SCIEX OS 3.0 Software

Software Installation Guide
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This guide provides information about, and procedures for, installing the SCIEX OS 3.0 software. The guide also includes information on supported devices and firmware and tips for troubleshooting the installation.

For information about new software features, enhancements, and known issues, refer to the Release Notes for the software, 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 3.0 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 3.0.
- Results Tables created in SCIEX OS 3.0 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 3.0.
- All devices supported in earlier versions of SCIEX OS continue to be supported in SCIEX OS 3.0. Some devices might require firmware upgrades. Refer to the section: Devices and Firmware.
- SCIEX OS 3.0 is available as a web download package. If a DVD is required, contact a local sales representative.
Introduction

- 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 3.0 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 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
Acquisition Computer Requirements

The software supports the following computers:

- **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 x 16 GB) DDR4 3200MHZ RDIMM ECC
  - SCIEX Workstation: 2 x 1 TB HDD (RAID1)
  - SCIEX Workstation+: 2 x 2 TB HDD (RAID1)

- **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 x 16 GB) 2666 MHz DDR4 UDIMM Non-ECC
  - 2 x 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 x 2 TB HDD (RAID1)

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

Acquisition computers also 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 3.0 data but they cannot be used for acquiring data.

**Operating System Requirements**

- Operating system: Windows 7, 64-bit or Windows 10, 64-bit, with HotFix 2
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.
**Requirements**

**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 or 2016, 32-bit or 64-bit, is required for the report functionality in the Analytics workspace.

**Note:** SCIEX OS is compatible with Microsoft Office 365. However, 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 3.0 software requires activation of the SCIEX OS 3.0 license.

**Compatible Systems**

The following systems are compatible with SCIEX OS 3.0.

**Table 2-1 Supported Mass Spectrometers and Ion Sources**

<table>
<thead>
<tr>
<th>Mass Spectrometer</th>
<th>Supported Ion Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>X500R QTOF or X500B QTOF system</td>
<td>Turbo V ion source</td>
</tr>
<tr>
<td>ZenoTOF 7600 system</td>
<td>Turbo V ion source</td>
</tr>
<tr>
<td></td>
<td>OptiFlow Turbo V ion source</td>
</tr>
<tr>
<td>SCIEX 4500 system</td>
<td>Turbo V ion source</td>
</tr>
<tr>
<td>SCIEX 5500 system</td>
<td>Turbo V ion source</td>
</tr>
<tr>
<td></td>
<td>OptiFlow Turbo V ion source</td>
</tr>
<tr>
<td>SCIEX 5500+ system</td>
<td>Turbo V ion source</td>
</tr>
<tr>
<td></td>
<td>OptiFlow Turbo V ion source</td>
</tr>
</tbody>
</table>
Table 2-1 Supported Mass Spectrometers and Ion Sources (continued)

<table>
<thead>
<tr>
<th>Mass Spectrometer</th>
<th>Supported Ion Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIEX 6500 system</td>
<td>IonDrive Turbo V ion source</td>
</tr>
<tr>
<td></td>
<td>OptiFlow Turbo V ion source</td>
</tr>
<tr>
<td></td>
<td>Turbo V ion source</td>
</tr>
<tr>
<td>SCIEX 6500+ system</td>
<td>IonDrive Turbo V ion source</td>
</tr>
<tr>
<td></td>
<td>OptiFlow Turbo V ion source (Micro probe)</td>
</tr>
<tr>
<td></td>
<td>Turbo V ion source</td>
</tr>
<tr>
<td>SCIEX 7500 system</td>
<td>OptiFlow Pro ion source</td>
</tr>
</tbody>
</table>

Compatible Software

The following applications are compatible with SCIEX OS 3.0 on Windows 7 and Windows 10 operating systems.

Table 2-2 Compatible Software

<table>
<thead>
<tr>
<th>Software Name</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biologics Explorer software version 1.0, 1.1</td>
<td>—</td>
</tr>
<tr>
<td>CloudConnect version 1.7</td>
<td>PeakView version 2.2 or higher is required.</td>
</tr>
<tr>
<td>LibraryView software version 1.4</td>
<td>SCIEX OS cannot coexist with the LibraryView software version 1.0.x or 1.1 to 1.3.</td>
</tr>
<tr>
<td>Molecule Profiler software version 1.2</td>
<td>Molecule Profiler software is a part of the installation package.</td>
</tr>
<tr>
<td>MarkerView software version 1.3.1</td>
<td>—</td>
</tr>
<tr>
<td>OneOmics suite version 3.2</td>
<td>PeakView version 2.2 or higher is required.</td>
</tr>
<tr>
<td>ProMassProcessor version 1.0</td>
<td>—</td>
</tr>
<tr>
<td>StatusScope remote monitoring service version 2.2, 2.2.1, 2.2.2</td>
<td>—</td>
</tr>
</tbody>
</table>

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.
Requirements

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

Note: SCIEX OS cannot coexist with the Cliquid or MasterView software.
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. If 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 the Software

<table>
<thead>
<tr>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Make sure that a SCIEX OS version 3.0 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, contact a SCIEX sales representative.</td>
</tr>
<tr>
<td>• If a Windows Update is in progress, then wait until the update is finished.</td>
</tr>
<tr>
<td>• If a reboot is required after a Windows Update, then reboot the computer before beginning the installation.</td>
</tr>
</tbody>
</table>

**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.
Installation Instructions

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.

While installing SCIEX OS, the user selects the type of installation and the modules to be installed, such as the Central Administrator Console (CAC) software, Molecule Profiler, and so on.

**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 workstation.

**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, perform 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. 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 Setup 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.

The initial setup might take several minutes because the SQL server must be installed.

**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.

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

**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. CAC software: 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. License and activate the software. Refer to the section: Electronic Licensing.

   Supported accurate and nominal mass systems: If the SCIEX OS 3.0 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: Run the MS FW Updater Utility and Mass Spectrometer Firmware Versions.

13. Central administration: On each SCIEX OS computer, change the administration mode to **Use centralized settings** and configure the connection to the server. Refer to the section: Change the Administration Mode.

### Upgrade the Software

A new software license is required to upgrade from versions of SCIEX OS earlier than version 3.0.
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 reboot is required after a Windows Update, then reboot 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 workstation.

  **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 perform these steps to save the Workstation audit data:
   a. **Navigate 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. Navigate to the 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 C:\ProgramData\SCIEX\Audit Data.

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

6. For acquisition computers perform 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.

   During the installation, the user is prompted to select the modules to be installed.
The initial setup might take several minutes if the SQL server must be installed.

**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.

**Note:** If the installation fails, then perform the procedure in the section: Installation Cleanup.

14. (If required) For acquisition computers, run the MS FW Updater Utility to update the MS firmware and instrument configuration tables. Refer to the section: Run the MS FW Updater Utility.

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

### 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 3.0. Refer to the section: Install the Software.
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).
Installation Instructions

**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 3.0. Refer to the section: Install the Software.

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 *Tools\InstrumentParametersConverter* folder in the SCIEX OS installation package.

   **Note:** Use the version of the Instrument Settings Converter distributed in the SCIEX OS 3.0 installation package.

3. In the MS Method workspace in SCIEX OS, click the **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:

- BioPharmaView software
- MarkerView software
- LibraryView software

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

If the application is not installed after SCIEX OS, then the software tile will not be shown on the home page after SCIEX OS has been installed.

When upgrading from SCIEX OS 1.3 or later, it is not necessary to upgrade the BioPharmaView or MarkerView software. When upgrading from earlier versions, these optional applications must be upgraded.
**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 BioPharmaView, BPV Flex, MarkerView, or LibraryView software.
3. Refer to the respective release notes for more information about installing the applications.

**Downgrade to Previous Versions of the Software**

Follow this procedure to downgrade from SCIEX OS 3.0 to SCIEX OS version 1.6.1 or later. To downgrade to earlier versions of SCIEX OS, contact sciex.com/request-support for help on downgrading from the current version of the software.

1. In the Windows Apps & features control panel, remove SCIEX OS 3.0.
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**

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.
Use this procedure to change between local and centralized administration of users, including roles and security settings, and projects. Centralized administration mode requires that the optional Central Administrator Console (CAC) software be used.

In local administration mode, users and projects can be managed with SCIEX OS.

In centralized administration mode, SCIEX OS can be opened in either a local or managed workgroup.

- If it is opened in a local workgroup, then users and projects can be managed with SCIEX OS.
- If it is opened in a managed workgroup, then users cannot be managed in SCIEX OS, and the ability to manage projects is controlled by the Use central settings for projects option in the CAC software.

1. Open the Configuration workspace.
2. Click CAC.
3. To manage projects, users, and roles locally, select Use local settings.
4. To manage projects, users, and roles centrally, with the CAC software, do this:
   a. Select Use centralized settings.
   b. In the Central Server Location field, type the address of the server on which the CAC software is installed.
   c. Click Connect.

**Note:** For workgroups administered by the Central Administrator Console (CAC) software, the configuration of the CAC software controls the ability to manage projects with SCIEX OS. If the Use central settings for projects option is selected in the CAC software, then the Projects page is read-only.

5. Close the software and then open it again.
Run the MS FW Updater Utility

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.

<table>
<thead>
<tr>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SCIEX OS version 3.0 or later is installed.</td>
</tr>
<tr>
<td>• The mass spectrometer is active in the Devices workspace.</td>
</tr>
<tr>
<td>• The computer is connected to the mass spectrometer.</td>
</tr>
<tr>
<td>• The person running the utility is logged in as an Administrator in Windows as well as an Administrator in the SCIEX OS User database.</td>
</tr>
</tbody>
</table>

1. Stop all acquisitions and then clear the queue. There must be no samples waiting in the queue.
2. Close SCIEX OS.
3. To run the MS FW Updater utility, extract the SCIEX OS package, browse to the \FirmwareUpdater\ folder, and then double-click MS FW Updater.exe.
Run the MS FW Updater Utility

Figure 5-1 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.
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

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 OS3.0.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 SCIEXOS3.0.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. The SCIEX OS Activation dialog opens.
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, 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. Click **Log In** to log in to an existing SCIEX account 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.
Electronic Licensing

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.
# Installation Troubleshooting Tips

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

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Possible Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The installation could not be completed. Refer to the figure: Figure 7-1.</td>
<td>The version of Microsoft Visual C++ installed on the computer is later than the version distributed with the software.</td>
<td>Remove Microsoft Visual C++ and then install the software again. <strong>Note:</strong> If the installation is still unsuccessful, then perform the procedure in the section: Installation Cleanup.</td>
</tr>
</tbody>
</table>
| 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 7-2. | .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 Message
The software does not start after the installation is changed with the Modify option in the installation program.

### Possible Cause
The software was installed while devices were active.

### Corrective Action
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 7-1 Installation Error (Example)

![Installation Error Message](image)
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. Remove all SQL server applications.
   For 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
Troubleshooting

For 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
   - MetabolitePilot software

6. Back up and then delete the following folders:
   - C:\Program Files\SCIEX\LibraryView
   - C:\Program Files\SCIEX\SCIEX OS
   - C:\SCIEX OS Data

7. 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).

12. (If required) Install the software that was removed in step 5:
   - BPV Flex software
   - BioPharmaView software
   - MetabolitePilot software
<table>
<thead>
<tr>
<th>Mass Spectrometer</th>
<th>Firmware Application Version</th>
<th>Configuration Table Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>X500R QTOF system</td>
<td>ATLAS_QTOF_ICX_v0_r04</td>
<td>CONFIG_X500R_v0_r04</td>
</tr>
<tr>
<td>X500B QTOF system</td>
<td>ATLAS_QTOF_ICX_v0_r04</td>
<td>CONFIG_X500B_v0_r03</td>
</tr>
<tr>
<td>ZenoTOF 7600 system</td>
<td>AION_QTOF_ICX64_v0_r05</td>
<td>CONFIG_Zeno-TOF-7600_v0_r05</td>
</tr>
<tr>
<td>SCIEX Triple Quad 4500 system</td>
<td>PIL2004</td>
<td>FWTripleQuad4500R22</td>
</tr>
<tr>
<td>QTRAP 4500 system</td>
<td>PIL2004</td>
<td>FWQTrap4500R21</td>
</tr>
<tr>
<td>SCIEX Triple Quad 5500 system</td>
<td>PIL2004</td>
<td>FWTripleQuad5500R08</td>
</tr>
<tr>
<td>QTRAP 5500 system</td>
<td>PIL2004</td>
<td>FWQTrap5500R07</td>
</tr>
<tr>
<td>SCIEX Triple Quad 5500+ system</td>
<td>PIL2004</td>
<td>FWTripleQuad5500+R02</td>
</tr>
<tr>
<td>SCIEX Triple Quad 6500 system</td>
<td>PIL2004</td>
<td>FWTripleQuad6500R05</td>
</tr>
<tr>
<td>QTRAP 6500 system</td>
<td>PIL2004</td>
<td>FWQTrap6500R04</td>
</tr>
<tr>
<td>SCIEX Triple Quad 6500+ system</td>
<td>PIL2005</td>
<td>FWTripleQuad6500+R04</td>
</tr>
<tr>
<td>QTRAP 6500+ system</td>
<td>PIL2004</td>
<td>FWQTrap6500+R03.fw</td>
</tr>
<tr>
<td>SCIEX 7500 system</td>
<td>PIL2004</td>
<td>FWTripleQuad7500QTRR02</td>
</tr>
</tbody>
</table>
SCIEX OS 3.0 supports the devices listed in the following tables.

In most cases, more recent firmware versions from the device manufacturer will work with SCIEX OS 3.0. 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

<table>
<thead>
<tr>
<th>Device Component</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Echo® MS module</td>
<td>1.1.0</td>
</tr>
</tbody>
</table>

---

### Table B-2 ExionLC 2.0 Systems

<table>
<thead>
<tr>
<th>Peripheral Device</th>
<th>Model</th>
<th>Tested Firmware</th>
<th>Communication Cable Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPG Pump</td>
<td>LPGP-200</td>
<td>1.07</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Binary Pump</td>
<td>BP-200</td>
<td>1.07</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Binary Pump+</td>
<td>BP-200+</td>
<td>1.01</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Autosampler</td>
<td>AS-200</td>
<td>1.22</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Autosampler+</td>
<td>AS-200+</td>
<td>1.22</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Column Switching (Valve drive)</td>
<td>DR-200</td>
<td>6.20</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Column Oven</td>
<td>CO-200</td>
<td>2.02</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Multiwavelength Detector</td>
<td>MWD-200</td>
<td>1.11</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Diode Array Detector</td>
<td>DAD-200</td>
<td>1.11</td>
<td>Ethernet</td>
</tr>
</tbody>
</table>

1 If a firmware upgrade is required, then contact an FSE.
### Table B-2 ExionLC 2.0 Systems (continued)

<table>
<thead>
<tr>
<th>Peripheral Device</th>
<th>Model</th>
<th>Tested Firmware</th>
<th>Communication Cable Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diode Array Detector - HS</td>
<td>DADHS-200</td>
<td>1.24</td>
<td>Ethernet</td>
</tr>
<tr>
<td>Wash System</td>
<td>WS-200</td>
<td>1.14</td>
<td>Ethernet</td>
</tr>
</tbody>
</table>

### Table B-3 ExionLC AC/ExionLC AD Systems

<table>
<thead>
<tr>
<th>Peripheral Device</th>
<th>Tested Firmware (and other firmware)</th>
<th>Communication Cable Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExionLC Controller</td>
<td>3.61 (2.0, 3.01, 3.40)</td>
<td>Ethernet</td>
</tr>
<tr>
<td>ExionLC AC Pump</td>
<td>5.001 (2.04)</td>
<td>Optic</td>
</tr>
<tr>
<td>ExionLC AC Autosampler</td>
<td>5.00 (2.05, 3.12)</td>
<td>Optic</td>
</tr>
<tr>
<td>ExionLC AC Column Oven</td>
<td>3.21</td>
<td>Optic</td>
</tr>
<tr>
<td>ExionLC AD Pump</td>
<td>3.30 (2.04, 3.11, 3.21)</td>
<td>Optic</td>
</tr>
<tr>
<td>ExionLC AD Autosampler</td>
<td>3.15 (3.12)</td>
<td>Optic</td>
</tr>
<tr>
<td>ExionLC AD Multiplate Sampler</td>
<td>3.30 (3.15)</td>
<td>Optic</td>
</tr>
<tr>
<td>ExionLC PDA Detector</td>
<td>4.02</td>
<td>Ethernet</td>
</tr>
</tbody>
</table>

**Note:** 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>
<thead>
<tr>
<th>Peripheral Device</th>
<th>Tested Firmware</th>
<th>Communication Cable Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExionLC UV Detector</td>
<td>2.03</td>
<td>Optic</td>
</tr>
<tr>
<td>ExionLC Rack Changer</td>
<td>2.0</td>
<td>Optic</td>
</tr>
<tr>
<td>ExionLC Degasser</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>ExionLC Solvent Selection Valve</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
### Table B-4 Agilent 1290 Infinity and Infinity II Devices

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

### Table B-5 Agilent 1260 Infinity II Devices

<table>
<thead>
<tr>
<th>Peripheral Device</th>
<th>Model</th>
<th>Tested Firmware (and other firmware)</th>
<th>Communication Cable Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infinity II Devices</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexible pump</td>
<td>G7104C</td>
<td>(B.07.25)</td>
<td>Ethernet or, if the system contains a DAD, then CAN</td>
</tr>
<tr>
<td>Binary pump</td>
<td>G7112B</td>
<td>—</td>
<td>CAN or Ethernet</td>
</tr>
<tr>
<td>Quarternary pump</td>
<td>G7111B</td>
<td>D.07.24</td>
<td>CAN or Ethernet</td>
</tr>
<tr>
<td>Bio-inert pump</td>
<td>G5654A</td>
<td>(D.07.13)</td>
<td>CAN or Ethernet</td>
</tr>
<tr>
<td>Vialsampler</td>
<td>G7129C</td>
<td>(D.07.26)</td>
<td>CAN</td>
</tr>
</tbody>
</table>
### Table B-5 Agilent 1260 Infinity II Devices (continued)

<table>
<thead>
<tr>
<th>Peripheral Device</th>
<th>Model</th>
<th>Tested Firmware (and other firmware)</th>
<th>Communication Cable Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multisampler</td>
<td>G7167A</td>
<td>(D.07.16)</td>
<td>Ethernet or, if the system contains a DAD, then CAN</td>
</tr>
<tr>
<td>Bio-inert multisampler</td>
<td>G5668A</td>
<td>(D.07.16)</td>
<td>Ethernet or, if the system contains a DAD, then CAN</td>
</tr>
<tr>
<td>Multicolumn thermostat</td>
<td>G7116A</td>
<td>D.07.13, D.07.16</td>
<td>CAN</td>
</tr>
<tr>
<td>DAD</td>
<td>G7171C</td>
<td>D.07.10</td>
<td>Ethernet</td>
</tr>
<tr>
<td>DAD WR</td>
<td>G7115A</td>
<td>D.07.25</td>
<td>Ethernet</td>
</tr>
<tr>
<td>FLD Spectra (Bio-inert)</td>
<td>G7121B</td>
<td>D.07.25</td>
<td>Ethernet</td>
</tr>
</tbody>
</table>

### Table B-6 Shimadzu Devices

<table>
<thead>
<tr>
<th>Peripheral Device</th>
<th>Tested Firmware (and other firmware)</th>
<th>Communication Cable Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBM-20 A with Ethernet Switch (system controller with 8 fiber optic ports)</td>
<td>3.61 (2.81, 3.01, 3.11, 3.31)</td>
<td>Ethernet</td>
</tr>
<tr>
<td>CBM-40 System Controller</td>
<td>1.30 (0.31)</td>
<td>Ethernet</td>
</tr>
<tr>
<td>CBM-40 Lite System Controller</td>
<td>1.30</td>
<td>Ethernet</td>
</tr>
<tr>
<td>SCL-40 System Controller</td>
<td>1.30</td>
<td>Ethernet</td>
</tr>
<tr>
<td>SIL-20ACXR autosampler</td>
<td>2.05 (1.20, 1.22, 1.23, 1.25)</td>
<td>Optic</td>
</tr>
<tr>
<td>SIL-30AC autosampler</td>
<td>3.12</td>
<td>Optic</td>
</tr>
<tr>
<td>SIL-30ACMP autosampler</td>
<td>3.21 (3.15)</td>
<td>Optic</td>
</tr>
<tr>
<td>SIL-40 autosampler</td>
<td>1.05</td>
<td>Optic</td>
</tr>
<tr>
<td>SIL-40C autosampler</td>
<td>1.05</td>
<td>Optic</td>
</tr>
<tr>
<td>SIL-40C X3 autosampler</td>
<td>1.05 (1.04)</td>
<td>Optic</td>
</tr>
<tr>
<td>SIL-40C XR autosampler</td>
<td>1.05 (1.08)</td>
<td>Optic</td>
</tr>
<tr>
<td>Peripheral Device</td>
<td>Tested Firmware (and other firmware)</td>
<td>Communication Cable Required</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>LC-20AB Binary Solvent Delivery Unit</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>LC-20AD pump</td>
<td>3.11 (1.04, 1.10, 1.07)</td>
<td>Optic</td>
</tr>
<tr>
<td>LC-20AD XR pump</td>
<td>1.21 (1.20)</td>
<td>Optic</td>
</tr>
<tr>
<td>LC-30AD pump</td>
<td>3.21 (3.11)</td>
<td>Optic</td>
</tr>
<tr>
<td>LC-40D pump</td>
<td>1.06</td>
<td>Optic</td>
</tr>
<tr>
<td>LC-40D XR pump</td>
<td>1.06 (1.04)</td>
<td>Optic</td>
</tr>
<tr>
<td>LC-40B XR pump</td>
<td>1.04</td>
<td>Optic</td>
</tr>
<tr>
<td>LC-40D X3 pump</td>
<td>1.04</td>
<td>Optic</td>
</tr>
<tr>
<td>LC-40B X3 pump</td>
<td>1.06 (1.04)</td>
<td>Optic</td>
</tr>
<tr>
<td>CTO-20AC column oven</td>
<td>2.10 (2.03)</td>
<td>Optic</td>
</tr>
<tr>
<td>CTO-30A column oven</td>
<td>3.11</td>
<td>Optic</td>
</tr>
<tr>
<td>CTO-40C column oven</td>
<td>1.01 (1.00)</td>
<td>Optic</td>
</tr>
<tr>
<td>CTO-40S column oven</td>
<td>1.01 (1.00)</td>
<td>Optic</td>
</tr>
<tr>
<td>SPD-20A UV-VIS detector</td>
<td>1.04</td>
<td>Optic</td>
</tr>
<tr>
<td>SPD-40V UV-Vis detector</td>
<td>1.06 (1.04)</td>
<td>Optic</td>
</tr>
<tr>
<td>SPD-M30A UV detector</td>
<td>3.11, 4.02</td>
<td>Ethernet</td>
</tr>
<tr>
<td>SPD-M40 PDA detector</td>
<td>2.00</td>
<td>Ethernet</td>
</tr>
<tr>
<td>RF-20A XS fluorescence detector</td>
<td>2.02</td>
<td>Optic</td>
</tr>
</tbody>
</table>

**Note:** The Detector requires a switching hub to connect to the system controller and the acquisition computer.
<table>
<thead>
<tr>
<th>Peripheral Device</th>
<th>Tested Firmware (and other firmware)</th>
<th>Communication Cable Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCV-12AH valve</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FCV-13AL valve</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FCV-32AH valve</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FCV-0206[H/H3] flow channel selection valve with drive</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FCV-0607[H/H3] flow channel selection valve with drive</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FCV-S flow channel selection valve with drive (1 box, 1 valve)</td>
<td>1.02</td>
<td>—</td>
</tr>
<tr>
<td>FCV-BOX flow channel selection valve with drive (1 box, 1 valve)</td>
<td>1.02</td>
<td>—</td>
</tr>
<tr>
<td>FCV-DR (drive)</td>
<td>1.02</td>
<td>—</td>
</tr>
<tr>
<td>LPGE-40 (no mixer)</td>
<td>1.02</td>
<td>—</td>
</tr>
<tr>
<td>LC-40 reservoir switching valve</td>
<td>1.02</td>
<td>—</td>
</tr>
<tr>
<td>FCV-11ALS solvent selection valve for LC-40 (1 pump)</td>
<td>1.02</td>
<td>—</td>
</tr>
<tr>
<td>FCV-11AL solvent selection valve for LC-40 (3 pumps)</td>
<td>1.02</td>
<td>—</td>
</tr>
<tr>
<td>Rack Changer II</td>
<td>2.0</td>
<td>Optic</td>
</tr>
<tr>
<td>Nexera Plate Changer</td>
<td>1.05</td>
<td>—</td>
</tr>
</tbody>
</table>
Windows Operating System Configuration

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 service 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 System Restore 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 7)

We recommend the use of the default settings for User Account Control when SCIEX OS is installed on the Windows 7, 64-bit. 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.
3. On the User Account Control Settings dialog, 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.
5. For standard users, select **Default – Always notify me when**, and then click **OK**.
User Account Control Settings (Windows 10)

We recommend the use of the default settings for User Account Control when SCIEX OS is installed on the Windows 10, 64-bit, operating system. For the Administrator, the default setting is 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.
3. On the User Account Control Settings dialog, 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-3 User Account Control Setting for the Administrator

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

Region and Language Settings

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).
2. Click 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.

**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**.
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-7 Language Dialog: Windows 10 Operating System

Language

Languages

Windows display language

English (United States)

Windows features like Settings and File Explorer will appear in this language.

Add a Windows display language with Local Experience Packs

Use Local Experience Packs to change the language Windows uses for navigation, menus, messages, settings, and help topics.

Preferred languages

Apps and websites will appear in the first language in the list that they support. Press and hold (or select) a language, then drag to rearrange them.

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

Local Settings

Only the local settings shown in the following figure are supported.
Figure C-8 Local Settings

<table>
<thead>
<tr>
<th>Label</th>
<th>Supported in SCIEX OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decimal symbol</td>
<td>Either '.' or ',' is supported.</td>
</tr>
<tr>
<td>No. of digits after decimal</td>
<td>Controlled by the number format in SCIEX OS.</td>
</tr>
<tr>
<td>Digit grouping symbol</td>
<td>Not supported.</td>
</tr>
<tr>
<td>Digit grouping</td>
<td>Not supported.</td>
</tr>
<tr>
<td>Negative sign symbol</td>
<td>Controlled by SCIEX OS.</td>
</tr>
<tr>
<td>Negative number format</td>
<td>Not supported.</td>
</tr>
<tr>
<td>Display leading zeros</td>
<td>Not supported.</td>
</tr>
<tr>
<td>List separator</td>
<td>Not supported.</td>
</tr>
<tr>
<td>Measurement system</td>
<td>Not supported.</td>
</tr>
<tr>
<td>Standard digits</td>
<td>Not supported.</td>
</tr>
</tbody>
</table>
## Windows Operating System Configuration

<table>
<thead>
<tr>
<th>Label</th>
<th>Supported in SCIEX OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use native digits</td>
<td>Not supported.</td>
</tr>
</tbody>
</table>
Configure Windows Firewall

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

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.

```
```

Table E-1 Elements and Attributes

<table>
<thead>
<tr>
<th>Value String</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>/quiet</td>
<td>Runs the installation in silent mode without any user interaction</td>
</tr>
<tr>
<td>/passive</td>
<td>Runs the software installation in unattended mode. The user sees only a progress bar</td>
</tr>
<tr>
<td>/install=modules</td>
<td>To install a software module. For a list of the module codes, refer to the table: Table E-2.</td>
</tr>
<tr>
<td>/add=modules</td>
<td>To install more than one software module. For a list of the module codes, refer to the table: Table E-2.</td>
</tr>
<tr>
<td>/repair=all</td>
<td>To repair installed software modules</td>
</tr>
<tr>
<td>/remove=modules</td>
<td>To uninstall a software module. For a list of the module codes, refer to the table: Table E-2.</td>
</tr>
<tr>
<td>/uninstall=all</td>
<td>To uninstall SCIEX OS</td>
</tr>
</tbody>
</table>

Table E-2 Software Modules

<table>
<thead>
<tr>
<th>Code</th>
<th>Software Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>Agilent</td>
</tr>
<tr>
<td>AN</td>
<td>Analytics (Processing)</td>
</tr>
<tr>
<td>AQ</td>
<td>Acquisition</td>
</tr>
<tr>
<td>CAC</td>
<td>Central Administrator Console (CAC) (Administration)</td>
</tr>
<tr>
<td>EC</td>
<td>Echo® MS</td>
</tr>
<tr>
<td>EX</td>
<td>ExionLC</td>
</tr>
</tbody>
</table>
Install the Software Using a Deployment Tool

Table E-2 Software Modules (continued)

<table>
<thead>
<tr>
<th>Code</th>
<th>Software Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP</td>
<td>Molecule Profiler (Processing)</td>
</tr>
<tr>
<td>SH</td>
<td>Shimadzu</td>
</tr>
</tbody>
</table>

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
```
For a list of the software guides that are installed with SCIEX OS, refer to the table: Table F-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 F-1 Software Documentation**

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

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

**Table F-2 Hardware Documentation**

<table>
<thead>
<tr>
<th>Document</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System User Guide</td>
<td>Provides information about operating and maintaining the mass spectrometer and using SCIEX OS.</td>
</tr>
<tr>
<td>Qualified Maintenance Person Guide</td>
<td>Provides procedures for cleaning and maintaining the mass spectrometer.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Only qualified operators should perform the procedures in this guide.</td>
</tr>
</tbody>
</table>
Table F-2 Hardware Documentation (continued)

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

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