SCIEX OS 3.1.5 Software

Software Installation Guide

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Introduction 1

For information about new software features, enhancements, and known issues, refer to the document: *Release Notes*, which is included with the software package.

Important Information to Know Before Installing

Read this guide before installing or upgrading SCIEX OS.

Note: Back up SCIEX OS data folders to a safe location before upgrading. For more information, refer to the section: Back up the SCIEX OS Folders to a Safe Location. These folders contain the device configurations, security data, methods, batches, and so on.

To make sure that the software installation is successful, read the following points carefully before starting any of the procedures in this guide:

- SCIEX OS uses electronic licensing. For license activation, refer to the section: Electronic Licensing.

- All versions of SCIEX OS require a valid software license. These licenses are provided with new instrument purchases and can also be purchased separately from SCIEX. For information about the validity of the current license or about purchasing additional licenses, contact a SCIEX sales representative or Technical Support using sciex.com/request-support.

  Note: In addition to SCIEX OS license, the user might need separate licenses for optional modules and features.

- SCIEX OS 3.1.5 data files cannot be opened in previous versions of SCIEX OS. However, data acquired in previous versions of SCIEX OS can be opened in SCIEX OS 3.1.5.

- Results Tables created in SCIEX OS 3.1.5 cannot be opened in previous versions of SCIEX OS. However, Results Tables created in previous versions of SCIEX OS can be opened in SCIEX OS 3.1.5.

- All devices supported in earlier versions of SCIEX OS continue to be supported in SCIEX OS 3.1.5. Some devices might require firmware upgrades. Refer to the section: Devices and Firmware.

- SCIEX OS 3.1.5 is available as a web download package. If a DVD is required, contact a local sales representative.

- If SCIEX OS is being installed on a computer running the Analyst or Analyst TF software, then deactivate the hardware profile and close the Analyst or Analyst TF software before starting the installation.

• For more information about the compatibility of SCIEX OS with other software applications, refer to the section: Compatible Software.

Patches and HotFixes

SCIEX OS 3.1.5 contains the functionality in these patches and HotFixes. If the patches or HotFixes are installed, then they are removed during the installation of the software.

SCIEX OS 3.0

• SCIEX OS 3.0 HotFix 1

SCIEX OS 2.2

• SCIEX OS 2.2 HotFix 1

SCIEX OS 2.1.6

• SCIEX OS 2.1.6 Patch for Acquisition Issue

• SCIEX OS 2.1.6 Patch for Communication Issue

• SCIEX OS 2.1.6 Patch for Slowness Issue

• SCIEX OS 2.1.6 HotFix 1

• SCIEX OS 2.1.6 HotFix 2

SCIEX OS 2.0.1

• SCIEX OS 2.0.1 Patch for Agilent Custom Well Plates

• SCIEX OS 2.0.1 Patch for Shimadzu Plate Layout

SCIEX OS 2.0

• SCIEX OS 2.0 Patch for Agilent Acquisition Issue

• SCIEX OS 2.0 Patch for Non-English OS

SCIEX OS 1.7

• SCIEX OS 1.7 HotFix 1

• SCIEX OS 1.7 Patch for ChemSpider Issue

• SCIEX OS 1.7 Patch for German OS

• SCIEX OS 1.7 Patch for Network Issue

• SCIEX OS 1.7 Patch for Reporting Issue

- SCIEX OS 1.7 Patch for Slowness Issue

SCIEX OS 1.6.10

- SCIEX OS 1.6.10 HotFix 1
- SCIEX OS 1.6.10 Patch for the Echo MS System

SCIEX OS 1.6.2

- SCIEX OS 1.6.2 Patch for Reporting Issue
- SCIEX OS 1.6.2 Patch for Slowness Issue

SCIEX OS 1.6.1

- SCIEX OS 1.6.1 Patch for Processing Issue with Checksum

SCIEX OS 1.5

- SCIEX OS 1.5 Patch for Chemspider API Update
- SCIEX OS 1.5 Patch for Cronologic Data Issues
- SCIEX OS 1.5 Patch for E-Signature Issue
- SCIEX OS 1.5 Patch for Processing Issue

SCIEX OS 1.4

- SCIEX OS 1.4 Patch for Diverter Valve Issue

Requirements 2

Computer Requirements

SCIEX OS and the Central Administrator Console (CAC) software are supported on the following computer:

- SCIEX Workstation or Workstation+, with:

  - An Intel Xeon W-2245 processor (8 core, 16.5 MB cache, 3.9 GHz, 4.7 GHz Turbo HT 16.5 MB, 155W DDR4-2933, with NVIDIA P400 or T400)

  - 32 GB (2 × 16 GB) DDR4 3200MHZ RDIMM ECC

  - SCIEX Workstation: 2 × 1 TB HDD (RAID1)

  - SCIEX Workstation+: 2 × 2 TB HDD (RAID1)

Note: Newer computer models might become available. Consult the local sales representative for the latest information.

In addition, SCIEX OS is supported on the following computers:

- SCIEX Alpha Workstation 2020, with:

  - An Intel Core I5-8500 processor (6 core, 9 MB cache, 3.0 GHz, 4.1 GHz Turbo, with HD Graphics 630)

  - 32 GB (2 × 16 GB) 2666 MHz DDR4 UDIMM Non-ECC

  - 2 × 2 TB HDD (RAID1)

- Dell OptiPlex XE2 computer, with:

  - An Intel Core I5-4570S processor (Quad core, 2.90 GHz, 6 MB with HD Graphics 4600)

  - 32 GB DDR3 1600 MHz SDRAM

  - 2 × 2 TB HDD (RAID1)

Acquisition computers require at least two Ethernet port connections.

For SCIEX OS-MQ, these computers can be used with a minimum of 8 GB RAM.

Computers with lower specifications can be used for processing SCIEX OS 3.1.5 data but they cannot be used for acquiring data.

Operating System Requirements

*   Operating system:

    *   SCIEX OS: Windows 7, 64-bit or Windows 10, 64-bit, version 1809 LTSC, 20H2, or 21H2

    *   Central Administrator Console (CAC): Windows 10, 64-bit, version 1809 LTSC, 20H2, or 21H2; Windows Server 2019 and later

    For acquisition, only the English operating system is supported. For processing (SCIEX OS-Q and SCIEX OS-MQ), the English, French, German, and Italian operating systems are supported.

*   Language settings: English

*   Region settings: English, French, or German

*   (Recommended) System Restore: Disabled

*   Windows Updates: Notify only

Note: SCIEX OS cannot be installed or used on a computer with Federal Information Processing Standards (FIPS) enabled (**System cryptography: Use FIPS compliant algorithms for encryption, hashing, and signing**).

Note: Every SCIEX computer is configured with a local Administrator-level account, **abservice**. This account is used by SCIEX service and technical support to install, service, and support the system. Do not remove or deactivate this account. If the account must be removed or deactivated, then prepare an alternate plan for SCIEX access, and communicate it to the local FSE.

Note: When installing on a computer that is not supplied by SCIEX, make sure that .NET Framework 4.x is installed on the computer. If it is not installed, then run `Install/NDP472-KB4054530-x86-x64-AllOS-ENU.exe`, located in the installation package, before installing SCIEX OS.

Network Requirements

The Software Updates feature has the following additional requirements:

*   Outbound connectivity must be enabled, using the HTTPS protocol on port 443.

*   The firewall must allow outbound communication from SCIEX OS to AWS, including: https://sciexos.com.

*   Transport Layer Security (TLS) 1.2, or later, is installed.

> **Note:** Computers with the Windows 7 operating system might have an earlier version of TLS. To upgrade them, install Microsoft update KB3140245. The Windows 10 operating system includes TLS 1.2 or later.

Contact the local network administrator to confirm that these requirements are obeyed.

> **Note:** If the Software Updates feature is unable to communicate with SCIEX, then contact the local network administrator to make sure that port 443 is open and that Transport Layer Security (TLS) 1.2 is installed on the computer.

> **Note:** The CAC software uses TCP ports 63333 and 44144 for communication. The server must allow inbound and outbound traffic on these ports.

This version of SCIEX OS does not support communication to the Internet through a corporate proxy server.

Software Requirements

Microsoft Office 2013, 2016, or 2021, 32-bit or 64-bit, is required to create, open, and edit the report templates used in the Analytics workspace.

> **Note:** SCIEX OS is compatible with Microsoft Office 365 for all functions except creating, opening, and editing the report templates used in the Analytics workspace.

> **Note:** Alpha and SCIEX workstations with LTSB/LTSC Windows 10 Operating systems are not compatible with Microsoft Office 365.

Licensing Requirements

Use of the SCIEX OS 3.1.5 software requires activation of the SCIEX OS 3.1 license.

Compatible Systems

The following sytems are compatible with SCIEX OS 3.1.5.

Table 2-1 Supported Mass Spectrometers and Ion Sources

Mass Spectrometer	Supported Ion Sources
X500R QTOF or X500B QTOF system	Turbo V ion source
ZenoTOF 7600 system	Turbo V ion source OptiFlow Turbo V ion source

Table 2-1 Supported Mass Spectrometers and Ion Sources (continued)

Mass Spectrometer	Supported Ion Sources
SCIEX 4500 system	Turbo V ion source
SCIEX 5500 system	Turbo V ion source OptiFlow Turbo V ion source (Micro probe)
SCIEX 5500+ system	Turbo V ion source OptiFlow Turbo V ion source (Micro probe)
SCIEX 6500 system	IonDrive Turbo V ion source OptiFlow Turbo V ion source Turbo V ion source
SCIEX 6500+ system	IonDrive Turbo V ion source OptiFlow Turbo V ion source Turbo V ion source
SCIEX 7500 system	OptiFlow Pro ion source

Compatible Software

The following applications are compatible with SCIEX OS 3.1.5 on Windows 7 and Windows 10 operating systems.

Table 2-2 Compatible Software

Software Name	Additional Information
Biologics Explorer software version 1.0, 1.1, 2.0, 3.0	Use the tile on the Home page in SCIEX OS to get access to Biologics Explorer software version 3.0.
CloudConnect version 1.8	PeakView version 2.2 or higher is required.
LibraryView software version 1.5	SCIEX OS cannot coexist with the LibraryView software version 1.0.x or 1.1 to 1.4.
Molecule Profiler software version 1.3	The Molecule Profiler software is a part of the installation package.
MarkerView software version 1.4	The MarkerView software is a part of the installation package.

Requirements

Table 2-2 Compatible Software (continued)

Software Name	Additional Information
OneOmics suite version 3.4	PeakView version 2.2 or higher is required.
ProMassProcessor version 1.0	—
StatusScope remote monitoring service version 2.2, 2.2.1, 2.2.2	—

Note: SCIEX OS can also coexist with the Analyst software version 1.6.3 or later and the Analyst TF software version 1.7.1 or later.

Note: SCIEX OS is compatible with the data files created with the Analyst software version 1.6.2, 1.6.3, and 1.7, or later, and the Analyst TF software version 1.7.1 or later.

Note: SCIEX OS cannot coexist with the Analyst Device Driver (ADD), Cliquid, MasterView, or MPX software.

Installation Instructions 3

Note: Internet access is required to download the software. We recommend that all of the required software and materials be downloaded before the scheduled installation to decrease the time required for the installation.

Back up the SCIEX OS Folders to a Safe Location

Before upgrading SCIEX OS, back up these folders to a safe location, such as a network drive or DVD:

- `SCIEX OS Data:` This folder contains all methods, batches, and data. By default, this folder is installed in `D:\SCIEX OS Data`.

- `C:\ProgramData\SCIEX:` This folder contains all security and device configuration data.

  Note: This is a hidden folder. If it is not visible, then configure File Explorer to show hidden items.

If the backup software encounters locked files, then skip them.

Note: The backups are required to revert to the previous version of SCIEX OS. It the backups are not available, and the previous version of SCIEX OS is reinstalled, then it will be necessary to recreate all methods and reconfigure security.

Do not rename the existing `SCIEX OS Data` folder. We recommend that the same `SCIEX OS Data` folder be used for the new version of SCIEX OS, to provide access to existing data, such as methods, batches, data, and Results Tables.

Install SCIEX OS

Prerequisites
• Make sure that a SCIEX OS 3.1 license key is available. The license key might be distributed on a printed activation certificate, or in an e-mail from SCIEX Now. If the license key is missing, then contact a SCIEX sales representative.
• If a Windows Update is in progress, then wait until the update is finished.
• If a reboot is required after a Windows Update, then reboot the computer before beginning the installation.

Installation Instructions

Note: VC++2008 SP1 MFC Security Redistributable is also required. If it is not present, then the installation program will install it. Do not remove it. If it is removed, then the SCIEX OS will not function properly when an ExionLC 2.0 system is used.

When installing the software from a DVD, always install it from the official SCIEX DVD and, after the installation, make sure that the correct version is installed.

During installation of SCIEX OS, the user selects the type of installation and the modules to be installed.

To install the CAC software, refer to the section: Install the CAC Software.

Note: The CAC software is a part of SCIEX OS installer package. However, the CAC software and SCIEX OS cannot be installed on the same computer.

Note: The installation program disables the System Restore task.

Note: To make changes in the installation, deactivate the devices in SCIEX OS before using the **Modify** option. Refer to the section: Installation Troubleshooting Tips.

1. Log on to the computer as a Windows user with Administrator privileges.

2. Make sure that all applications are closed.

3. To install the software from a DVD, put the DVD in the DVD drive.

4. To install the software from a downloaded file, do these steps:

   a. Download the required zip file from sciex.com/software-support/software-downloads.

      Tip! To prevent potential installation issues, save the file to a location other than the computer desktop and then disconnect any external USB storage devices before starting the installation.

   b. After the download is complete, right-click the downloaded file and then click **Extract All** to extract the installation package.

5. Acquisition computers: Install the driver:

   • X500 QTOF systems: Browse to the `Drivers` folder of the DVD or installation package and then double-click `xTDC4_driver_v1.1.0.exe` to install version 1.1.0.

   • ZenoTOF systems: Browse to the `Drivers` folder of the DVD or installation package and then double-click `ndigo_driver_v1.3.0.exe` to install version 1.3.0.

6. Double-click `Setup.exe` in the `Install` folder on the DVD or in the installation package.

7. Follow the on-screen instructions.

During the installation, the user is prompted to select the type of installation and the modules to be installed:

- **Acquisition + Processing**

- **Processing**

- **Administration**

Figure 3-1 Choose Modules for Installation
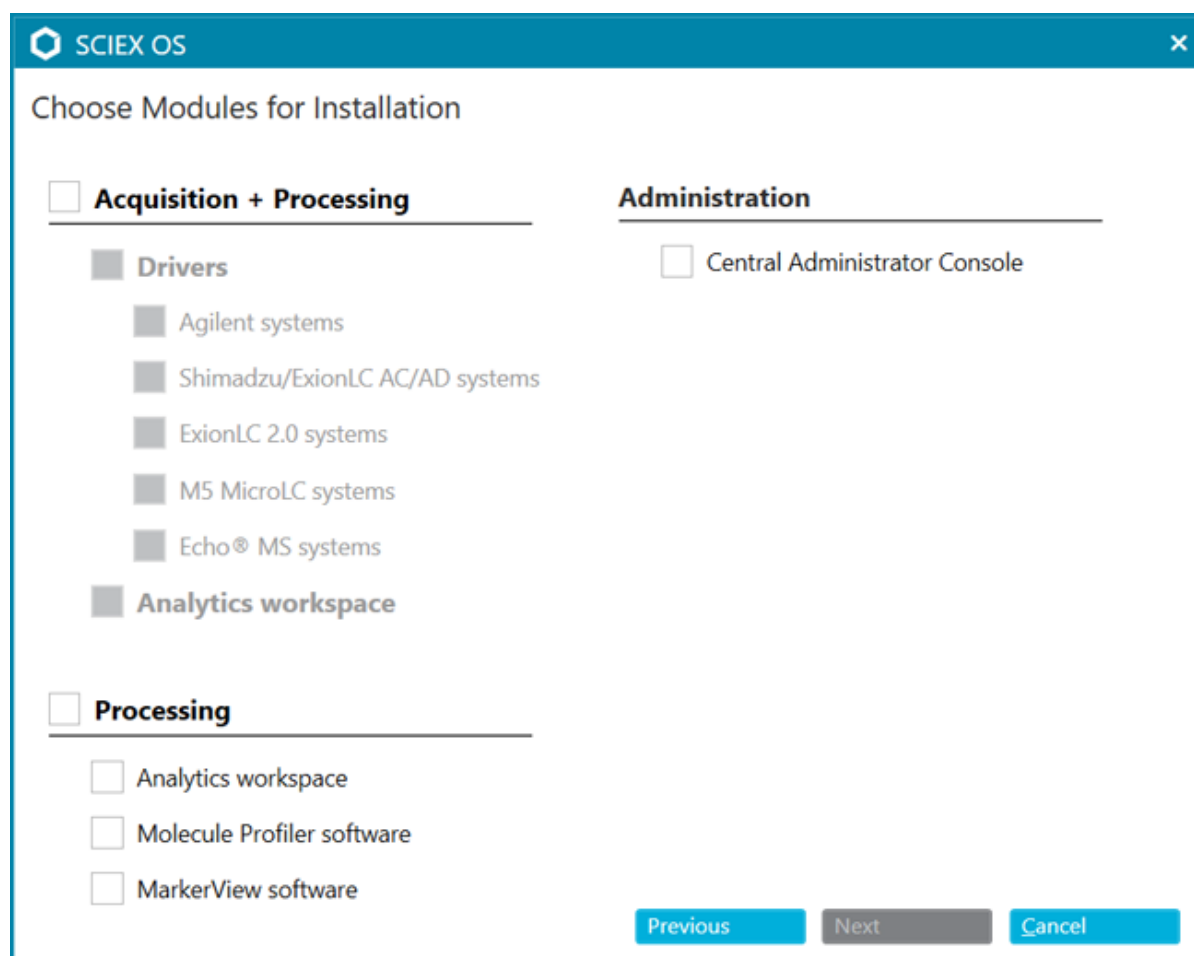
Note: Separate licenses might be required for optional modules.

Note: To avoid installation issues, install the software on a local drive. Do not install on a network or removable drive.

Note: To avoid installation issues, make sure that the path to the installation folder is 118 characters or less. If it is longer, then installation will not proceed.

> **Tip!** If an upgrade to .NET is required, then a prompt for a computer restart is shown during the installation. Users have the option to continue with the restart immediately or select the option to postpone the restart until later. However, installation does not continue until after the restart.

If the installation does not complete successfully, then use the SCIEX OS Installation Repair Tool to identify the issue. Refer to the section: SCIEX OS Installation Repair Tool.

8. If prompted, then restart the computer after the software is installed.

> **Note:** A restart is recommended after the software is installed for the first time, even if no prompt is given. A restart is not required after reinstallation of the software.

9. (Optional) Use the SCIEX OS Installation Confirmation Tool to make sure that the software installed correctly:

    a. In the SCIEX OS Installation Confirmation Tool, click **Start verifying installed files**.

    b. After the analysis is complete, click **Print Report**, select a printer, and then click **Print**.

10. Open the software.

11. Activate the software using the license key. Refer to the section: Electronic Licensing.

    Supported accurate and nominal mass systems: If the SCIEX OS 3.1.5 license includes licensing for the LibraryView software, then the LibraryView software must be installed separately.

> **Note:** In addition to SCIEX OS license, the user might need separate licenses for optional modules and features. Make sure to obtain and activate the licenses before attempting to use these features.

12. (If required) For acquisition computers, run the MS FW Updater Utility to update the MS firmware and instrument configuration tables. Refer to the sections: MS FW Updater Utility and Mass Spectrometer Firmware Versions.

Install the CAC Software

Prerequisites
• Make sure that a license key for the CAC software is available. The license key might be distributed on a printed activation certificate, or in an e-mail from SCIEX Now. If the license key is missing, then contact a SCIEX sales representative.
• If a Windows Update is in progress, then wait until the update is finished.
• If a reboot is required after a Windows Update, then reboot the computer before beginning the installation.

When installing the software from a DVD, always install it from the official SCIEX DVD and confirm after the installation that the correct version is installed.

Note: The installation program disables the System Restore task.

Note: To make changes in the installation, deactivate the devices in SCIEX OS before using the **Modify** option. Refer to the section: Installation Troubleshooting Tips.

1. Log on to the computer as a Windows user with Administrator privileges.

2. Make sure that all applications are closed.

3. To install the software from a DVD, load the DVD in the DVD drive.

4. To install the software from a downloaded file, do these steps:

    a. Download the required zip file from the SCIEX website.

        Tip! To prevent potential installation issues, save the file to a location other than the computer desktop and then disconnect any external USB storage devices before starting the installation.

    b. After the download is complete, right-click the downloaded file and then click **Extract All** to extract the installation package.

5. Double-click `Setup.exe` in the `Install` folder on the DVD or in the installation package.

6. Follow the on-screen instructions. On the Choose Modules for Installation dialog, select **Central Administrator Console**.

Figure 3-2 Choose Modules for Installation

Note: To avoid installation issues, install the software on a local drive. Do not install on a network or removable drive.

Note: To avoid installation issues, make sure that the path to the installation folder is 118 characters or less. If it is longer, then installation will not proceed.

Tip! If an upgrade to .NET is required, then a prompt for a computer restart is shown during the installation. Users have the option to continue with the restart immediately or select the option to postpone the restart until later. However, installation does not continue until after the restart.

If the installation does not complete successfully, then use the SCIEX OS Installation Repair Tool to identify the issue. Refer to the section: SCIEX OS Installation Repair Tool.

7.   If prompted, then restart the computer after the software is installed.

> **Note:** A restart is recommended after the software is installed for the first time, even if no prompt is given. A restart is not required after reinstallation of the software.

8. (Optional) Use the SCIEX OS Installation Confirmation Tool to make sure that the software installed correctly:

    a. In the SCIEX OS Installation Confirmation Tool, click **Start verifying installed files**.

    b. After the analysis is complete, click **Print Report**, select a printer, and then click **Print**.

9. Configure the Windows firewall, refer to the section: Configure Windows Firewall.

    Use TCP ports 63333 and 44144 for communication on the Central Administrator Console (CAC) software. The server must allow inbound and outbound traffic on these ports.

10. Open the software.

11. Activate the software using the license key. Refer to the section: Electronic Licensing.

12. Configure the CAC software. Refer to the document: *CAC Help*.

> **Note:** The administration mode can be changed in the CAC software or in SCIEX OS. SCIEX OS. For instructions for configuring the administration mode in SCIEX OS, refer to the *SCIEX OS Help System*.

Upgrade the Software

A new software license is required to upgrade from versions of SCIEX OS earlier than version 3.1.

Upgrade from SCIEX OS 1.4 or Later

Prerequisites
• Make sure that a SCIEX OS license key is available. Eligible customers can also get an upgrade license key by clicking the **Upgrade Software** button on the Registered Software page in SCIEX Now. • If any Results Tables contain custom columns with the name **IF**, then change the column name. • Make sure that the versions of all vertical applications installed on the computer are supported. For supported versions, refer to the section: Compatible Software. If required, update the vertical applications before upgrading SCIEX OS. Refer to the section: Install Optional Vertical Applications. **Note:** Make sure that the LibraryView software version 1.4 is installed before upgrading SCIEX OS. • If a Windows Update is in progress, then wait until the update is finished. • If a restart is required after a Windows Update, then restart the computer before beginning the upgrade.

The installation program silently removes the patches that are integrated in this version. For a list of these patches, refer to the section: Patches and HotFixes.

While installing SCIEX OS, the user selects the modules to be installed, such as **Molecule Profiler** or **Analytics**.

Note: The CAC software is a part of SCIEX OS installer package. However, the CAC software and SCIEX OS cannot be installed on the same computer.

Note: During the upgrade, the ExionLC 2.0 system driver, if installed on the computer, is removed. After SCIEX OS is installed, install the ExionLC 2.0 system driver again.

During the upgrade, the LibraryView software database is migrated from SQL Server Express to MongoDB. The amount of time required for the migration depends on the size of the database. If the database is large, then the migration can take more than 30 minutes. To save time during the upgrade, the migration step can be skipped and done after the upgrade is complete. Refer to the section: Migrate the LibraryView Database.

Note: Some of the steps might take some time to complete.

1. Deactivate all devices and then close SCIEX OS.

2. Make sure that all other applications are closed.

3. Back up the `C:\ProgramData\SCIEX` folder. Refer to the section: Back up the SCIEX OS Folders to a Safe Location.

4. For upgrades from SCIEX OS 1.4: If the Audit Trail feature is being used, then do these steps to save the Workstation audit data:

   a. Browse to the folder, `C:\ProgramData\SCIEX`, and then create a folder named `Audit Data`. Give System, Users, and Administrators read and write access to the new folder.

   b. Browse to the folder, `SCIEX OS Data\common-project-area\Audit Data`, and then copy the following files:

      • `WorkstationAuditMap.atms`

      • `WorkstationAuditMapTemplates.atms`

      • `WorkstationAuditTrailData.atds`

      > **Note:** By default, `SCIEX OS Data` is installed on `D:\`.

   c. Paste the files in the folder, `C:\ProgramData\SCIEX\Audit Data`.

5. Log on to the computer as a Windows user with Administrator privileges.

6. Acquisition computers: Do these steps:

   a. Open the currently installed SCIEX OS.

   b. Open the MS Tune workspace.

   c. Click **Positive MS Tuning**.

   d. Click **Save Tuning Settings** in the left panel and then click **Save settings**.

7. Back up the SCIEX OS data folder. Refer to the section: Back up the SCIEX OS Folders to a Safe Location.

8. Do one of the following:

   • If the software is being installed from a DVD, then insert the DVD in the DVD drive and continue with step 12.

   • If the software is being installed from a downloaded file, then continue with step 9.

9. Download the required zip file from the SCIEX website.

   > **Tip!** To prevent potential installation issues, save the file to a location other than the computer desktop and then disconnect any external USB storage devices before starting the installation.

10. After the download is complete, right-click the downloaded file and then click **Extract All** to extract the installation package.

11. Acquisition computers: Upgrade the drivers.

    - X500 QTOF systems: Browse to the Drivers folder of the DVD or installation package and then double-click **xTDC4_driver_v1.1.0.exe** to remove version 1.0.3 of the TDC4 driver and install version 1.1.0.

12. Double-click **Setup.exe** on the DVD or in the installation package.

13. Follow the on-screen instructions. When prompted, select the modules to be installed.

    > **Note:** If the library was previously migrated to MongoDB and the SQL server was not removed, then the user will see an additional dialog to resolve the database conflict. Click **Keep All Original** so that the MongoDB is not overwritten.

    During the migration of the database from SQL Server Express to MongoDB, a progress dialog is shown. After the migration is complete, the Data Migration dialog opens. If there are issues, resolve them. Refer to the section: Migrate the LibraryView Database. Then click **Close**.

    > **Tip!** To do the migration later, click **Close** to cancel it. Then, after the installation is complete, follow the procedure in the section: Migrate the LibraryView Database.

    > **Tip!** If an upgrade to .NET is required, then a prompt for a computer restart is shown during the installation. Users have the option to continue with the restart immediately or select the option to postpone the restart until later. However, installation does not continue until after the restart.

    If the upgrade does not complete successfully, then use the SCIEX OS Installation Repair Tool to identify the issue. Refer to the section: SCIEX OS Installation Repair Tool.

14. (Optional) If no software installed on the computer other than SCIEX OS was using SQL Server Express, then remove the SQL Server database.

15. (Optional) If no software installed on the computer other than SCIEX OS was using MongoDB 3.0.2, then remove the MongoDB 3.0.2 software.

16. (Optional) Use the SCIEX OS Installation Confirmation Tool to make sure that the software installed correctly:

    a. In the SCIEX OS Installation Confirmation Tool, click **Start verifying installed files**.

    b. After the analysis is complete, click **Print Report**, select a printer, and then click **Print**.

17. For acquisition computers, run the MS FW Updater utility to update the mass spectrometer firmware and configuration tables, if required. Refer to the section: MS FW Updater Utility.

    For a list of supported firmware versions, refer to the section: Mass Spectrometer Firmware Versions.

18. If required, then install the ExionLC 2.0 system driver.

Upgrade from Earlier Versions of SCIEX OS

To upgrade from versions of SCIEX OS earlier than version 1.4, remove the earlier version of SCIEX OS and then install the new version.

1. Deactivate all devices and then close SCIEX OS.

2. Make sure that all other applications are closed.

3. Back up the `C:\ProgramData\SCIEX` folder. Refer to the section: Back up the SCIEX OS Folders to a Safe Location.

4. In the Windows Apps & features control panel, remove SCIEX OS.

5. Install SCIEX OS 3.1.5. Refer to the section: Install SCIEX OS.

6. Upgrade any vertical applications. Refer to the section: Install Optional Vertical Applications for information about upgrading the vertical applications.

Migrate from the Analyst Software

Prerequisites
• Complete the *SCIEX OS eLearning*, available at SCIEX Now Learning Hub.
• Make sure that the acquisition computer meets the requirements for SCIEX OS.
• Purchase the SCIEX OS license.

Customers using the Analyst software to acquire data from SCIEX 4500, 5500, 5500+, 6500, and 6500+ systems can upgrade to SCIEX OS, the new mass spectrometry software available from SCIEX. An onsite upgrade service is available from SCIEX. For more information, contact a sales representative or field service employee (FSE).

Note: SCIEX does not support workflows that use both the Analyst software and SCIEX OS to acquire data from the same mass spectrometer.

1. Install SCIEX OS 3.1.5. Refer to the section: Install SCIEX OS.

2. Use the Instrument Settings Converter to import the mass spectrometer settings from the Analyst software into SCIEX OS. Refer to the document: *Instrument Settings Converter Release Notes*.

   Tip! The release notes are in the `Instrument Settings Converter` folder in the SCIEX OS installation package.

   Note: Use the version of the Instrument Settings Converter distributed in the SCIEX OS 3.1.5 installation package.

3. In the MS Method workspace in SCIEX OS, click **Open** > **Convert File**.

4. Import MS methods created with the Analyst software and convert them to SCIEX OS format.

    Note: Only MS method information is converted. LC methods must be created manually in SCIEX OS.

5. Review the transferred settings in SCIEX OS to make sure that they are appropriate.

    Tip! Use the **Verify MS scans** option in the **MS Scan Tuning** procedure in the MS Tune workspace to review the settings. Expected results should be the same regardless of the control software installed.

Install Optional Vertical Applications

The following optional applications must be installed after SCIEX OS is installed:

- Biologics Explorer software
- LibraryView software

Note: For supported versions, refer to the section: Compatible Software.

Note: If newer versions of the applications are available, then contact sciex.com/request-support to verify software compatibility.

1. Install SCIEX OS.

2. Make sure that SCIEX OS is closed, and then install the optional applications.

    Note: For instructions, refer to the document: *Release Notes* for the optional application.

Downgrade to Previous Versions of the Software

Follow this procedure to downgrade from SCIEX OS 3.1.5 to SCIEX OS version 1.6.1 or later. To downgrade to earlier versions of SCIEX OS, contact sciex.com/request-support.

1. In the Windows Apps & features control panel, remove SCIEX OS 3.1.5.

2. Remove all Microsoft C++ Redistributables from 2014 to 2019.

3. Install the earlier version of SCIEX OS.

Note: If the installation fails, then perform the cleanup procedure. Refer to the section: Installation Cleanup.

Remove the SCIEX OS Software

Prerequisites
• Remove any HotFixes.

1. Log on to the computer as a Windows user with Administrator privileges.

2. Click **Start** > **Control Panel** > **Programs and Features**.

   Tip! If the control panel components are shown by **Category**, then click **Start** > **Control Panel** > **Programs** > **Programs and Features** > **Uninstall a program**.

3. Select **SCIEX OS** and then click **Uninstall**.

   The software is removed, with no user intervention required.

   Note: If the product is licensed, then the license file is not removed and can be used if SCIEX OS is installed again.

MS FW Updater Utility 4

SCIEX OS requires that a supported firmware version be installed on the connected mass spectrometer. Use this utility to upgrade the firmware version on the mass spectrometer.

For a list of supported versions, refer to the section: Mass Spectrometer Firmware Versions.

Prerequisites
• SCIEX OS 3.1.5 or later is installed.
• The mass spectrometer is active in the Devices workspace.
• The computer is connected to the mass spectrometer.
• The user running the utility is logged in as an Administrator in Windows as well as an Administrator in the SCIEX OS User database.

1. Stop all acquisitions and then clear the queue.

   There must be no samples waiting in the queue.

2. Close SCIEX OS.

3. In the SCIEX OS installation package, browse to the `\FirmwareUpdater\` folder, and then double-click `MS FW Updater.exe`.

Figure 4-1 MS FW Updater Utility
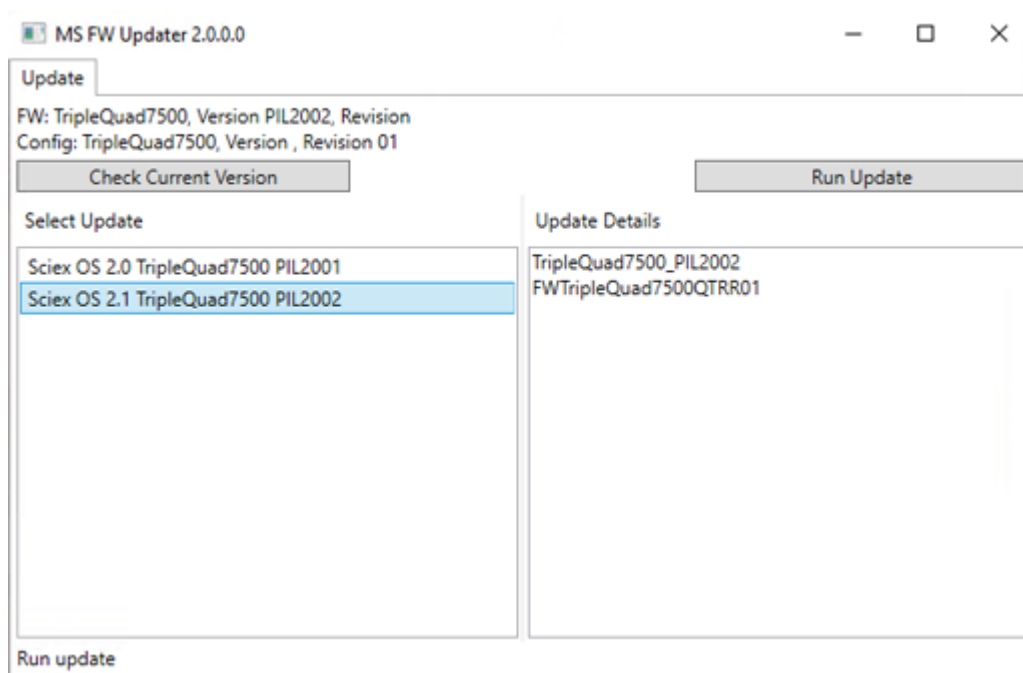
4. In the **Select Update** list, select the mass spectrometer and software version.

5. Click **Run Update** and then follow the on-screen instructions.

Figure 4-2 MS FW Updater Progress Bar
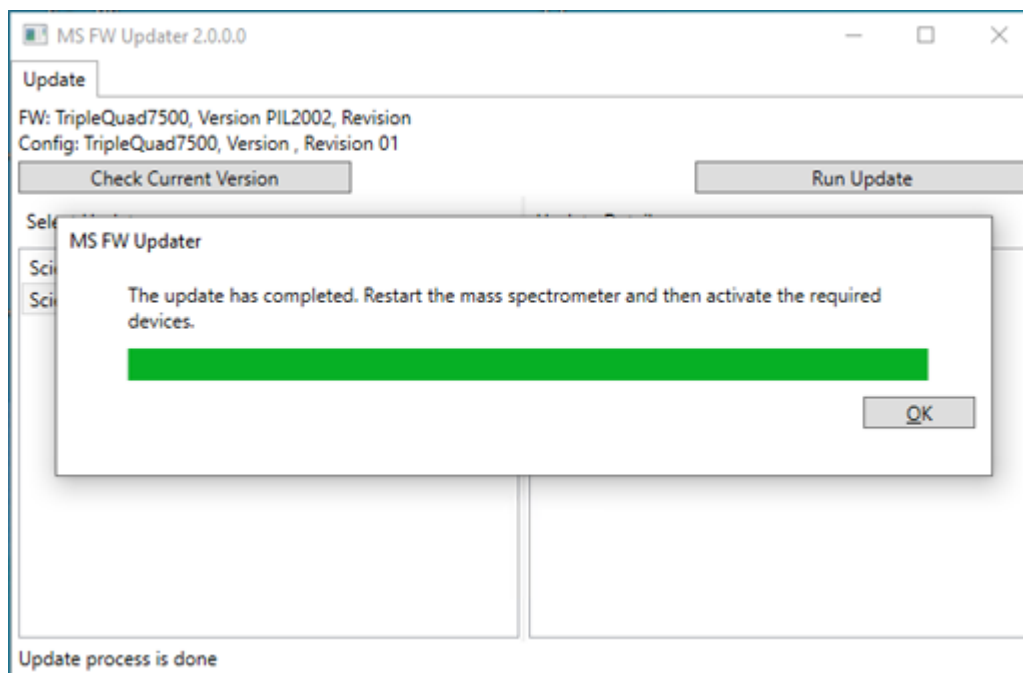
6. After the update finishes, click **OK** on the progress bar, and then close the utility.

   Note: The event log in SCIEX OS indicates that the firmware was updated successfully.

7. Wait 30 seconds and then restart the mass spectrometer. Refer to the document: *System User Guide*.

8. Open SCIEX OS and then open the Devices page in the Configuration workspace.
   The mass spectrometer device has been deleted from the list.

9. Add the mass spectrometer to the Device list and then activate the required devices.

   The MS FW Updater utility can be used to revert to a firmware version supported by an earlier version of SCIEX OS. Run the Firmware Updater utility again, select the required version, and then click **Run Update**.

   Note: X500 QTOF systems: The MS FW Updater cannot revert to firmware versions supported by SCIEX OS versions earlier than version 1.2. To revert to earlier versions, contact sciex.com/request-support.

   Note: SCIEX 7500 systems: The MS FW Updater cannot revert to firmware versions supported SCIEX OS versions earlier than version 2.0. Earlier versions of SCIEX OS do not support the SCIEX 7500 system.

Electronic Licensing 5

SCIEX OS supports node-locked licensing for both acquisition and processing workstations. A node-locked license can only be used on one computer. Server-based licensing is only supported for processing workstations. For both node- and server-based licenses, the license file name is SCIEX OS3.1.lic. Install the license file in the `C:\Program Files\SCIEX\SCIEX OS` folder on the computer where SCIEX OS is installed.

Note: For the Central Administrator Console (CAC) software, only node-locked licensing is supported.

Note: If the computer date and time must be changed, then do so before activating the license. Otherwise, the software might not function.

Note: Modifying the license file invalidates the license and it becomes unrecoverable.

Activate a Server-Based License

Note: This procedure is not applicable for the Central Administrator Console (CAC) software.

For a server-based license, contact the IT department to do the following:

1. Set up a license server.

   To set up a license server, ask the IT department to download the *License-Server-Setup.zip* file by clicking the link **License Server Setup Software** in the **Additional Downloads > License Server Setup** section at the following site: sciex.com/software-support/software-downloads. Follow the instructions in the *License Server Setup Guide* contained in the downloaded package.

2. Create a license file named SCIEXOS3.1.lic for the client computers.

3. Distribute the license file to each client computer where SCIEX OS is installed.

Activate a Node-Locked License

Prerequisites
• A license key is available.

1. Double-click the SCIEX OS icon on the desktop.

Figure 5-1 License Message
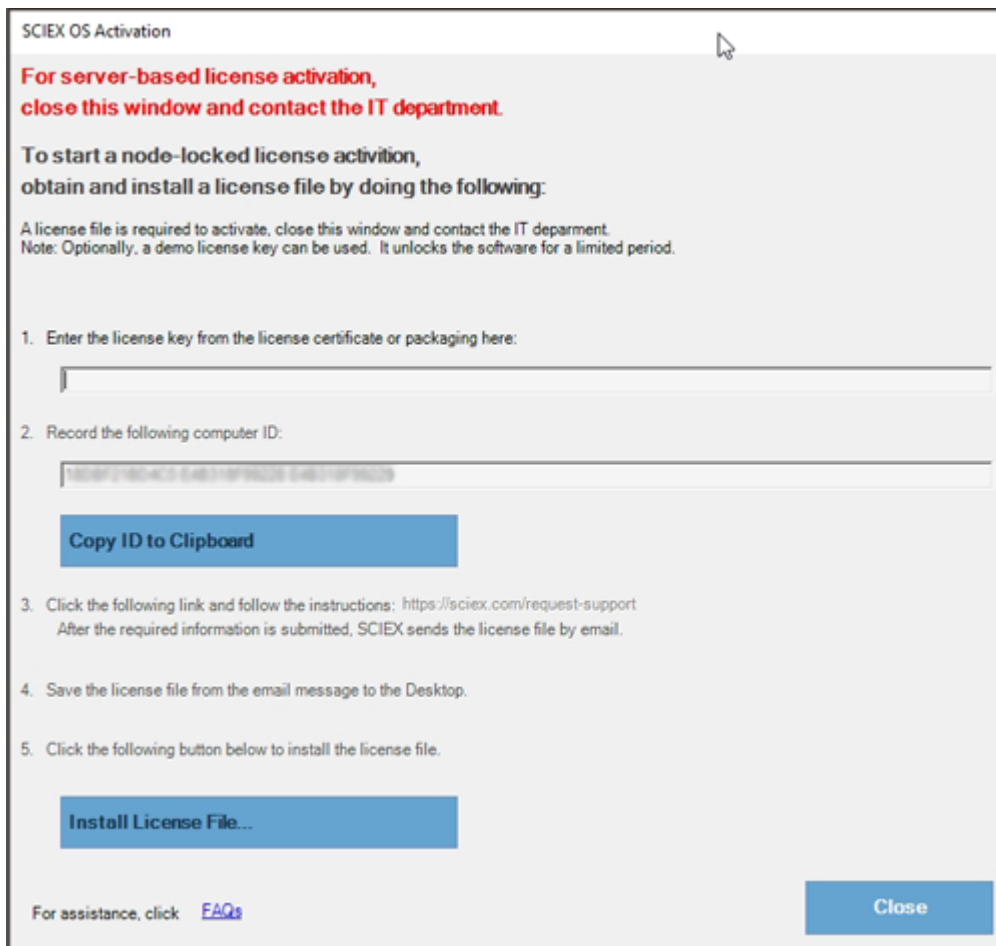
2. In step 1 of the SCIEX OS Activation dialog, type the license key.

    The license key might be distributed on a printed activation certificate or in an e-mail from SCIEX Now. If the license key is missing, then contact a SCIEX sales representative.

    Note: The license key starts with AID and is followed by 32 characters, consisting of 8 segments of 4-digit codes separated by hyphens.

    ---

3. In the SCIEX OS Activation dialog, click the link in step 3.
    The SCIEX Login web page opens.

4. To log on to an existing SCIEX account, click **Log In**, or click **Create an Account**.

    When account creation or log on is complete, the SCIEX software activation web page opens. The first name, last name, and e-mail address of the user are shown in the first three fields in the form.

If a license is being activated for SCIEX OS on this computer, then the **License Key** field is also populated with the correct information.

5. In the **Select Your Instrument** field, select and type the required information.

> **Note:** To activate a node-locked license for a processing workstation, use a serial number for any SCIEX instrument. Contact SCIEX Support at sciex.com/contact-us if an instrument serial number is not available.

6. If a license is being activated for SCIEX OS on a different computer, then type the computer ID, which is the MAC address of the network port used to connect the computer to the network, and the license key.

7. Click **Submit**.
   A message is shown indicating that an e-mail with the license file will be sent.

8. After the e-mail is received, save the attached license file in the
   `C:\Program Files\SCIEX\SCIEX OS` folder.

9. Use the SCIEX Now web page to obtain and activate license for add-on features such as the Central Administrator Console (CAC) software, Molecule Profiler, Scout Triggered MRM (stMRM) and so on. For more information, contact Technical Support at sciex.com/request-support.

Troubleshooting 6

SCIEX OS Installation Repair Tool

Prerequisites
• Repair the SCIEX OS installation: Start the installation program (`Install/Setup.exe`), and then select the **Repair** option.

If the repair does not complete successfully, then do this procedure.

Note: The SCIEX OS Installation Repair Tool cannot be used for installations of the Central Administrator Console (CAC) software.

1. To view the status of the installation, in the SCIEX OS installation package, browse to the `Installation Repair Tool` folder, and then double-click `Sciex.Installer.Repair.exe`.

   • In the list of Installed SCIEX Modules, modules that installed successfully are marked with a green check mark ( ) and modules that were not installed are marked with a red × ( ). All modules selected during installation should be marked as passed.

   • On the SCIEX OS Prerequisites tab in the Installer Packages pane, packages shown in red text were not installed or are the incorrect version.

   • On the Subsystem Components tab in the Installer Packages pane, subsystems shown in red text were not installed or are the incorrect version.

2. Close the SCIEX OS Installation Repair Tool.

3. In the Windows Apps & features control panel, remove the following applications, if present, in this order:

   • LibraryView software

   • SCIEX OS

   • LibraryView Framework

   • MongoDB

   • Microsoft Access Database Engine

   • Reporter

4. If applicable, remove all of the SQL server applications.

   Note: Do not remove the SQL server applications if they are used by existing libraries.

   For new installations and upgrades from SCIEX OS 1.6.1 and later versions, remove the following applications:

   - Microsoft SQL Server 2008 Setup Support Files
   - Microsoft SQL Server 2012 (64-bit)
   - Microsoft SQL Server 2012 Native Client
   - Microsoft SQL Server 2012 Setup (English)
   - Microsoft SQL Server 2012 Transact_SQL ScriptDom
   - Microsoft SQL Server Compact 3.5 SP2 ENU
   - Microsoft SQL Server Compact 3.5 SP2 x64 ENU
   - SQL Server Browser for SCL Server 2012
   - Microsoft VSS Writer for SQL Server 2012

   For upgrades from SCIEX OS 1.5 and earlier versions, remove the following applications:

   - Microsoft SQL Server 2008 R2 (64-bit)
   - Microsoft SQL Server 2008 R2 Native Client
   - Microsoft SQL Server 2008 R2 Setup (English)
   - Microsoft SQL Server 2008 R2 Setup Support Files
   - Microsoft SQL Server Browser
   - Microsoft SQL Server Compact 3.5 SP2 ENU
   - Microsoft SQL Server Compact 3.5 SP2 x64 ENU
   - Microsoft SQL Server VSS Writer

5. Restart the computer.

6. Open the SCIEX OS Installation Repair Tool.

7. If the **Clean up SCIEX OS** button is active, then click it.

8. After the cleanup is complete, close the SCIEX OS Installation Repair Tool.

9. Install SCIEX OS. Refer to the section: Install SCIEX OS or Install the CAC Software.

10. If the issues cannot be resolved, then follow the instructions in the section: Installation Cleanup.

Installation Troubleshooting Tips

Note: The software in this procedure can be either the Central Administrator Console (CAC) software or SCIEX OS.

Error or Warning Message	Possible Cause	Corrective Action
The installation could not be completed. Refer to the figure: Figure 6-1.	Various causes are possible.	Do the procedure in the section: Installation Cleanup.
The installed version of the Microsoft Visual C++ Redistributable has not been validated with SCIEX OS. Refer to the figure: Figure 6-2.	The version of Microsoft Visual C++ that is installed on the computer is later than the version distributed with the software.	If this computer is to be used for acquisition, then remove the Microsoft Visual C++ Redistributable version shown in the warning message, and then install the software again. No action is required if this computer is to be used for processing only.
Microsoft.Practices.Prism. Regions.UpdateRegions Exception: An exception occurred while trying to create region objects.	This version of the LibraryView Framework installed on the computer is not compatible with the software.	1. Remove the software. 2. Remove the LibraryViewFramework. 3. Rename `C:\ProgramData\SCIEX` to `C:\ProgramData \SCIEX_Removed`. 4. Install the software.
Setup.exe - .NET Framework Initialization Error. Refer to the figure: Figure 6-3.	.NET Framework Version 4.x is not installed.	Install .NET Framework by running `Install/ NDP472-KB4054530-x86- x64-AllOS-ENU.exe`, included in the installation package.

Error or Warning Message	Possible Cause	Corrective Action
The software does not start after the installation is changed with the **Modify** option in the installation program.	The software was installed while devices were active.	To prevent this issue, before using the **Modify** option, deactivate all devices. If the issue occurs, then delete the file: `C:\ProgramData\SCIEX\Clearcore2.Acquisition\HardwareProfile.hwp`. After this file is deleted, the software will open properly.

Figure 6-1 Installation Error (Example)
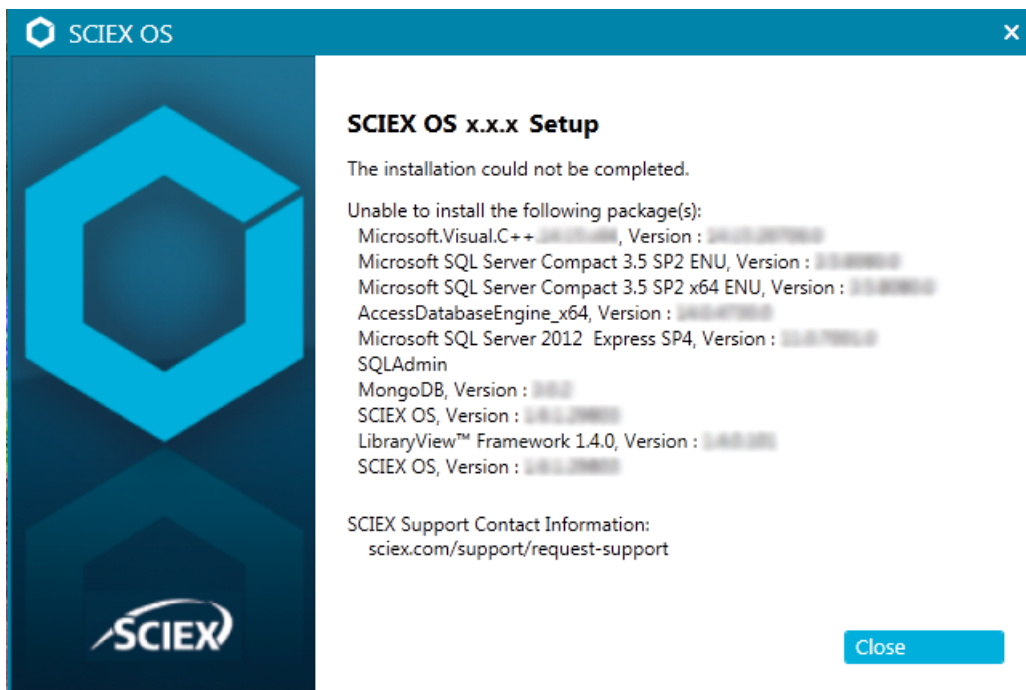
Figure 6-2 Microsoft Visual C++ Redistributable Error
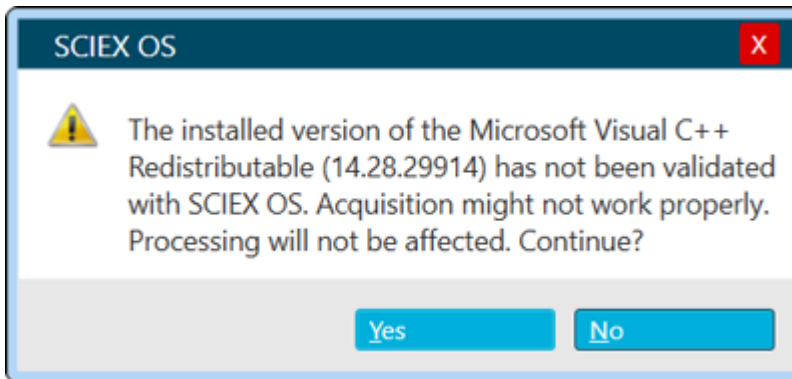
Figure 6-3 .NET Framework Initialization Error
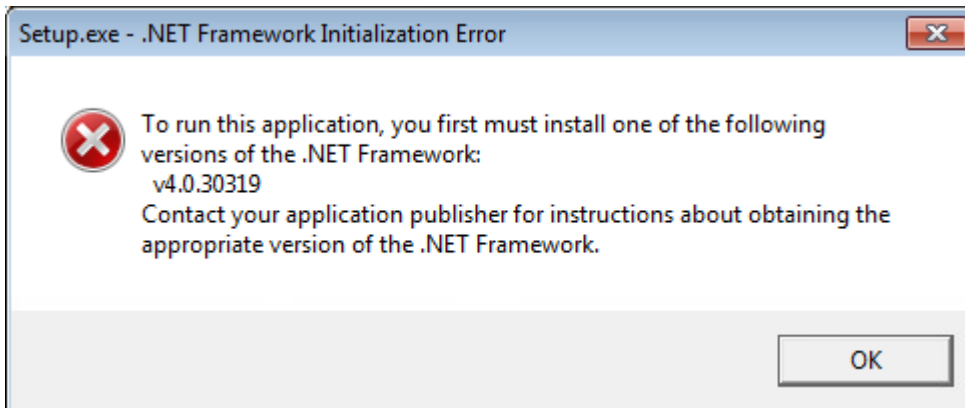
Installation Cleanup

1. In the Windows Apps & features control panel, remove the following applications, if present, in this order:

   - LibraryView software
   - SCIEX OS
   - LibraryView Framework
   - MongoDB
   - Microsoft Access Database Engine
   - Reporter

2. If applicable, remove all of the SQL server applications.

   Note: Do not remove the SQL server applications if they are used by existing libraries.

For new installations and upgrades from SCIEX OS 1.6.1 and later versions, remove the following applications:

- Microsoft SQL Server 2008 Setup Support Files

- Microsoft SQL Server 2012 (64-bit)

- Microsoft SQL Server 2012 Native Client

- Microsoft SQL Server 2012 Setup (English)

- Microsoft SQL Server 2012 Transact_SQL ScriptDom

- Microsoft SQL Server Compact 3.5 SP2 ENU

- Microsoft SQL Server Compact 3.5 SP2 x64 ENU

- SQL Server Browser for SCL Server 2012

- Microsoft VSS Writer for SQL Server 2012

For upgrades from SCIEX OS 1.5 and earlier versions, remove the following applications:

- Microsoft SQL Server 2008 R2 (64-bit)

- Microsoft SQL Server 2008 R2 Native Client

- Microsoft SQL Server 2008 R2 Setup (English)

- Microsoft SQL Server 2008 R2 Setup Support Files

- Microsoft SQL Server Browser

- Microsoft SQL Server Compact 3.5 SP2 ENU

- Microsoft SQL Server Compact 3.5 SP2 x64 ENU

- Microsoft SQL Server VSS Writer

3. Back up and then delete all of the SQL server files in the following folders:

    - SCIEX OS 1.6.1 or later: `C:\Program Files\Microsoft SQL Server\MSSQL11.sqlexpress\MSSQL\Data`

    - SCIEX OS 1.5 or earlier: `C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Data` or `C:\Program Files\Microsoft SQL Server\MSSQL10-50.sqlexpress\MSSQL\Data`

4. In the Apps & features control panel, remove Update for Microsoft Windows (KB4054590). This is .NET 4.7.2.

5. (If required) In the Apps & features control panel, remove the following software:

    - BPV Flex software

    - BioPharmaView software

Troubleshooting

- MetabolitePilot software

Note: These applications are not supported by SCIEX OS 3.1.5

6. Back up and then delete the following folders:

   - `C:\Program Files\SCIEX\LibraryView`
   - `C:\Program Files\SCIEX\SCIEX OS`
   - `D:\SCIEX OS Data`

7. Back up and then delete the following folders:

   - `C:\ProgramData\SCIEX`
   - `C:\Program Files\MongoDB`

8. Restart the computer.

9. Open the Windows Services control panel, and make sure that there are no SQL or LibraryViewHost services in the list.

10. If the ClearCore2 service is present in the Windows Services control panel, then open a Command Prompt window, type the following command, and then press **Enter**:

    `sc DELETE "Clearcore2.Service.exe"`

11. Install the software again, restarting the computer when prompted (if applicable).

Mass Spectrometer Firmware Versions

A

Note: For SCIEX Triple Quad and QTRAP systems, the supported firmware and configuration table version depends on the version of the instrument controller board (ICB) installed on the system.

Mass Spectrometer	Firmware Version	Configuration Table Version
X500R QTOF system	ATLAS_QTOF_ICX_v0_r04	CONFIG_X500R_v0_r04
X500B QTOF system	ATLAS_QTOF_ICX_v0_r04	CONFIG_X500B_v0_r03
ZenoTOF 7600 system	AION_QTOF_ICX64_v0_r05	CONFIG_Zeno-TOF-7600_v0_r06
SCIEX Triple Quad 4500 system	TripleQuad4500_PIL2006	FWTripleQuad4500R22
QTRAP 4500 system	QTrap4500_PIL2006	FWQTrap4500R21
SCIEX Triple Quad 5500 system	TripleQuad5500_PIL2006	FWTripleQuad5500R08
QTRAP 5500 system	QTrap5500_PIL2006	FWQTrap5500R07
SCIEX Triple Quad 5500+ system	TripleQuad5500+_PIL2006	FWTripleQuad5500+R02
SCIEX Triple Quad 6500 system	TripleQuad6500_PIL2006	FWTripleQuad6500R05
QTRAP 6500 system	QTrap6500_PIL2006	FWQTrap6500R04
SCIEX Triple Quad 6500+ system	TripleQuad6500+_PIL2006	FWTripleQuad6500+R04
QTRAP 6500+ system	QTrap6500+_PIL2006	FWQTrap6500+R03

Mass Spectrometer Firmware Versions

Mass Spectrometer	Firmware Version	Configuration Table Version
SCIEX 7500 system	TripleQuad7500_PIL2006	FWTripleQuad7500QTRR02

Devices and Firmware   B

SCIEX OS 3.1.5 supports the devices listed in the following tables.

In most cases, more recent firmware versions from the device manufacturer will work with SCIEX OS 3.1.5. If issues occur, then change the device firmware to the version listed in the table. For information on verifying and upgrading firmware, refer to the documentation provided by the device manufacturer or contact the SCIEX Field Service Employee (FSE). For information on installation and configuration of devices, refer to the document: *Devices Setup Guide*.

Note: For information about drivers for Waters ACQUITY UPLC Systems, contact Waters Support.

Table B-1 Echo® MS System

Device Component	Firmware
Echo® MS module [1]	1.2

Table B-2 ExionLC 2.0 Systems

Peripheral Device	Model	Tested Firmware	Communication Cable Required
LPG Pump	LPGP-200	1.07	Ethernet
Binary Pump	BP-200	1.07	Ethernet
Binary Pump+	BP-200+	1.01	Ethernet
Autosampler	AS-200	1.22	Ethernet
Autosampler+	AS-200+	1.22	Ethernet
Column Switching (Valve drive)	DR-200	6.20	Ethernet
Column Oven	CO-200	2.02	Ethernet
Multiwavelength Detector	MWD-200	1.11	Ethernet
Diode Array Detector	DAD-200	1.11	Ethernet
Diode Array Detector - HS	DADHS-200	1.24	Ethernet

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[1] If a firmware upgrade is required, then contact an FSE.

Table B-2 ExionLC 2.0 Systems (continued)

Peripheral Device	Model	Tested Firmware	Communication Cable Required
Wash System	WS-200	1.14	Ethernet

Table B-3 M5 MicroLC System

Device Component	Tested Firmware or Software
M5 MicroLC SCIEX OS Driver [2]	1.0
Eksigent Control software	4.3
LC pump	2.48
CTC PAL3 autosampler	2.4.18031.1655

Table B-4 ExionLC AC/ExionLC AD Systems

Peripheral Device	Tested Firmware (and other firmware)	Communication Cable Required
ExionLC Controller	3.61 (2.0, 3.01, 3.40)	Ethernet
ExionLC AC Pump	5.001 (2.04)	Optic
ExionLC AC Autosampler	5.00 (2.05, 3.12)	Optic
ExionLC AC Column Oven	3.21	Optic
ExionLC AD Pump	3.30 (2.04, 3.11, 3.21)	Optic
ExionLC AD Autosampler	3.15 (3.12)	Optic
ExionLC AD Multiplate Sampler	3.30 (3.15)	Optic
ExionLC PDA Detector	4.02	Ethernet [3]
ExionLC UV Detector	2.03	Optic
ExionLC Rack Changer	2.0	Optic
ExionLC Degasser	—	—

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[2] For migration from the Analyst software to SCIEX OS, contact an FSE.

[3] The PDA Detector requires a switching hub to connect to the system controller and the acquisition computer. Refer to the document: *ExionLC PDA Detector Operator Guide*.

Table B-4 ExionLC AC/ExionLC AD Systems (continued)

Peripheral Device	Tested Firmware (and other firmware)	Communication Cable Required
ExionLC Solvent Selection Valve	—	—

Table B-5 Agilent 1290 Infinity and Infinity II Devices

Peripheral Device	Model	Tested Firmware (and other firmware)	Communication Cable Required
1290 Infinity Devices			
Binary pump	G4220A	B.06.73, A.06.73, B.07.01),	Ethernet or CAN
Standard autosampler	G4226A	(A.07.01, A.06.54, A.07.01)	Ethernet or, if the system contains a DAD, then CAN
Column compartment	G1316C	(A.07.01, A.06.53)	CAN
DAD	G4212A	A.06.73, B.06.30	Ethernet
1290 Infinity II Devices			
High-speed pump	G7120A	(B.07.10)	CAN or Ethernet
Flexible pump	G7104A	(B.07.10)	CAN or Ethernet
Vialsampler	G7129B	(B.07.10)	CAN
Multisampler	G7167B	(D.07.17)	CAN or Ethernet
Multicolumn-thermostat	G7116B	D.07.10	CAN
DAD	G7117B	D.07.23 (D.07.10)	Ethernet

Table B-6 Agilent 1260 Infinity II Devices

Peripheral Device	Model	Tested Firmware (and other firmware)	Communication Cable Required
Infinity II Devices			
Flexible pump	G7104C	(B.07.25)	Ethernet or, if the system contains a DAD, then CAN

Table B-6 Agilent 1260 Infinity II Devices (continued)

Peripheral Device	Model	Tested Firmware (and other firmware)	Communication Cable Required
Binary pump	G7112B	—	CAN or Ethernet
Quarternary pump	G7111B	D.07.24	CAN or Ethernet
Bio-inert pump	G5654A	(D.07.13)	CAN or Ethernet
Vialsampler	G7129C	(D.07.26)	CAN
Multisampler	G7167A	(D.07.16)	Ethernet or, if the system contains a DAD, then CAN
Bio-inert multisampler	G5668A	(D.07.16)	Ethernet or, if the system contains a DAD, then CAN
Multicolumn thermostat	G7116A	D.07.13, D.07.16	CAN
DAD	G7117C	D.07.10	Ethernet
DAD WR	G7115A	D.07.25	Ethernet
FLD spectra (Bio-inert)	G7121B	D.07.25	Ethernet

Table B-7 Shimadzu Devices

Peripheral Device	Tested Firmware (and other firmware)	Communication Cable Required
CBM-20 A with Ethernet switch (system controller with 8 fiber optic ports)	3.61 (2.81, 3.01, 3.11, 3.31)	Ethernet
CBM-40 system controller	1.30 (0.31)	Ethernet
CBM-40 Lite system controller	1.30	Ethernet
SCL-40 system controller	1.30	Ethernet
SIL-20ACXR autosampler	2.05 (1.20, 1.22, 1.23, 1.25)	Optic
SIL-30AC autosampler	3.12	Optic
SIL-30ACMP autosampler	3.21 (3.15)	Optic
SIL-40 autosampler	1.05	Optic

Table B-7 Shimadzu Devices (continued)

Peripheral Device	Tested Firmware (and other firmware)	Communication Cable Required
SIL-40C autosampler	1.05	Optic
SIL-40C X3 autosampler	1.05 (1.04)	Optic
SIL-40C XR autosampler	1.05 (1.08)	Optic
LC-20AB binary solvent delivery unit	—	—
LC-20AD pump	3.11 (1.04, 1.10, 1.07)	Optic
LC-20AD XR pump	1.21 (1.20)	Optic
LC-30AD pump	3.21 (3.11)	Optic
LC-40D pump	1.06	Optic
LC-40D XR pump	1.06 (1.04)	Optic
LC-40B XR pump	1.04	Optic
LC-40D X3 pump	1.04	Optic
LC-40B X3 pump	1.06 (1.04)	Optic
CTO-20AC column oven	2.10 (2.03)	Optic
CTO-30A column oven	3.11	Optic
CTO-40C column oven	1.01 (1.00)	Optic
CTO-40S column oven	1.01 (1.00)	Optic
SPD-20A UV-Vis detector	1.04	Optic
SPD-40V UV-Vis detector	1.06 (1.04)	Optic
SPD-M30A UV detector	3.11, 4.02	Ethernet[4]
SPD-M40 PDA detector	2.00	Ethernet[4]
RF-20A XS fluorescence detector	2.02	Optic
FCV-12AH valve	—	—
FCV-13AL valve	—	—
FCV-32AH valve	—	—

[4] The detector requires a switching hub to connect to the system controller and the acquisition computer.

Table B-7 Shimadzu Devices (continued)

Peripheral Device	Tested Firmware (and other firmware)	Communication Cable Required
FCV-0206[H/H3] flow channel selection valve with drive	—	—
FCV-0607[H/H3] flow channel selection valve with drive	—	—
FCV-S flow channel selection valve with drive (1 box, 1 valve)	1.02	—
FCV-DR (drive)	1.02	—
LPGE-40 (no mixer)	1.02	—
LC-40 reservoir switching valve	1.02	—
FCV-11ALS solvent selection valve for LC-40 (1 pump)	1.02	—
FCV-11AL solvent selection valve for LC-40 (3 pumps)	1.02	—
Rack Changer II	2.0	Optic
Nexera Plate Changer	1.05	—

Windows Operating System Configuration C

Only the English language is supported.

The English, German, French, and Italian regions are supported.

Note: If the computer is connected to the Internet, then follow the recommended security guidelines. Go to sciex.com/productsecurity. Make sure that adequate virus protection is in place to prevent virus corruption of system functionality.

Windows Update

Making sure that critical security patches are installed is essential to maintaining the security of the computer. Follow these guidelines for the configuration and use of Windows Update:

- Windows 10: Configure Windows Update to notify only. Do not download and install updates automatically as this may impact systems during data acquisition.

- Download and install updates as soon as possible after notification is received.

- Before installing updates:

    - Wait until acquisition and processing is finished.

    - Deactivate the devices and stop the ClearCore2 service.

- Install all updates. If an issue occurs as the result of an update, report it to SCIEX at sciex.com/contact-us or sciex.com/request-support as soon as possible.

System Restore

By default, the Windows Task Scheduler runs the System Restore task at midnight and when the computer starts. The installation program disables the System Restore task, to optimize acquisition performance in IDA mode.

The System Restore task might slow down the system when it is active. If it is active during acquisition in IDA mode, the cycle time might be longer, increasing from milliseconds to seconds. This might result in fewer points across a chromatographic peak. Therefore, we recommend that the System Restore task be disabled, for optimum performance.

Note: System Restore does not impact performance for regular operations or for data processing.

Customer Security Guidance: Backups

Backup of customer data is the responsibility of the customer. Although SCIEX service and support personnel might provide advice and recommendations about customer data backup, it is up to the customer to make sure the data is backed up according to the policies, needs, and regulatory requirements of the customer. The frequency and coverage of customer data backup should be commensurate with organizational requirements and the criticality of the data that is generated.

Customers should make sure that backups are functional, because backups are a vital component of overall data management and essential to recovery in the event of a malicious attack, hardware failure, or software failure. Do not back up the computer during data acquisition, or else make sure that files being acquired are ignored by the backup software. We strongly recommend that a full backup be taken of the computer before any security updates are installed or any computer repairs are performed. This will facilitate a rollback in the rare case that a security patch affects any application functionality.

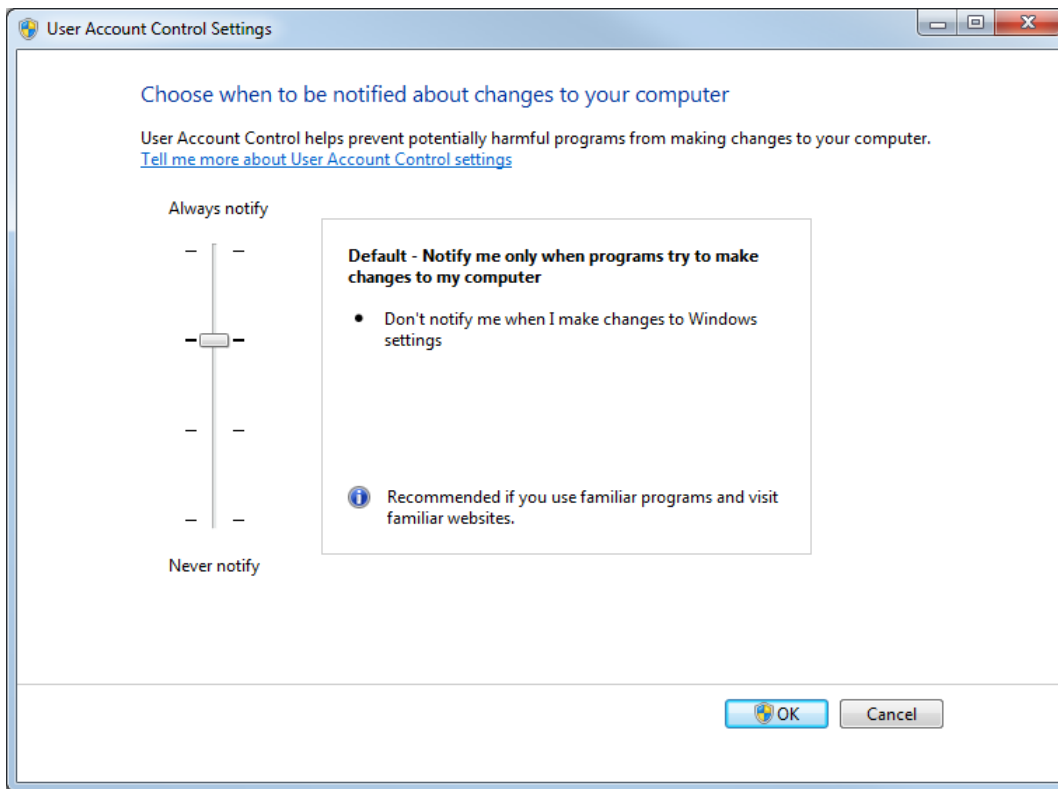# User Account Control Settings

User Account Control Settings (Windows 10)

We recommend the use of the default User Account Control Settings when SCIEX OS is installed on the Windows 10, 64-bit, operating system. For the Administrator, the default setting is **Default - Notify me only when programs try to make changes to my computer**. For standard users, it is **Always notify me**.

The acquisition computer comes configured with the default User Account Control Settings.

1. Open Control Panel.

2. Click **Security and Maintenance** > **Change User Account Control settings**.
   The User Account Control Settings dialog opens.

3. Move the slider bar to the required level.

4. For the Administrator, select **Notify me only when programs try to make changes to my computer (default)**, and then click **OK**.

Figure C-1 User Account Control Settings: Administrator

5.   For standard users, select **Always notify me when**, and then click **OK**.
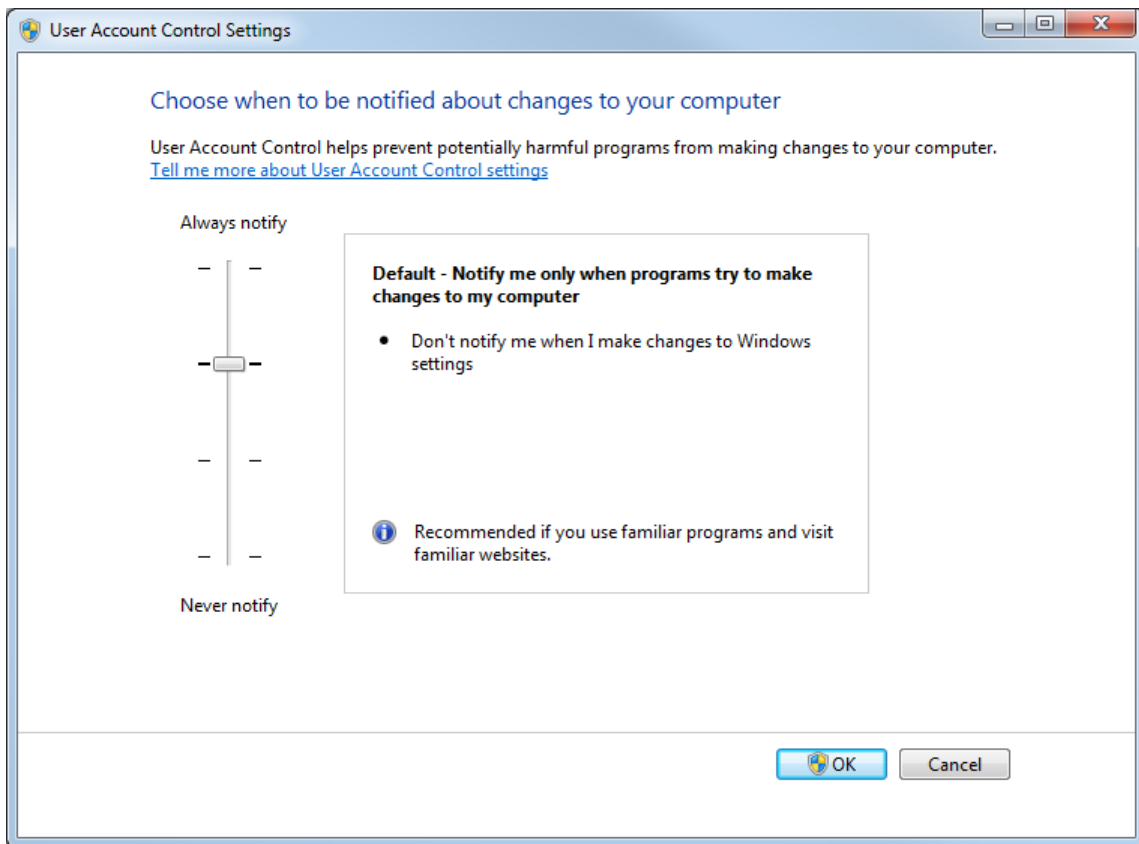
User Account Control Settings (Windows 7)

We recommend the use of the default User Account Control Settings when SCIEX OS is installed on the Windows 7, 64-bit operating system. For the Administrator, the default setting is **Default - Notify me only when programs try to make changes to my computer**. For standard users, it is **Always notify me**.

The acquisition computer comes configured with the default User Account Control Settings.
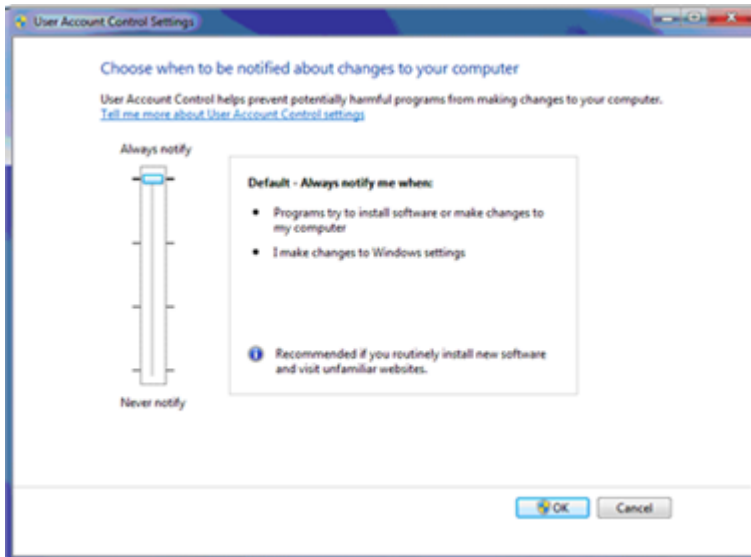
1.   Open Control Panel.

2.   Click **System and Security** > **Change User Account Control settings**.
      The User Account Control Settings dialog opens.

3.   Move the slider bar to the required level.

4.   For the Administrator, select **Default - Notify me only when programs try to make changes to my computer**, and then click **OK**.

Figure C-2 User Account Control Settings: Administrator

5. For standard users, select **Default – Always notify me when**, and then click **OK**.

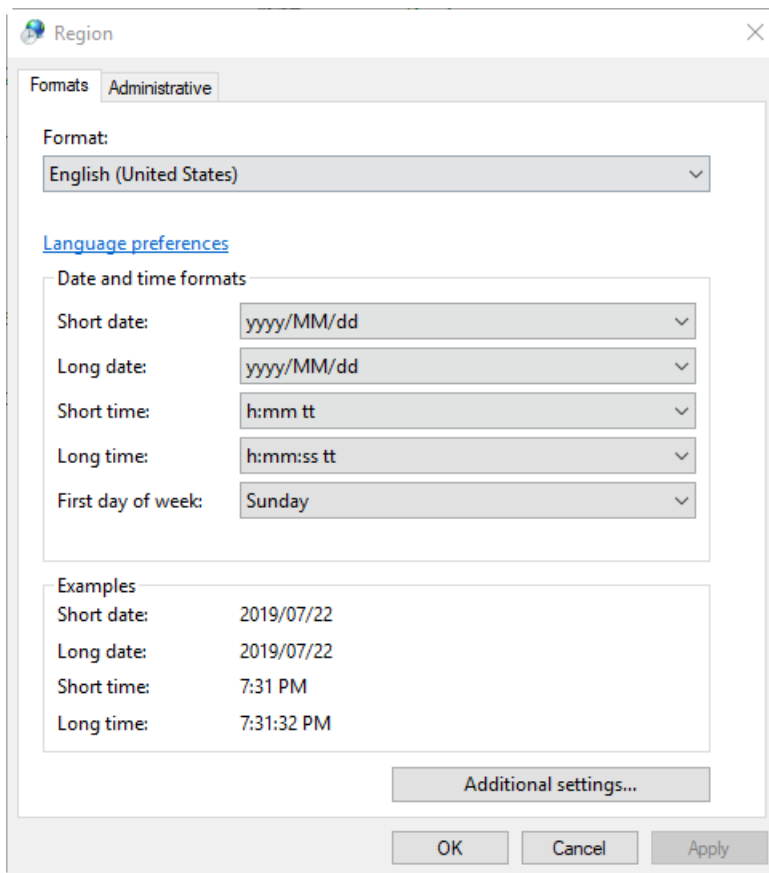**Figure C-3 User Account Control Settings: Standard Users**

Region and Language Settings

Region Settings (Windows 10)

Note: Setting the **Format** field to a different value might cause the software to show the file information or the audit trail information incorrectly.

1. Open Control Panel.
2. Click **Region**.

Figure C-4 Region Dialog

3. Make sure that the **Format** field is set to **English (United States)**, **French (France)**, or **German (Germany)**.

4. Click **Apply**.

5. Click **OK**.

Language Settings (Windows 10)

Note: Setting the **Windows display language** to a different value might cause the software to show the file information or the audit trail information incorrectly.
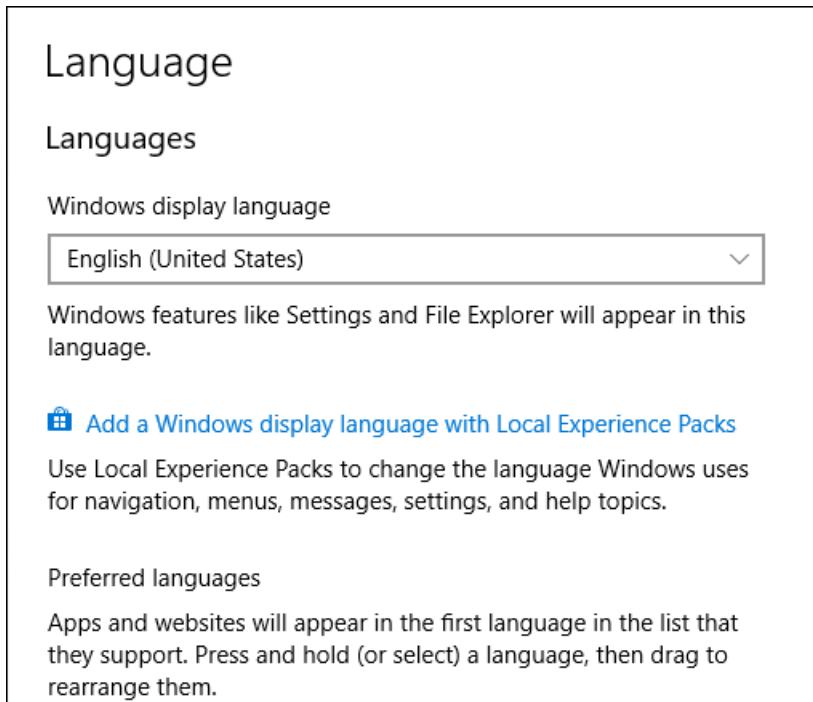
1. Open Control Panel.

2. Click **Region**.

3. Click **Language preferences**.

Figure C-5 Language Dialog

4. For the **Windows display language**, select **English (United States)**.

Region and Language Settings (Windows 7)

Note: Setting the **Format** field and the **Default input language** field to a different value might cause the software to show the file information or the audit trail information incorrectly.

- Configure the Region and Language control panel.

    1. Set the **Format** field to **English (United States)**, **French (France)**, or **German (Germany)**.

       Figure C-6 Region and Language Dialog
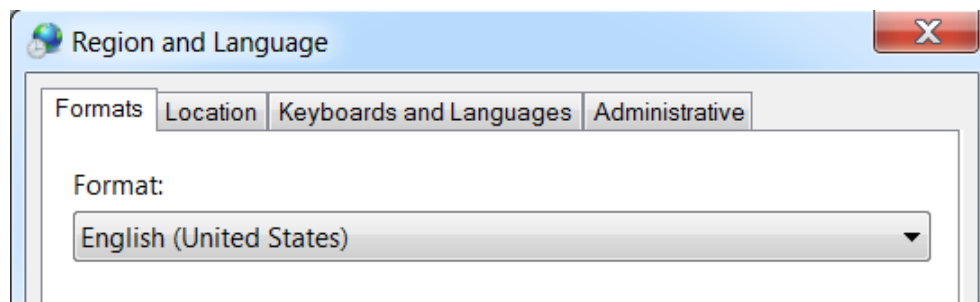
2. Open the Keyboards and Languages tab and then click **Change Keyboards**.

3. Click **Apply**.

4. Click **OK**.

- Configure the Text Services and Input Languages control panel.

    1. On the General tab, select **English (United States) - US** as the default input language.

       Figure C-7 Text Services and Input Languages Dialog
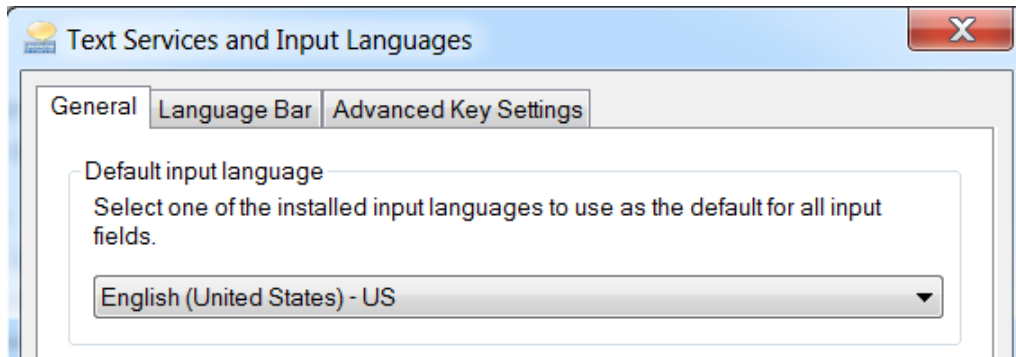
2. Click **Apply**.

3. Click **OK**.

Local Settings

Only the local settings shown in the following figure are supported.

Figure C-8 Local Settings
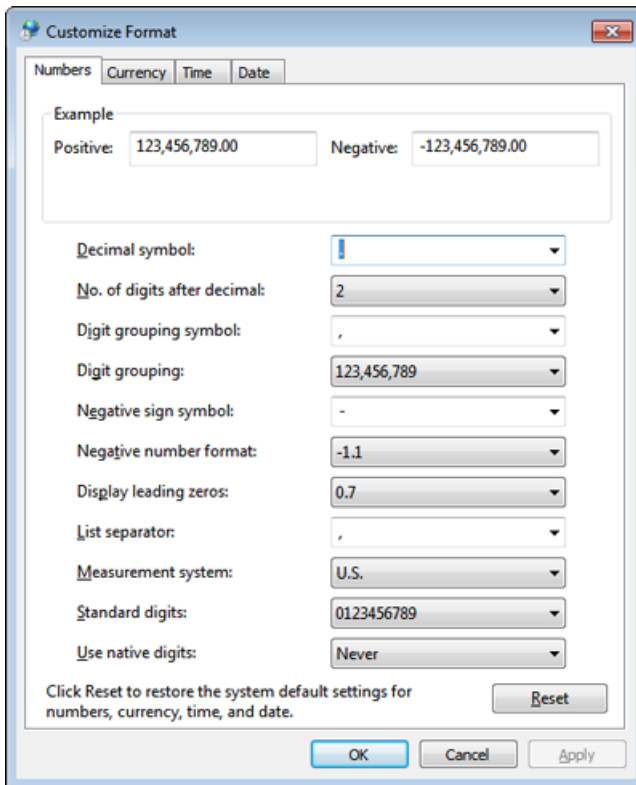
Label	Supported in SCIEX OS
Decimal symbol	Either '.' or ',' is supported.
No. of digits after decimal	Controlled by the number format in SCIEX OS.
Digit grouping symbol	Not supported.
Digit grouping	Not supported.
Negative sign symbol	Controlled by SCIEX OS.
Negative number format	Not supported.
Display leading zeros	Not supported.
List separator	Not supported.
Measurement system	Not supported.
Standard digits	Not supported.

Label	Supported in SCIEX OS
Use native digits	Not supported.

Migrate the LibraryView Database   D

During the upgrade to version 3.1.5, the LibraryView software database is migrated from SQL Server Express to MongoDB. If the migration is cancelled during the installation, then do it after the installation is complete and before using SCIEX OS. Follow the steps in this procedure to do the migration.

Note: If the migration is done more than once and the utility finds that the data being added is already in the database, then an conflict can occur. If SQL Server Express is found on the computer during the upgrade from version 3.1 to version 3.1.5, then a conflict can occur.

1. Log on to the computer as a Windows user with Administrator privileges.

2. Browse to the folder:
   ```
   C:\Program
   Files\SCIEX\LibraryView\LibraryViewFramework\ClientDevTools\MongoDBD
   ataMigration.
   ```

3. Double-click `Sciex.LibraryView.MongoDBDataMigration.exe.`

   The application migrates the database and then shows a report with any conflicts.

4. (If required) Resolve conflicts:

   • Resolve all conflicts by clicking one of these buttons:

      • **Merge All**: To merge all duplicate records in the data being migrated with the records in the database.

      • **Overwrite All**: To replace all duplicate records in the database with the records being migrated.

      • **Keep All Original**: To discard all duplicate records in the data being migrated.

   • Resolve conflicts for individual compounds by clicking one of these buttons for each compound:

      • **Merge**: To merge the duplicate record in the data being migrated with the record in the database.

      • **Resolve**: To open a dialog showing the record in the database (the original record) and the record being migrated (the new record). Click **Keep Original** or **Use New**.

      • **Keep Original**: To discard the duplicate record in the data being migrated.

5. To close the application after the migration is complete, click **Close**.

Configure Windows Firewall   E

The Central Administrator Console (CAC) software client connects to the CAC server using TCP ports 63333 and 44144. Use this procedure to open the Windows firewall port when Windows Defender is used as firewall software (default). If different firewall software is used, then use instructions specific to that software to open this port.

1. Open the Windows Defender Firewall with Advanced Security.

2. Right-click the **Inbound Rules** menu, and then click **New Rule**.
   The Rule Type page opens.

3. Select **Port**, and then click **Next**.
   The Protocol and Ports page opens.

4. Set **Specific local ports** to `63333,44144`, and then click **Next**.
   The Action page opens.

5. Select **Allow the connection**, and then click **Next**.
   The Profile page opens.

   Note: Make sure that **Domain**, **Private**, and **Public** profiles are selected.

6. Click **Next**.
   The Name page opens.

7. Type `CAC inbound connections` in the **Name** field.

8. Click **Finish**.

Install the Software Using a Deployment Tool
F

Use the command lines in this procedure for the modular installation of SCIEX OS. User can install, modify, repair or remove the software modules by running the silent mode or passive mode commands from the installation files location using the deployment tool.

```
setup.exe {/quiet | /passive} [/install=modules] [/add=modules] [/
repair=all] [/remove=modules] [/uninstall=all]
```

Table F-1 Elements and Attributes

Value String	Comment
/quiet	Runs the installation in silent mode without any user interaction
/passive	Runs the software installation in unattended mode. The user sees only a progress bar
/install=*module1, module2*	To install one or more than one software module. For a list of the module codes, refer to the table: Table F-2.
/add=*module1,module2*	To install one or more than one software module in an existing installation of this software version. For a list of the module codes, refer to the table: Table F-2.
/repair=all	To repair installed software modules
/remove=*module1,module2*	To uninstall one or more than one software module from an existing installation of this software version. For a list of the module codes, refer to the table: Table F-2.
/uninstall=all	To uninstall SCIEX OS

Table F-2 Software Modules

Code	Software Module
AG	Agilent drivers
AN	Analytics workspace (Processing)
AQ	Acquisition workspaces
CC	Central Administrator Console (CAC) (Administration)

Table F-2 Software Modules (continued)

Code	Software Module
EC	Echo® MS system
EX	ExionLC system
M5	M5 MicroLC system
MP	Molecule Profiler software (Processing)
MV	MarkerView software (Processing)
SH	Shimadzu drivers

Example: Quiet Install Command

```
Setup.exe /quiet /Install=MP
```

Example: Quiet Add and Remove Command

```
Setup.exe /quiet /Add=AQ,AG,SH,AN /Remove=MP
```

Example: Quiet Repair Command

```
Setup.exe /quiet /Repair=all
```

Example: Quiet Uninstall Command

```
Setup.exe /quiet /Uninstall=all
```

Example: Passive Install Command

```
Setup.exe /passive /Install=MP
```

Example: Passive Add and Remove Command

```
Setup.exe /passive /Add=AQ,AG,SH,AN /Remove=MP
```

Example: Passive Repair Command

```
Setup.exe /passive /Repair=all
```

Example: Passive Uninstall Command

```
Setup.exe /passive /Uninstall=all
```

SCIEX OS Documentation   G

For a list of the software guides that are installed with SCIEX OS, refer to the table: Table G-1. These guides can be accessed at the following locations:

- Windows 10 operating systems: **Start** > **SCIEX OS**

- Windows 7 operating systems: **Start** > **All Programs** > **SCIEX OS**

The software guides and tutorials are installed in `<drive>:\Program Files\SCIEX\SCIEX OS\Documentation\`.

Table G-1 Software Documentation

Document	Description
Software Installation Guide	Describes how to install the software.
Release Notes	Describes new features and any software issues.
Software User Guide	Provides procedures for setting up and using SCIEX OS to create methods, acquire samples, and analyze data.
Laboratory Director Guide	Describes the security and audit functionality of SCIEX OS.
Help System	Provides procedures for setting up and using SCIEX OS to create methods, acquire samples, and analyze data.

Hardware guides are distributed on the *Customer Reference* DVDs for the system and ion source. The following table lists these guides.

Table G-2 Hardware Documentation

Document	Description
System User Guide	Provides information about operating and maintaining the mass spectrometer and using SCIEX OS.
Qualified Maintenance Person Guide	Provides procedures for cleaning and maintaining the mass spectrometer.
	Note: Only qualified operators should perform the procedures in this guide.

Table G-2 Hardware Documentation (continued)

Document	Description
Devices Setup Guide	Provides procedures for connecting devices to the computer and instrument.
Site Planning Guide	Provides information about how to prepare the site, as well as materials required for installing the instrument.
Turbo V Ion Source Operator Guide	(X500 QTOF and ZenoTOF systems) Provides procedures for installing the ion source.
IonDrive Turbo V Ion Source Operator Guide	Provides procedures for installing the ion source.
OptiFlow Turbo V Ion Source Operator Guide	(ZenoTOF systems) Provides procedures for installing the ion source.
OptiFlow Pro Ion Source Operator Guide	(SCIEX 7500 systems) Provides procedures for installing the ion source.

Note: The latest versions of the documentation are available on the SCIEX website, at sciex.com/customer-documents.

Contact Us

Customer Training

- In North America: NA.CustomerTraining@sciex.com
- In Europe: Europe.CustomerTraining@sciex.com
- Outside the EU and North America, visit sciex.com/education for contact information.

Online Learning Center

- SCIEX Now Learning Hub

SCIEX Support

SCIEX and its representatives maintain a staff of fully-trained service and technical specialists located throughout the world. They can answer questions about the system or any technical issues that might arise. For more information, visit the SCIEX website at sciex.com or contact us in one of the following ways:

- sciex.com/contact-us
- sciex.com/request-support

CyberSecurity

For the latest guidance on cybersecurity for SCIEX products, visit sciex.com/productsecurity.

Documentation

This version of the document supercedes all previous versions of this document.

To view this document electronically, Adobe Acrobat Reader is required. To download the latest version, go to https://get.adobe.com/reader.

To find software product documentation, refer to the release notes or software installation guide that comes with the software.

To find hardware product documentation, refer to the documentation DVD for the system or component.

The latest versions of the documentation are available on the SCIEX website, at sciex.com/customer-documents.

Note: To request a free, printed version of this document, contact sciex.com/contact-us.