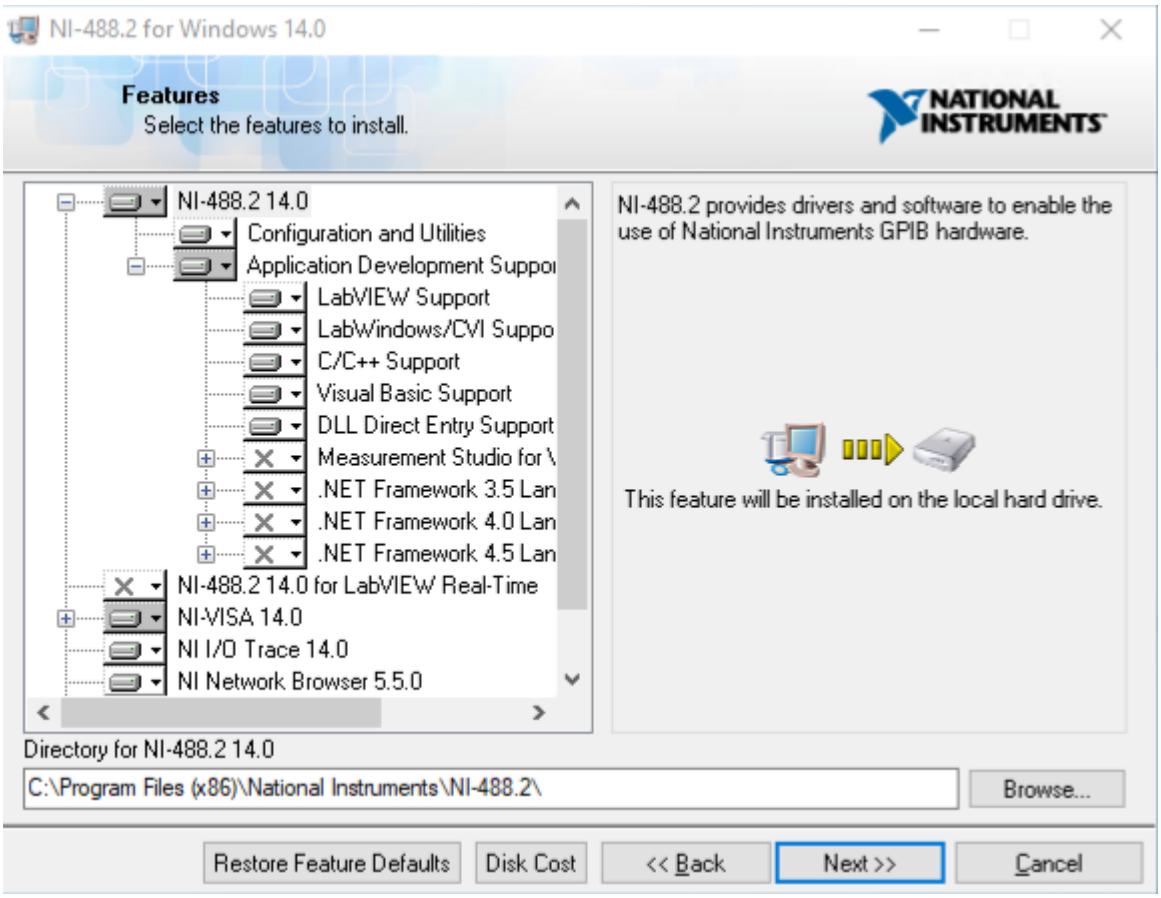

7. Click **Yes:**



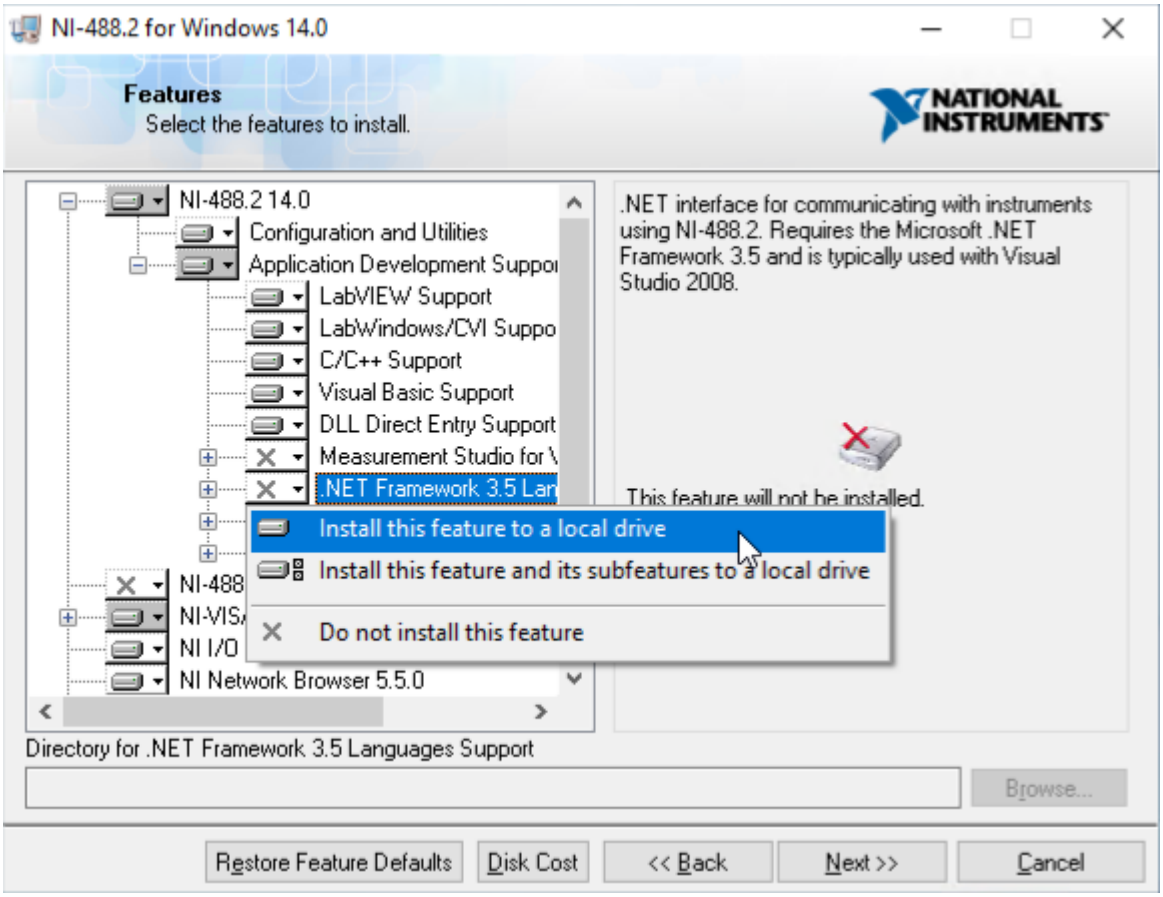
8. Click **Next:**


NI-488.2 for Windows 14.0
Destination Directory
Select the primary installation directory.
NATIONAL INSTRUMENTS
All National Instruments software will be installed in the following folder. To install in a different folder, click the Browse button, and select another folder.
Destination Directory
C:\Program Files (x86)\National Instruments\
Browse...
<< Back
Next >>
Cancel

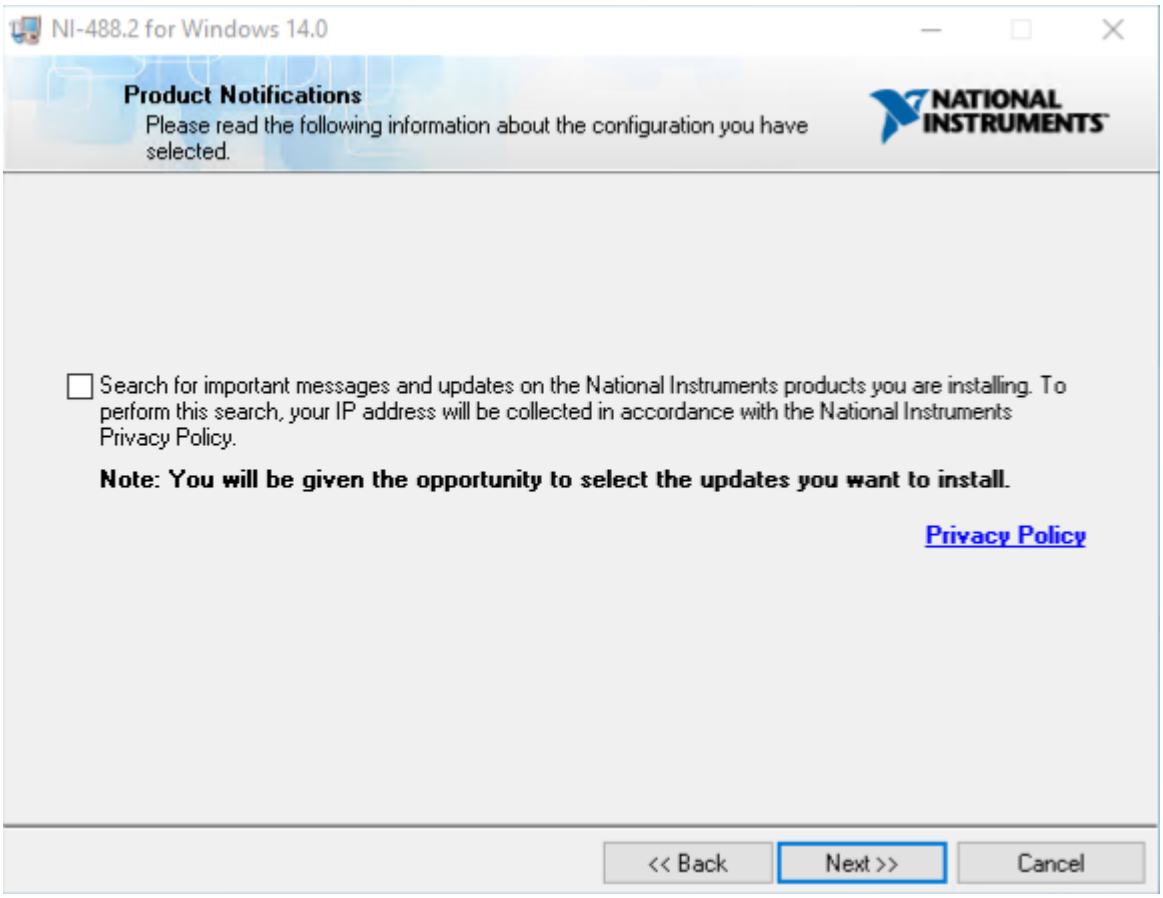
9. Click **Next:**


NI-488.2 for Windows 14.0
Features
Select the features to install.
NATIONAL INSTRUMENTS
NI-488.2 14.0
Configuration and Utilities
Application Development Suppor
LabVIEW Support
LabWindows/CVI Suppo
C/C++ Support
Visual Basic Support
DLL Direct Entry Support
Measurement Studio for V
.NET Framework 3.5 Lan
.NET Framework 4.0 Lan
.NET Framework 4.5 Lan
NI-488.2 14.0 for LabVIEW Real-Time
NI-VISA 14.0
NI I/O Trace 14.0
NI Network Browser 5.5.0
NI-488.2 provides drivers and software to enable the use of National Instruments GPIB hardware.
This feature will be installed on the local hard drive.
Directory for NI-488.2 14.0
C:\Program Files (x86)\National Instruments\NI-488.2\
Browse...
Restore Feature Defaults
Disk Cost
<< Back
Next >>
Cancel

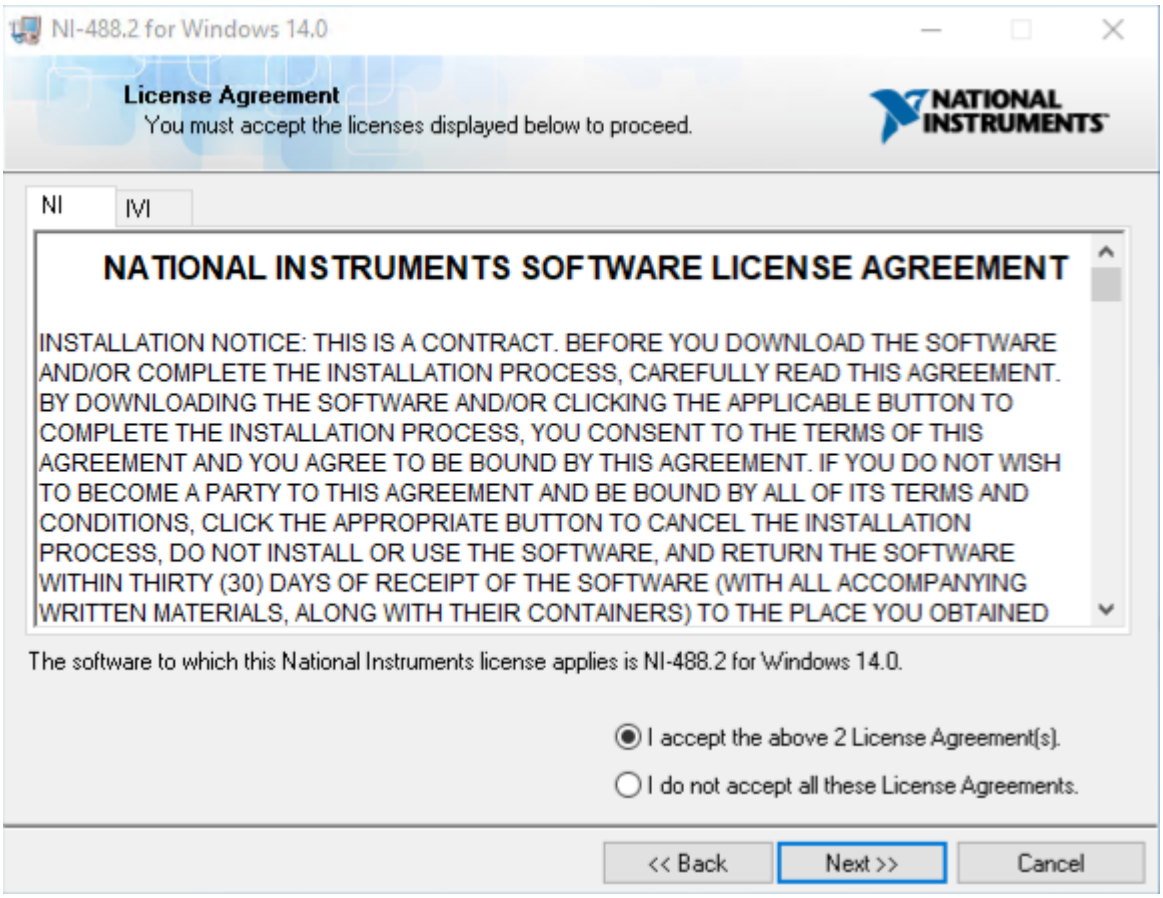
10. Click **".NET Framework 3.5 Languages Support"** and click **"Install this feature to a local drive":**



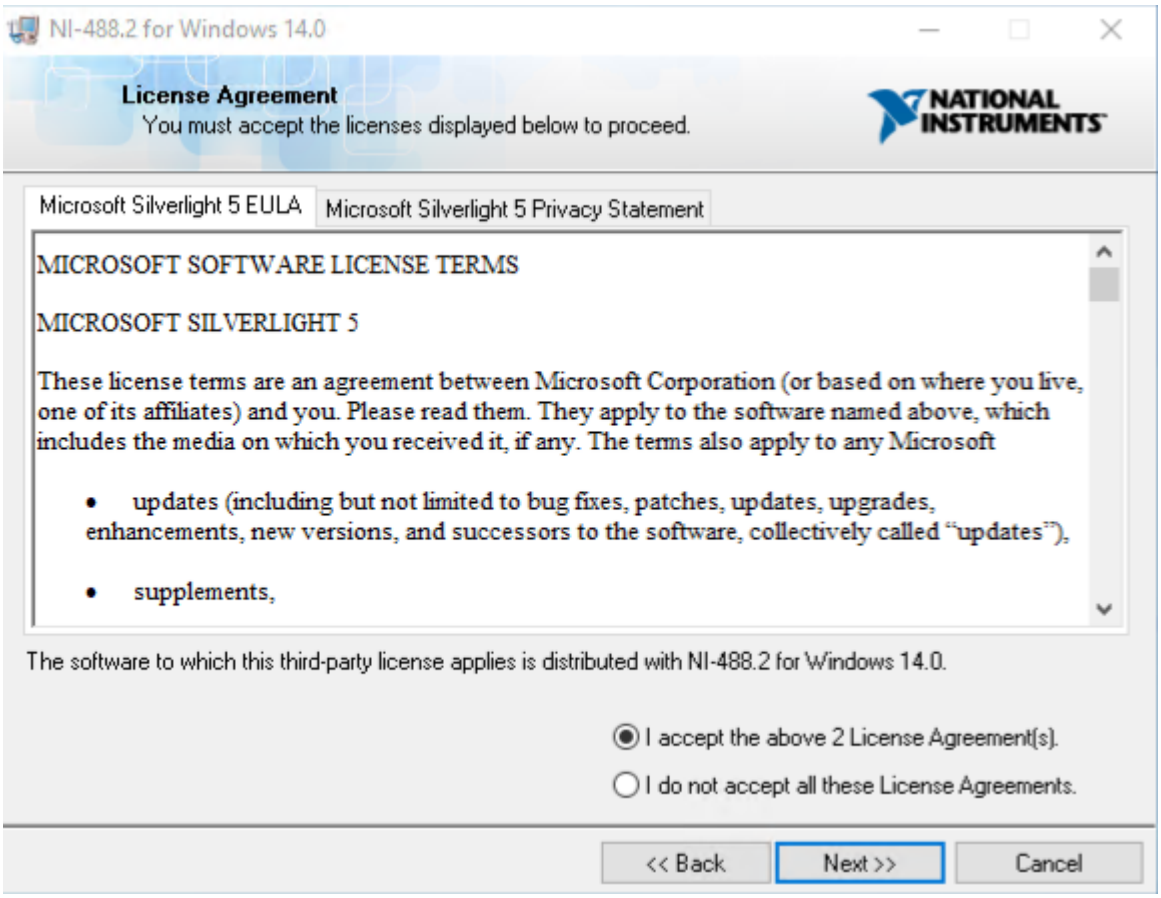
11. Click **Next:**



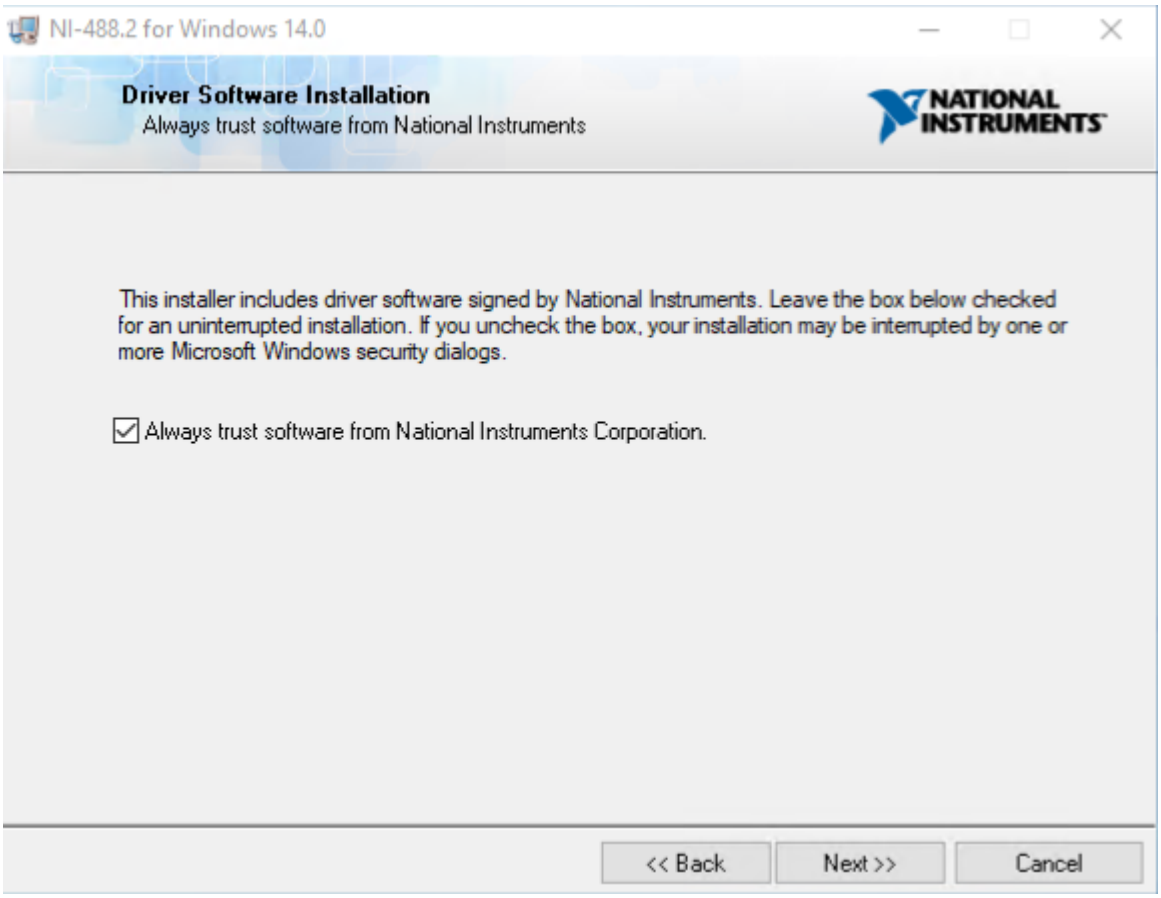
12. Deselect **“Search for important messages and updates …”** and click **Next:**



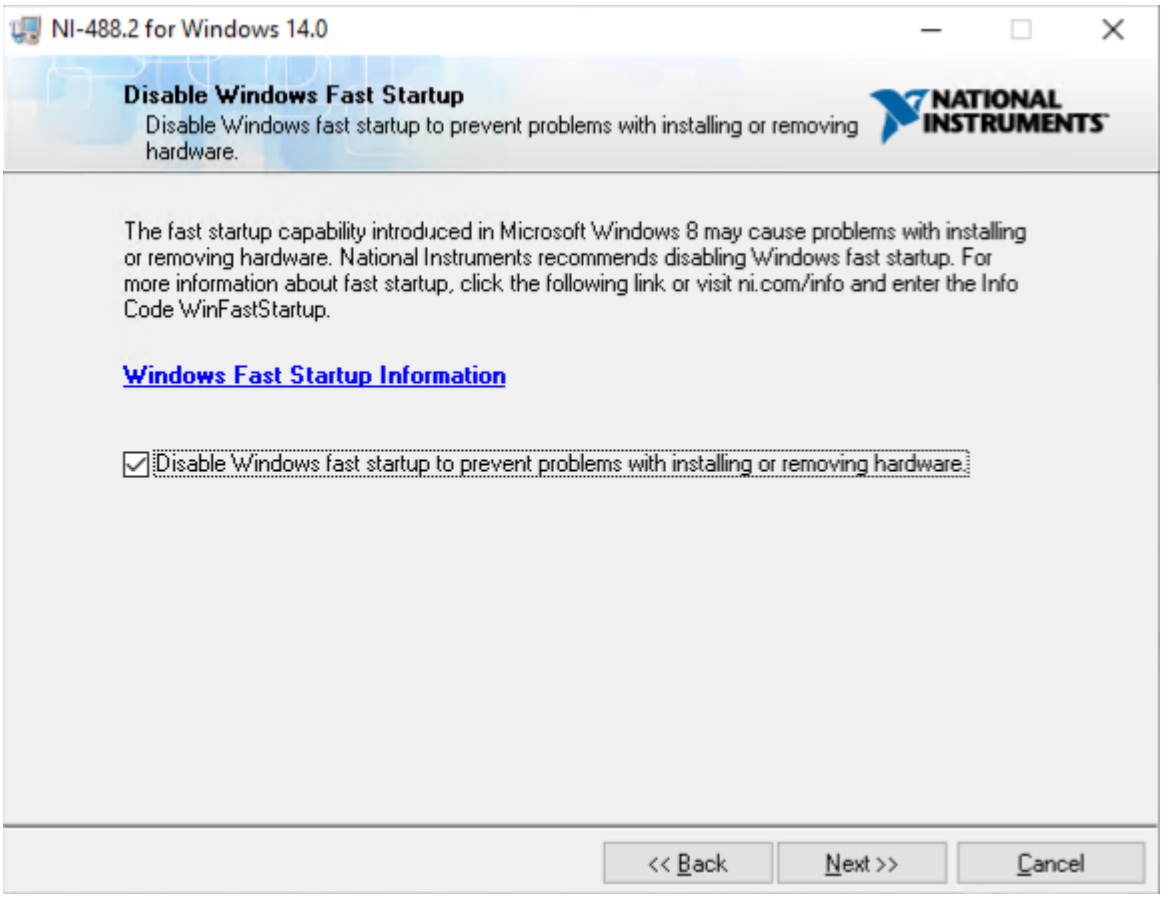
13. Select **“I accept the above 2 License Agreement(s)”** and click **“Next”:**



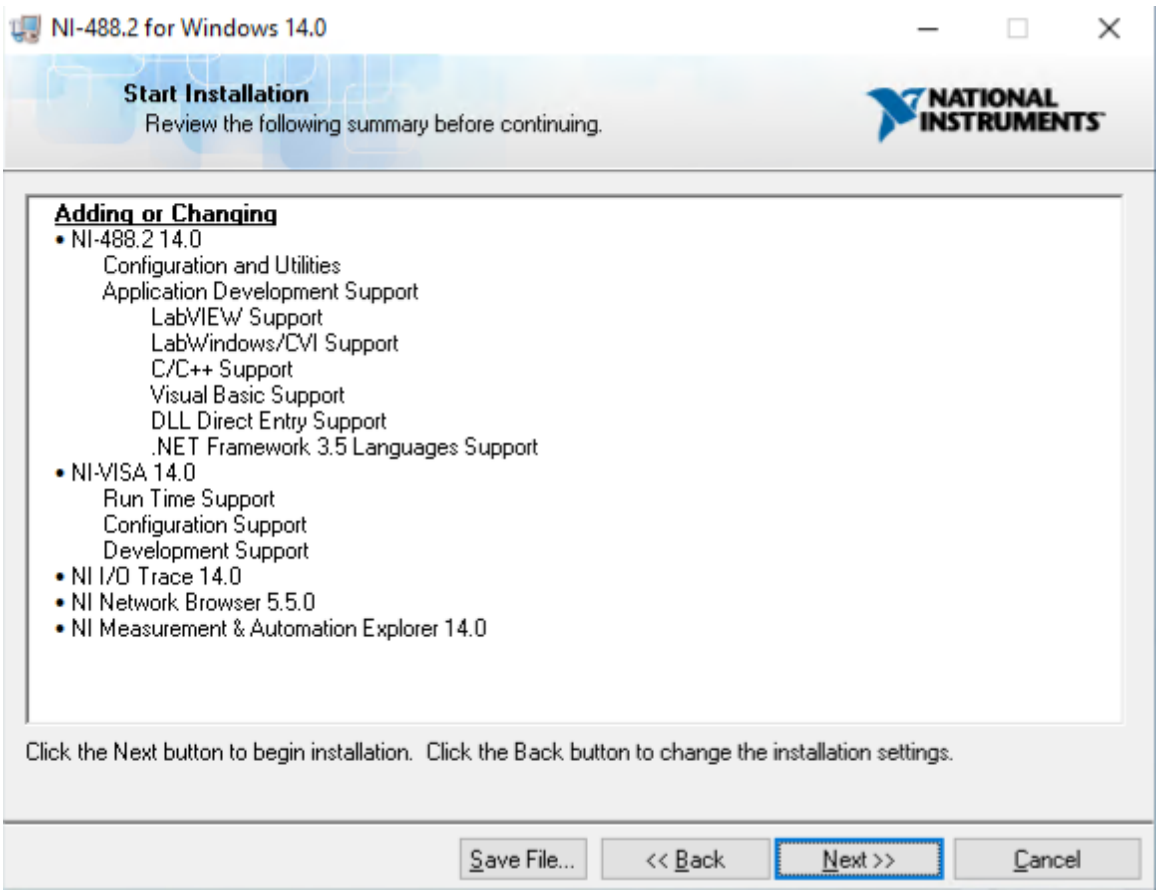
14. Select **“I accept the above 2 License Agreement(s)”** and click **“Next”:**



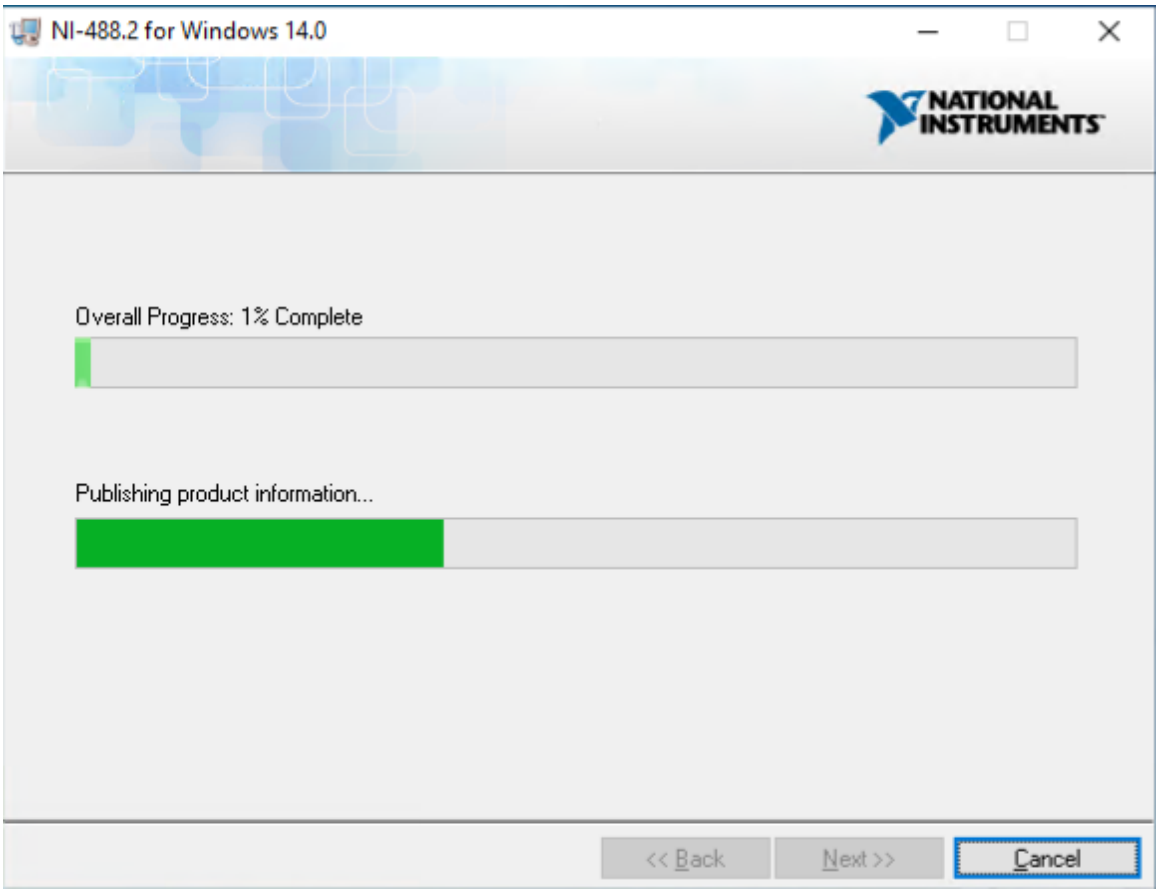
15. Select **“Always trust software from National Instruments Corporation”** and click **Next:**

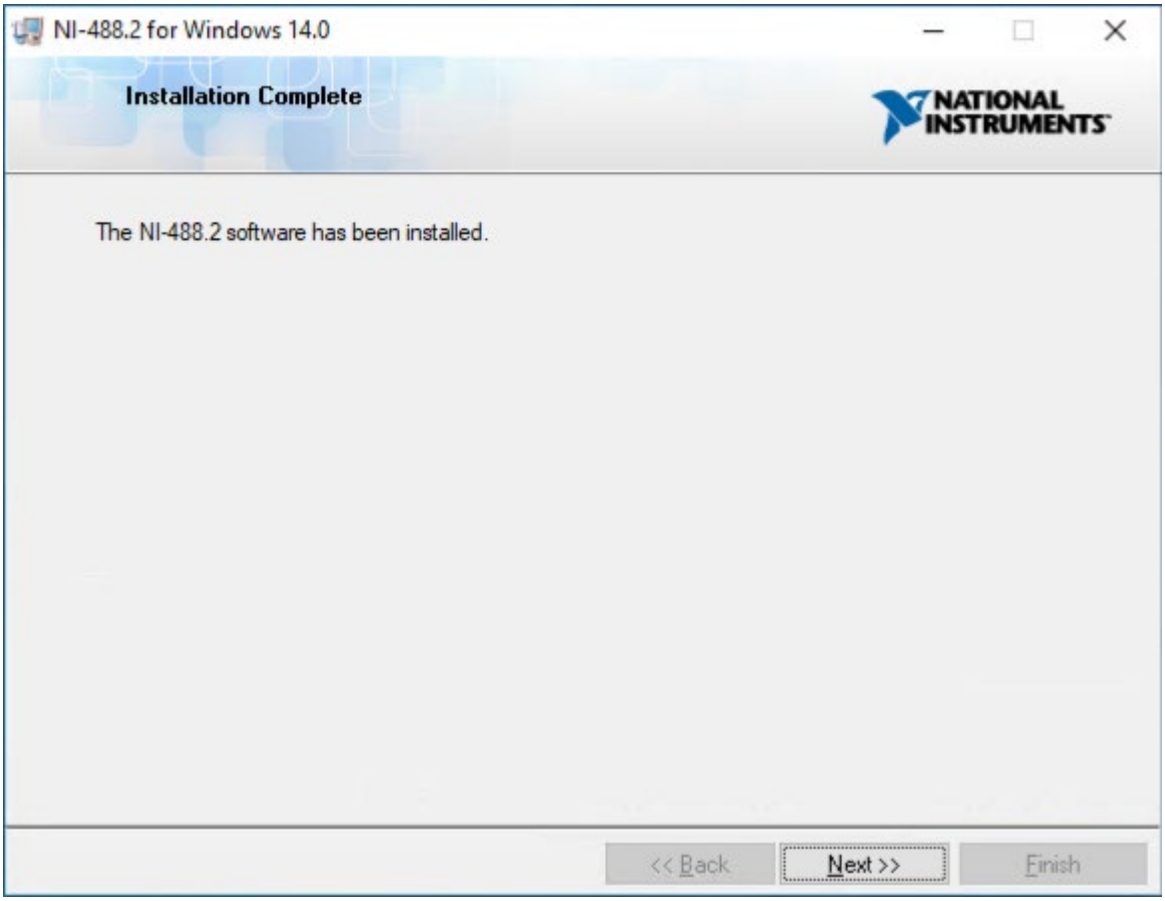


16. Select **“Disable Windows fast startup to prevent problems with installing or removing hardware”** and click **Next:**

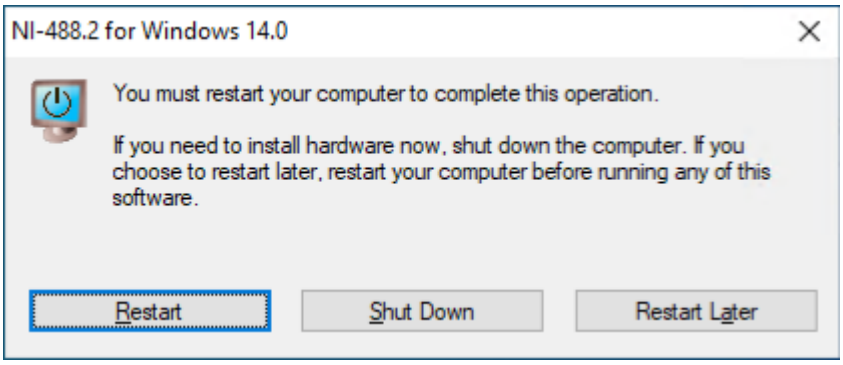


17. Click **Next:**



18. Click **Next:**




19. Click **Restart**

## 2.6 Configure Windows

### 2.6.1 Disable Fast Startup (Windows 10)

On instrument control PCs the option **Turn on fast startup (recommended)** should be disabled in the Windows 10 shutdown settings. This ensures that the Chromeleon Instrument Controller Service is stopped correctly on system shutdown and prevents potential instrument connection issues when the computer is powered up again.

### 2.6.2 Disable Windows Power Management

If a computer goes into **Standby** or **Hibernate** mode while the Chromeleon Instrument Controller Service is running, the USB subsystem will become unavailable. As a result, USB-dependent modules will stop functioning and operation is interrupted.

To disable Windows power management on instrument control PCs:

1. From the **Control Panel** navigate to **Power Options** > **All Control Panel Items** > **Power Options** > **Create a Power Plan**.
2. Select **High Performance**.
3. Click **Edit Plan Settings**.
4. Set every drop-down list to **Never**.
5. Click **Save Changes**.

### 2.6.3 Disable USB Power Management

To avoid problems during instrument control, USB specific power saving options must be turned off as well.

To disable USB power management on instrument control PCs:

1. From the **Control Panel** open **Device Manager**.
2. Expand **Universal Serial Bus Controllers**.

**Tip:** On some systems, **Universal Serial Bus Controllers** may be called **USB Controller**.

3. Right-click the **USB Root Hub** or **Generic USB Hub** (multiple instances of each are possible) for which you want to change the power savings options, and click **Properties**.
4. On the **USB Root Hub** (or **Generic USB Hub**) **Properties** dialog box, click the **Power Management** tab.
5. Clear the **Allow the computer to turn off this device to save power** option.
6. Repeat steps 4 to 6 above for all remaining USB instances.

**Note:** For instruments controlled by LAN, power management of the LAN card that controls the instrument must be disabled. This is achieved by performing steps similar to those described above.

# 3 Installing SCIEX PA 800 Plus Driver

Follow the instructions below to perform the initial SCIEX PA 800 Plus Driver installation or to upgrade the software from an earlier version. When you install SCIEX PA 800 Plus Driver on a PC on which an earlier version of SCIEX PA 800 Plus Driver is installed, the earlier version will be upgraded.

Ensure that SCIEX PA 800 Plus Driver is installed on all computers that are required to control any system supported for use with this software and acquire and process data of any of these instruments.
Depending on the network configuration it may also be required to be installed on Citrix or other terminal servers.

## 3.1 Prerequisites

Make sure the following prerequisites are met before you install SCIEX PA 800 Plus Driver:

☑ Chromeleon (relevant edition for customer's configuration) software must be installed before installing SCIEX PA 800 Plus Driver.

☑ The appropriate instrument class 3 license.

☑ The person installing SCIEX PA 800 Plus Driver must be logged on as a Windows user with local administrator privileges.

**IMPORTANT:** Do not connect any analytical instruments to the PC until after you finish the software installation. This is indicated by the Chromeleon Installation Qualification (IQ) having been completed and passed.

## 3.2 Installation Procedure

Follow the instructions here to perform the initial SCIEX PA 800 Plus Driver installation or to upgrade the software from an earlier version.

1. Check that the prerequisites for installation (see 3.1) have been met
2. Log onto Windows as a user with full local administrator privileges.

**IMPORTANT:** Installation of SCIEX PA 800 Plus Driver without the required privileges will fail or be incomplete.

3. Insert or download the SCIEX PA 800 Plus Driver medium.
4. Double-click **Setup.exe** in the root folder. The SCIEX PA 800 Plus Driver Setup window appears.
5. Click **Next**.
6. Enter your **User Name** and **Company Name,** select "Anyone who used this computer (all users)" and click **Next.**
7. Review the **Settings** and click Next.
8. After the installation has completed click **Finish**.

**Tip:** A User Account Control (UAC) message may be displayed shortly after clicking **Install**. If the message is not acknowledged, it will time out after 2 minutes and the installation will be interrupted. To avoid this, do not leave the installation unattended until after the UAC message appears.

**Note:** It might be necessary to reboot the PC during or at the end of the installation. After reboot, the administrator running the setup must login again so that the installation process can be completed correctly.

9. Remove the installation medium. Store it in a safe place, away from heat or moisture.

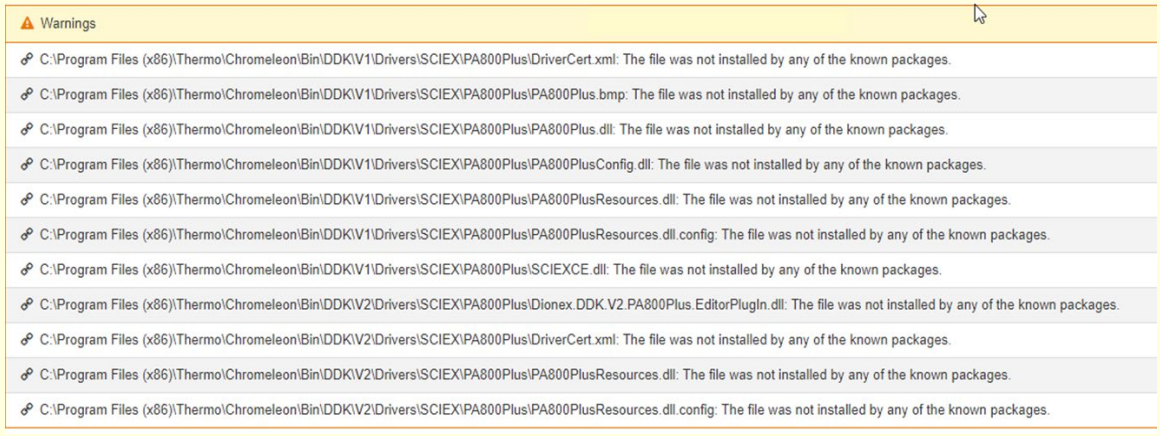
**Note:** SCIEX PA 800 Plus Driver always installs with a proper SCIEX PA 800 Plus Driver license. It is not necessary to install or configure a license

### 3.2.1 Unattended Installation

In the event that an unattended installation is desired, the following steps may be used in place of steps 4-8 above:

3. Open a Command-prompt.
4. Go to the directory where the setup.exe is located.
5. Enter "setup.exe -s -f<PATH>\install.iss"

**IMPORTANT:** Following installation, the Chromeleon Station IQ will show 11 warnings as follows:




## 3.3 Troubleshoot Software Installation

The setup process itself checks for various conditions and provides useful hints/warnings for preventing installation issues. Therefore, always observe the instructions during setup. For example, the setup checks the following:

- Does the user who started the setup have local administrator privileges?

- Are the operating system requirements fulfilled?
- Is the correct version of Chromeleon installed?

Make sure that all requirements and Windows configuration steps described in Sections 2 and 3.1 are fulfilled/performed.

To identify installation issues, check the installation qualification report for errors and warnings. If you find errors, try to repair the installation as described in Section 3.3.1.

**Tips:** Remember, that you can re-run installation qualification at any time.
You may access the installation qualification reports via the **Start** menu: **Start > Thermo Chromeleon 7 > All IQ Reports**

### 3.3.1 Repair an Installation

Follow the instructions below to repair a SCIEX PA 800 Plus Driver installation:

**Note:** You will need access to the SCIEX PA 800 Plus Driver installation medium to repair an installation.

1. Insert the SCIEX PA 800 Plus Driver installation medium into the PC.
2. Click **Run Setup.exe**. This starts the SCIEX PA 800 Plus Driver setup in **Maintenance mode**.

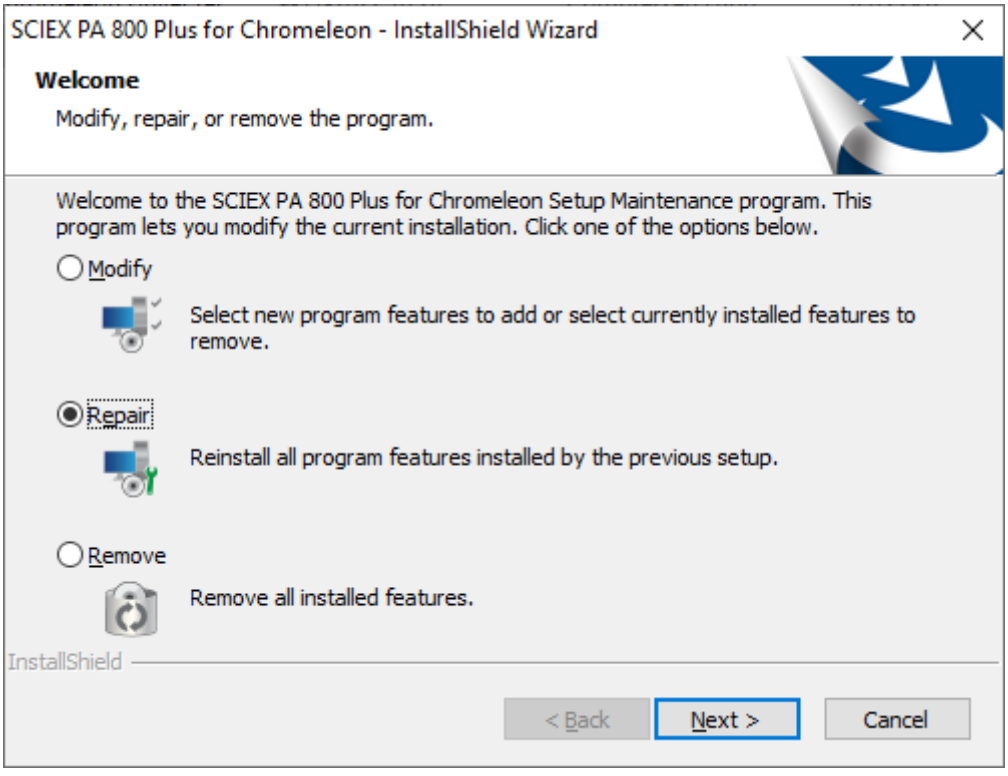



Figure 1: Maintenance mode

3. Click **Repair** to run a repair installation.

4. Follow the on-screen instructions to repair the installation..

### 3.3.2 System Status Report

If an installation problem cannot be resolved using the above-described steps, use the System Status Report (SSR) application to create an error report. The report collects detailed information about the SCIEX PA 800 Plus Driver installation. This information is required by the Thermo Fisher Scientific Support team to provide a solution to your installation problem.

**TO CREATE A SYSTEM STATUS REPORT**

1. Access the System Status Report application via:

**Start > Thermo Chromeleon 7 > System Status Report**.

> **Note:** The person creating a System Status Report must be logged on as a Windows user with local administrator privileges.

2. Specify a destination folder for the SSR. By default, the report is saved on the computer desktop.

3. Select the information that you want to include in the report.

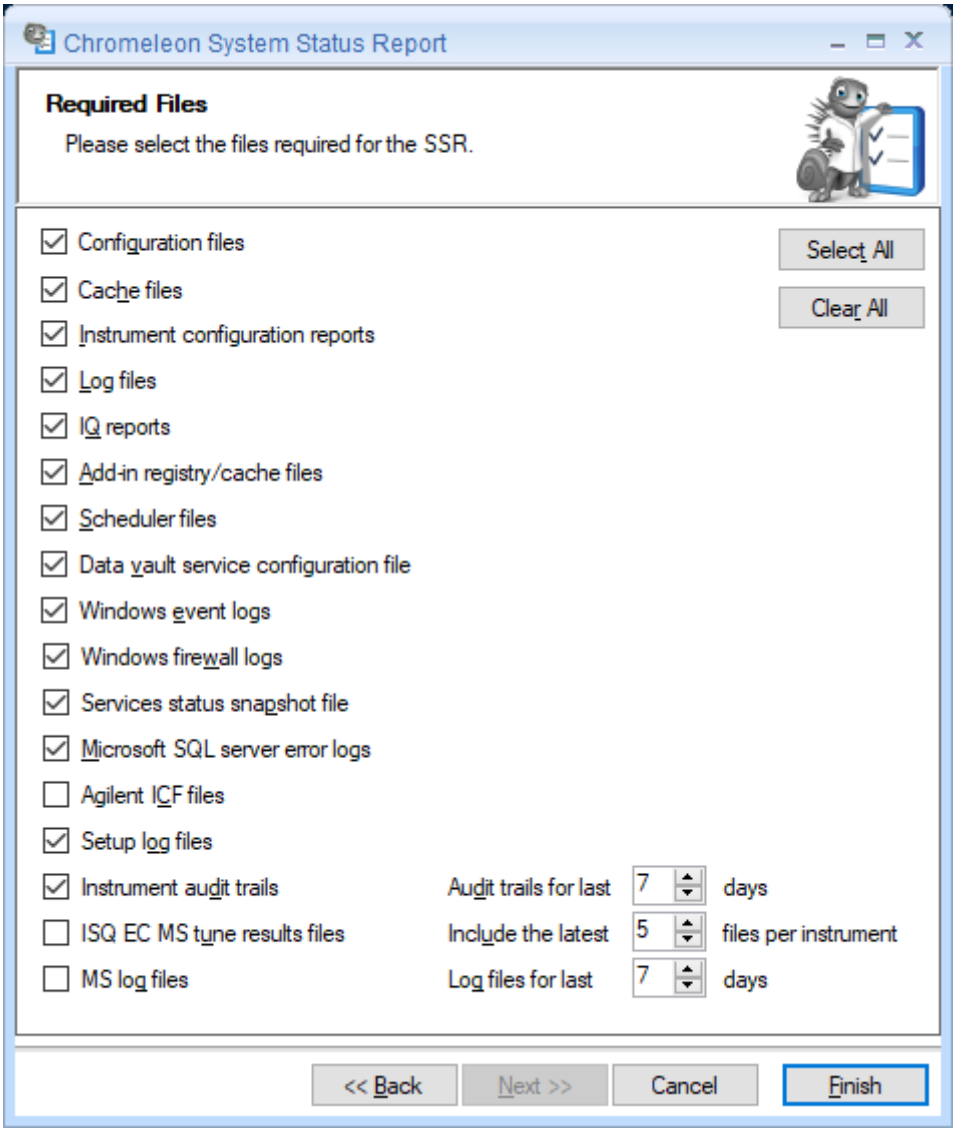



Figure 2: Preferred Options for SSR generation

4.Click **Finish**. The System Status Report Tool creates a folder on the desktop containing the report data as a compressed archive.

5. Save the finished report and email it to the Thermo Fisher Scientific Support team.

# 4 Uninstalling SCIEX PA 800 Plus Driver

You can remove the SCIEX PA 800 Plus Driver program files from your computer by following the instructions below.

**Tip:** These steps only remove the software components. All your data and settings will be preserved. This has the advantage that you can safely uninstall the software without affecting your data.

1. Insert the SCIEX PA 800 Plus Driver installation medium into the PC. Click **Run Setup.exe**. This starts the SCIEX PA 800 Plus Driver setup in **Maintenance mode** (see Figure 1: Maintenance mode).

-OR-

1. Alternatively, click **Start > Settings > Apps and features.** Select the current SCIEX PA 800 Plus Driver program.

2. Select **Remove** in Maintenance Mode or **Uninstall** in Windows settings**.**
3. Follow the onscreen instructions to remove the program from the computer.

-OR-

1. Open a Command-prompt**.**
2. Go to the directory where the setup.exe is located
3. Enter "setup.exe -s -f<PATH>\uninstall.iss"

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