# SCIEX OS 2.0.1 Software

## Software Installation Guide

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# Contents

# Introduction 1

This guide provides information about, and procedures for, installing the SCIEX OS 2.0.1 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 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:

- Data files created with SCIEX OS 2.0.1 are not compatible with other versions of the software.

- SCIEX OS uses electronic licensing. For license activation, refer to 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.

- SCIEX OS 2.0.1 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 2.0.1.

- Results Tables created in SCIEX OS 2.0.1 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 2.0.1.

- All peripheral devices supported in earlier versions of SCIEX OS continue to be supported in SCIEX OS 2.0.1. Refer to Peripheral Devices and Firmware.

- SCIEX OS 2.0.1 is available as either a software DVD or web download package. Refer to Installation Instructions.

- 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 Compatible Software.

# Requirements 2

## Computer Requirements

The software supports the following computers:

- 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)

  - DVD±RW

- 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)

  - DVD±RW

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

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Acquisition computers also require two single-port Broadcom Ethernet cards.

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 2.0.1 data but they cannot be used for acquiring data.

## Operating System Requirements

- Windows 7, 64-bit, SP1 or Windows 10, 64-bit, operating system

- Language and Region settings: English

  **Note:**

  - For acquisition, only the English version of the Windows 7, 64-bit, or Windows 10, 64-bit, operating system is supported. For information about configuring the Windows operating system, refer to  Windows Operating System Configuration.

  - For processing (SCIEX OS-Q and SCIEX OS-MQ), the German language versions of Windows 7, 64-bit and Windows 10, 64-bit are also supported.

- (Recommended) System Restore: Disabled

- Windows Update: Notify only

**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.

# 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.

# Compatible Software

The following applications are compatible with SCIEX OS 2.0.1 on Windows 7 and Windows 10 operating systems.

**Table 2-1 Compatible Software**

| Software Name | Additional Information |
|---|---|
| BPV Flex Software version 1.0.1, 2.0, 2.1 | — |
| BioPharmaView<sup>TM</sup> Software version 2.1, 3.0, 3.0.1, or 3.0.2 | Version 2.1 of the BioPharmaView<sup>TM</sup> Software is only compatible with the Windows 7 operating system. Versions 3.0 and later are compatible with both the Windows 7 and Windows 10 operating systems. |

**Table 2-1 Compatible Software (continued)**

| Software Name | Additional Information |
|---|---|
| LibraryView™ Software version 1.4 | SCIEX OS cannot coexist with the LibraryView™ 1.1 Software. |
| MarkerView™ Software version 1.3.1 | — |
| MetabolitePilot™ Software version 2.0.4 | — |
| StatusScope® Remote Monitoring Service 1.6.1, 2.0 | — |

**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 cannot coexist with the Cliquid® or MasterView™ Software.

# Installation Instructions 3

## 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 the Software

**Note:** For the SCIEX Triple Quad<sup>TM</sup> 7500 LC-MS/MS System – QTRAP<sup>®</sup> Ready, when SCIEX OS is reinstalled, the existing instrument data file is backed up to a C:\ProgramData\SCIEX\MassSpec\InstrumentData\YYYYMMDDHHMMSS folder. To restore the instrument settings, copy current.dat from this folder to C:\ProgramData\SCIEX\MassSpec\InstrumentData\.

| Prerequisites |
|---|
| • 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.

During the installation, the user is prompted to specify the connected mass spectrometer. The selection determines which Help files are installed. If the wrong mass spectrometer is selected, then the user must remove the software and install it again to install the correct Help files.

**Note:** The installation program disables the System Restore task.

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 disconnect any external USB storage devices.

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

5.  (SCIEX X500 QTOF Systems and Windows 7 operating system) 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.

    **Note:** On a computer configured with the Windows 10 operating system, version 1.1.0 of the xTDC4 driver is already installed.

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

7.  Follow the on-screen instructions.

    The initial setup might take several minutes as 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.

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> **Note:** To avoid installation issues, make sure that the path to the installation folder is not too long. If the path is longer than 118 characters, then installation will not proceed.

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> **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. After the software is installed, restart the computer.

> **Note:** A restart is not mandatory. However, SCIEX recommends that the computer be restarted.

9. Open the software.

10. License and activate the software. Refer to Electronic Licensing.

   A license key is supplied with the system. If a license key is not available, then contact sciex.com/request-support.

   (SCIEX X500 QTOF Systems and QTRAP® Enabled 7500 Systems) If the SCIEX OS 2.0.1 license includes licensing for the LibraryView™ Software, then the LibraryView™ Software must be installed separately.

   Separate licenses are required for the Bio Tool Kit, ChemSpider, Intact Quant, and Auditing features. Make sure to obtain licenses before attempting to use these features.

11. (SCIEX X500 QTOF Systems) For acquisition computers, run the MS FW Updater Utility to update the MS firmware and instrument configuration tables. Refer to Run the MS FW Updater Utility.

12. (SCIEX 7500 Systems) If the software has been reinstalled, then copy the backup current.dat file from C:\ProgramData\SCIEX\MassSpec\InstrumentData\YYYYMMDDHHMMSS to C:\ProgramData\SCIEX\MassSpec\InstrumentData\ to restore the instrument settings.

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# Upgrade from SCIEX OS 1.3 or Later

| Prerequisites |
| --- |
| • 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. |
| • Before upgrading SCIEX OS, verify that the versions of all vertical applications installed on the computer are supported. For supported versions, refer to Compatible Software. If required, update the vertical applications before upgrading SCIEX OS. Refer to Install Optional Vertical Applications. |
| **Note:** Make sure that the LibraryView<sup>TM</sup> Software version 1.4 is installed before upgrading SCIEX OS. |

A new software license is required to upgrade from previous versions of SCIEX OS.

During the upgrade, the user is prompted to specify the connected mass spectrometer. The selection determines which Help files are installed. If the wrong mass spectrometer is selected, then the user must remove the software and install it again to install the correct Help files.

**Note:** To upgrade from versions of SCIEX OS earlier than version 1.3, remove SCIEX OS from the Windows Add and Remove Programs control panel and then install SCIEX OS 2.0.1. Also upgrade any vertical applications. Refer to Install Optional Vertical Applications for information about upgrading the vertical applications.

**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 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 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 disconnect any external USB storage devices.

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

11.  (Windows 7 operating system only) 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.

> **Note:** On a computer configured with the Windows 10 operating system, version 1.1.0 of the xTDC4 driver is already installed.

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

13.     Follow the on-screen instructions.

        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 Installation Cleanup.

14.     After the software is installed, restart the computer.

        **Note:** A restart is not mandatory. However, SCIEX recommends that the computer is restarted.

15.     For SCIEX X500 QTOF acquisition computers, run the MS FW Updater Utility to update the MS firmware and instrument configuration tables. Refer to Run the MS FW Updater Utility.

# Install Optional Vertical Applications

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

*   BioPharmaView<sup>TM</sup> Software
*   MarkerView<sup>TM</sup> Software version
*   LibraryView<sup>TM</sup> Software version

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

If the application is not installed, 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<sup>TM</sup> or MarkerView<sup>TM</sup> 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

**Note:** Only the SCIEX X500 QTOF System is supported in versions of SCIEX OS earlier than 2.0.

Follow this procedure to downgrade from SCIEX OS 2.0.1 to SCIEX OS version 1.5 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 2.0.1

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 procedure in Installation Cleanup.

4.      Install the version of the Microsoft C++ Redistributable that is included in the SCIEX OS 2.0.1 installation package.

# Run the MS FW Updater Utility 4

> **Note:** This utility is used for SCIEX X500 QTOF Systems only.

| Prerequisites |
|---|
| • Version 1.2 or greater of SCIEX OS is installed.<br><br>• The mass spectrometer is active in the Devices workspace.<br><br>• The computer is connected to the mass spectrometer.<br><br>• The person 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.  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**.

**Figure 4-1 MS FW Updater Utility**
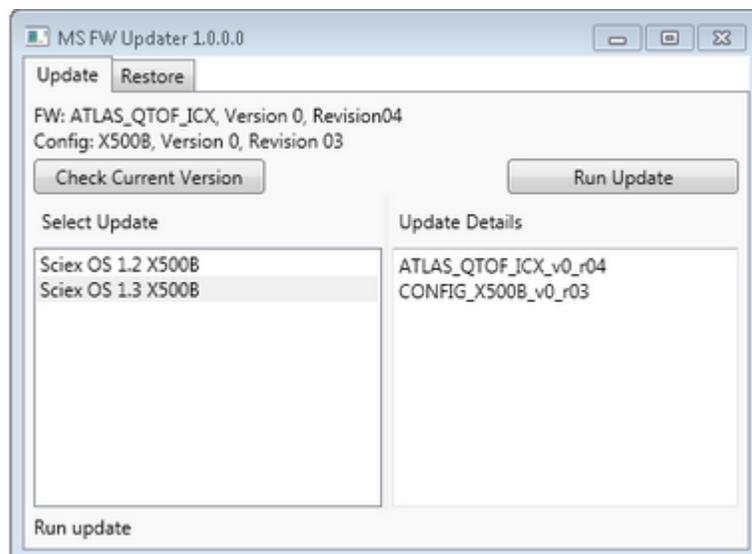


4.      In the **Select Update** list, select the mass spectrometer and software version.

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.

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

8.   Open SCIEX OS and then open the Devices 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.

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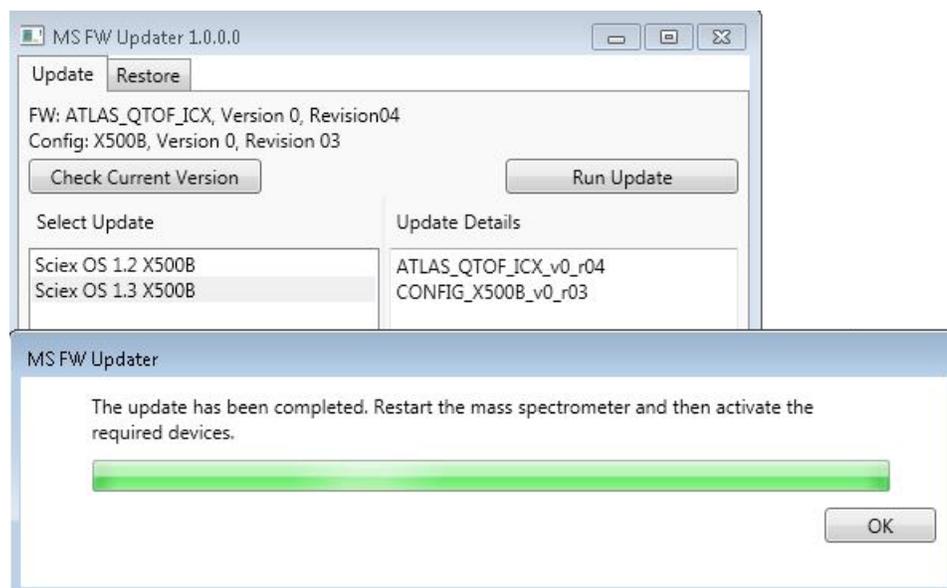**Note:** If SCIEX OS was not closed before the utility was run, then the mass spectrometer is still shown in the Devices list. To remove the mass spectrometer, close and then open the application. Add the mass spectrometer.

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**Note:** The event log in SCIEX OS will indicate that the firmware was updated successfully.

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

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**Note:** Because the MS FW Updater requires SCIEX OS 1.2 or greater, it cannot revert to versions earlier than SCIEX OS 1.2. To revert to earlier versions, contact sciex.com/request-support.

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# 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 OS2.0.1.lic. Install the license file in the C:\Program Files\SCIEX\SCIEX OS folder on the computer where SCIEX OS is installed.

**Note:** For both node-locked and server-based licenses, do not change the computer date and time after the license is activated. If the computer date and time must be changed, then do so before activating the license. Otherwise, the software might not function.

**Note:** Do not modify a node-locked license file, regardless of whether it is for an acquisition computer or a license server. Modifying the license file invalidates the license and it becomes unrecoverable.

## Activate a Node-Locked License for SCIEX OS

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

   A message is shown indicating that the license file SCIEXOS2.0.1.lic cannot be found in the C:\Program Files\SCIEX\SCIEX OS folder. The software initiates the software activation process by showing a software activation dialog. Follow the instructions in the dialog. A license key is required.

**Figure 5-1 License Message**



2.    Type the license key from the license certificate in step 1 in the SCIEX OS Activation dialog.

3.    Click the link in step 3 in the SCIEX OS Activation dialog.

      The SCIEX Login web page opens.

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

      After the log on or account creation is completed, the software activation SCIEX web page is shown. 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 **Computer ID** and **License Key** fields are also populated with the correct information.

5.    Select and enter the required information under **Select Your Instrument**.

      **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 enter 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.

# Activate a Server-Based License

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 SCIEXOS2.0.1.lic for the client computers.

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

# Troubleshooting 6

## Installation Troubleshooting Tips

| Error Message | Possible Cause | Corrective Action |
|---|---|---|
| The installation could not be completed. Refer to Figure 6-1. | The version of Microsoft Visual C++ installed on the computer is later than the version distributed with SCIEX OS. | Remove Microsoft Visual C++ and then install SCIEX OS again.<br><br>**Note:** If the installation is still unsuccessful, then perform the procedure in Installation Cleanup. |
| 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 SCIEX OS. | a. Remove SCIEX OS.<br>b. Remove the LibraryView™ Framework.<br>c. Rename C:\ProgramData\SCIEX to C:\ProgramData \SCIEX_Removed.<br>d. Install SCIEX OS. |
| Setup.exe - .NET Framework Initialization Error. Refer to Figure 6-2. | .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. |

**Figure 6-1 Installation Error (Example)**



**Figure 6-2 .NET Framework Initialization Error**
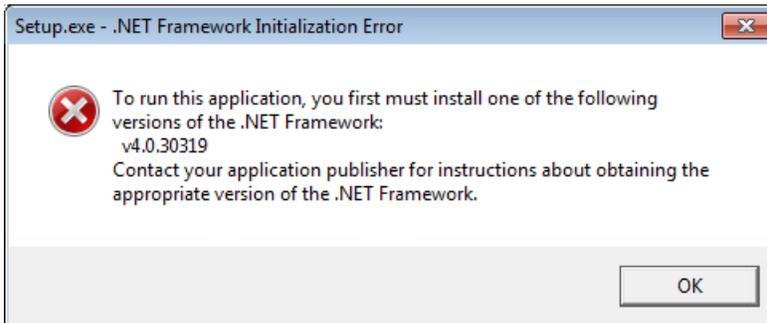


# Installation Cleanup

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

   - LibraryView^TM Software

   - SCIEX OS

   - LibraryView^TM 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

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
- SQL Server browser for SQL Server 2012

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. Back up and then delete the following folders:

    - C:\Program Files\SCIEX\LibraryView

    - C:\Program Files\SCIEX\SCIEX OS

    - C:\SCIEX OS Data

6. Delete the following folders:

    - C:\ProgramData\SCIEX

    - C:\Program Files\MongoDB

7. Restart the computer.

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

9. 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"**

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

# Mass Spectrometer Firmware Versions   A

| Mass Spectrometer | Firmware |
|---|---|
| X500R or X500B QTOF System | ATLAS_QTOF_ICX_v0_r04 |
| SCIEX Triple Quad<sup>TM</sup> 7500 LC-MS/MS System–QTRAP® Ready | PIL2001 |

# Instrument Configuration Table     B

| Mass Spectrometer | Instrument Configuration Table |
|---|---|
| SCIEX X500R QTOF System | X500R CONFIG_X500R_v0_r04 |
| SCIEX X500B QTOF System | X500B CONFIG_X500B_v0_r03 |
| SCIEX Triple Quad™ 7500 LC-MS/MS System–QTRAP® Ready | FWTripleQuad7500QTRR00.fw |

# Peripheral Devices and Firmware     C

SCIEX OS 2.0.1 supports the devices listed in the following tables.

In most cases, more recent firmware versions from the device manufacturer will work with SCIEX OS 2.0.1. 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 *Devices Setup Guide*.

**Table C-1 ExionLC<sup>TM</sup> AC/ExionLC<sup>TM</sup> AD Systems**

| Peripheral Device | Tested Firmware (and other firmware) | Communication Cable Required |
|---|---|---|
| ExionLC<sup>TM</sup> Controller | 2.0, 3.01, 3.40 | Ethernet |
| ExionLC<sup>TM</sup> AC Pump | 2.04 | Optic |
| ExionLC<sup>TM</sup> AC Autosampler | 2.05, 3.12 | Optic |
| ExionLC<sup>TM</sup> AC Column Oven | 3.21 | Optic |
| ExionLC<sup>TM</sup> AD Pump | 2.04, 3.11, 3.21 | Optic |
| ExionLC<sup>TM</sup> AD Autosampler | (3.12) | Optic |
| ExionLC<sup>TM</sup> AD Multiplate Sampler | (3.15) | Optic |
| ExionLC<sup>TM</sup> PDA Detector | 4.02 | Ethernet<br><br>**Note:** The PDA Detector requires a switching hub to connect to the system controller and the acquisition computer. Refer to the *ExionLC<sup>TM</sup> PDA Detector Operator Guide*. |
| ExionLC<sup>TM</sup> UV Detector | 2.03 | Optic |
| ExionLC<sup>TM</sup> Rack Changer | (2.0) | Optic |

**Table C-1 ExionLC<sup>TM</sup> AC/ExionLC<sup>TM</sup> AD Systems (continued)**

| Peripheral Device | Tested Firmware (and other firmware) | Communication Cable Required |
|---|---|---|
| ExionLC<sup>TM</sup> Degasser | — | — |
| ExionLC<sup>TM</sup> Solvent Selection Valve | — | — |

**Table C-2 Agilent 1290 Infinity and Infinity II Devices**

| Peripheral Device | Model | Tested Firmware (and other firmware) | Communication Cable Required |
|---|---|---|---|
| **1290 Infinity Devices** | | | |
| Binary Pump | G4220A | A.06.73, B.07.01 | Ethernet or CAN |
| Standard Autosampler | G4226A | A.06.54, A.07.01 | Ethernet or, if the system contains a DAD, then CAN |
| Column compartment | G1316C | 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 |
| 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 C-3 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 C-3 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 (D.07.13) | 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 C-4 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) | 2.81, 3.01, 3.11, 3.31 (3.61) | Ethernet |
| CBM-40 System Controller | 0.31, 1.30 | 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 | 3.15 | Optic |
| SIL-40 Autosampler | (1.05) | Optic |

**Table C-4 Shimadzu Devices (continued)**

| Peripheral Device | Tested Firmware (and other firmware) | Communication Cable Required |
|---|---|---|
| SIL-40C Autosampler | (1.05) | Optic |
| SIL-40C X3 Autosampler | 1.04, 1.05 | Optic |
| SIL-40C XR Autosampler | 1.05 | Optic |
| LC-20AB Binary Solvent Delivery Unit | — | — |
| LC-20AD Pump | 3.11 (1.04, 1.10, 1.07) | Optic |
| LC-20AD XR Pump | (1.20, 1.21) | Optic |
| LC-20AT Solvent Delivery Unit | — | — |
| LC-30AD Pump | 3.11, 3.21 | Optic |
| LC-40D | (1.04) | Optic |
| LC-40D XR | 1.04 | Optic |
| LC-40B XR | (1.04) | Optic |
| LC-40D X3 | (1.04) | Optic |
| LC-40B X3 | 1.04 | Optic |
| CTO-20AC Column Oven | 2.03, 2.10 | Optic |
| CTO-40C Column Oven | 1.00 | Optic |
| CTO-40S Column Oven | 1.00 | Optic |
| SPD-20A UV-VIS Detector | 1.04 | Optic |
| SPD-40V UV-Vis Detector | 1.04 | Optic |
| SPD-M30A UV Detector | 3.11, 4.02 | Ethernet<br><br>**Note:** The Detector requires a switching hub to connect to the system controller and the acquisition computer. |

**Table C-4 Shimadzu Devices (continued)**

| Peripheral Device | Tested Firmware (and other firmware) | Communication Cable Required |
|---|---|---|
| SPD-M40 Detector | 2.00 | Ethernet<br><br>**Note:** The Detector requires a switching hub to connect to the system controller and the acquisition computer. |
| RF-20A XS Fluorescence Detector | 2.02 | Optic |
| FCV-12AH Valve | — | — |
| FCV-13AL Valve | — | — |
| FCV-32AH Valve | — | — |
| 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-BOX 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　　　D

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**Note:**

- For acquisition, only the English version of the Windows 7, 64-bit, or Windows 10, 64-bit, operating system is supported. For information about configuring the Windows operating system, refer to  Windows Operating System Configuration.

- For processing (SCIEX OS-Q and SCIEX OS-MQ), the German language versions of Windows 7, 64-bit and Windows 10, 64-bit are also supported.

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

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## 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.

- 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 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.

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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.
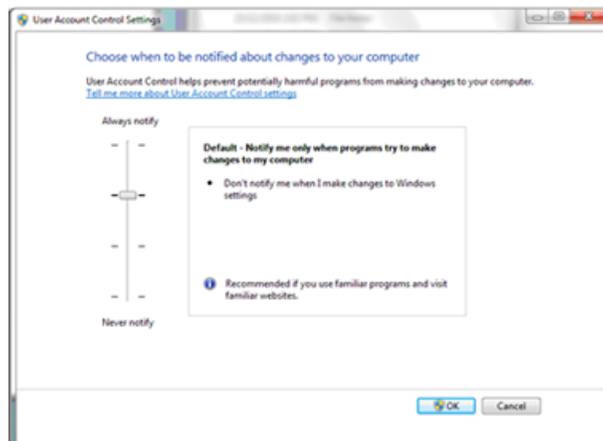
# User Account Control Settings

## 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.
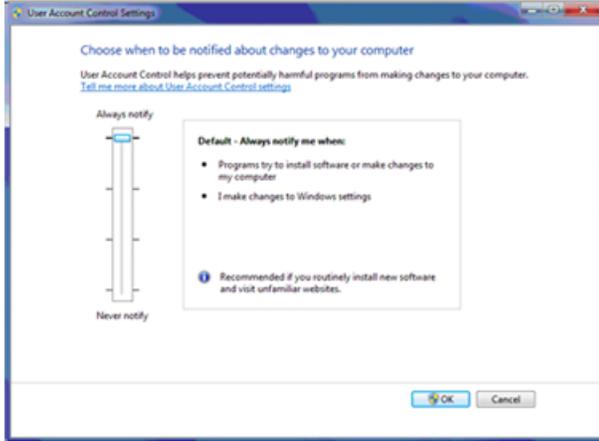
1.    Open Control Panel.

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**.

**Figure D-1 User Account Control Setting for the Administrator**



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

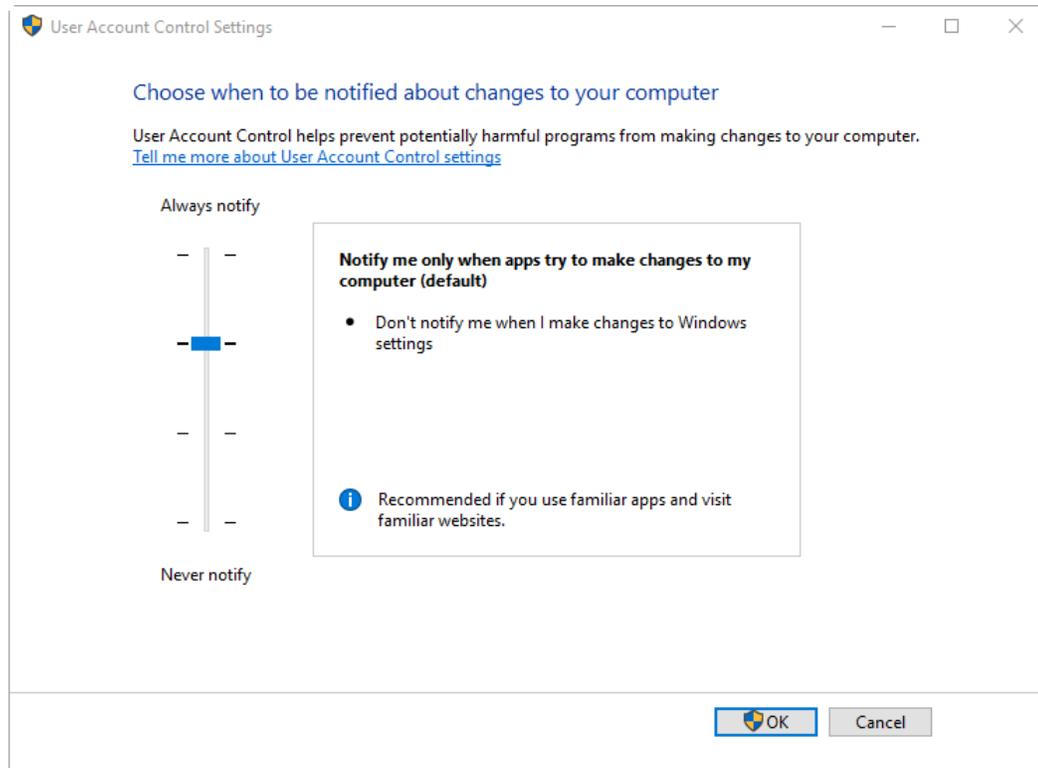**Figure D-2 User Account Control Setting for Standard Users**



# 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.
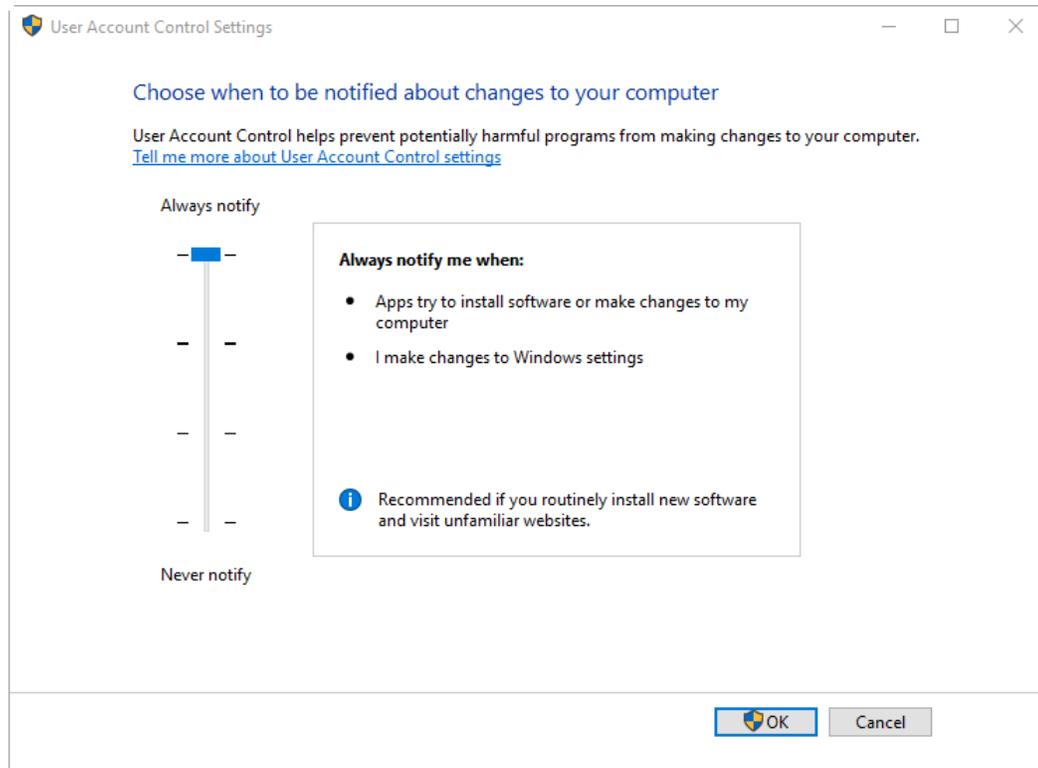
1.    Open Control Panel.

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 D-3 User Account Control Setting for the Administrator**



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

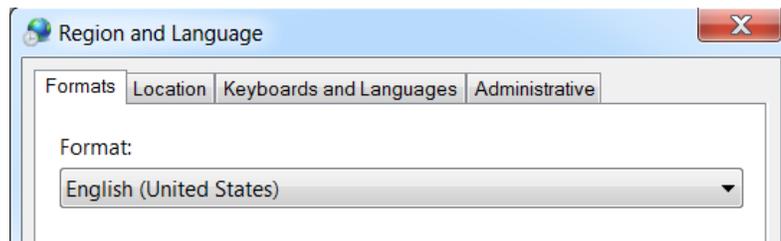**Figure D-4 User Account Control Setting for Standard Users**

# Region and Language Settings

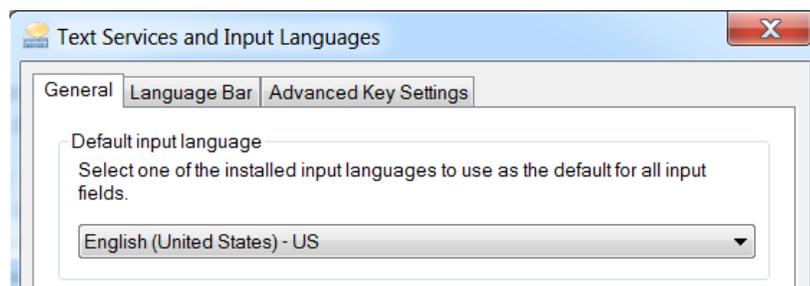## Region and Language Settings (Windows 7)

- Configure the Region and Language control panel.

    1. Set the **Format** field to **English (United States)**.

        **Figure D-5 Region and Language Dialog: Windows 7 Operating System**

        

    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.

        **Figure D-6 Text Services and Input Languages Dialog: Windows 7 Operating System**

        

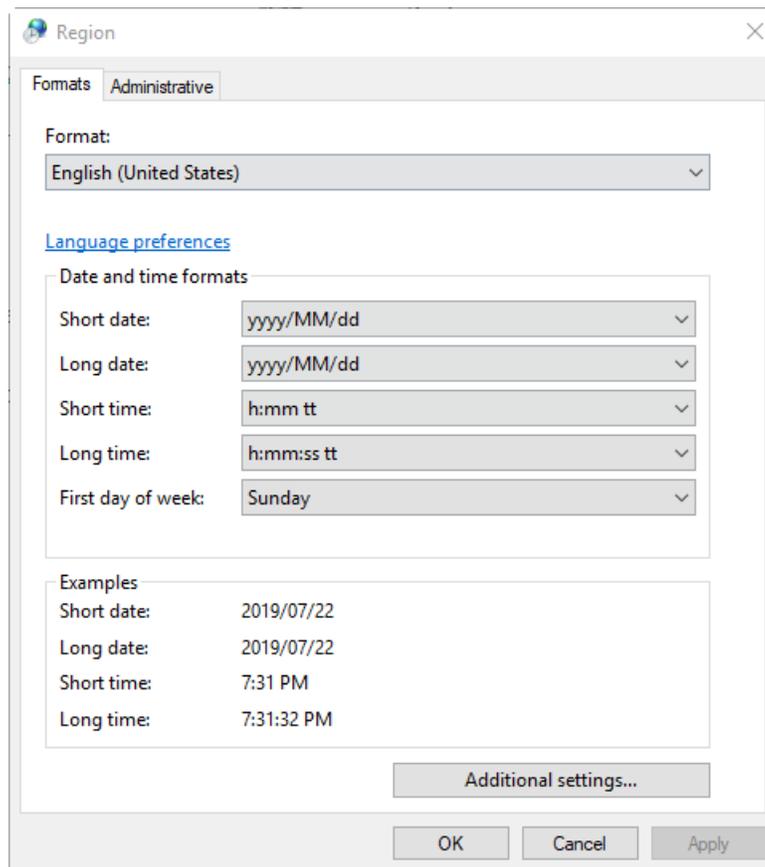    2. Click **Apply**.

    3. Click **OK**.

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.

# 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 D-7 Region Dialog**



3.  Make sure that the **Format** field is set to **English (United States)**.
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**.

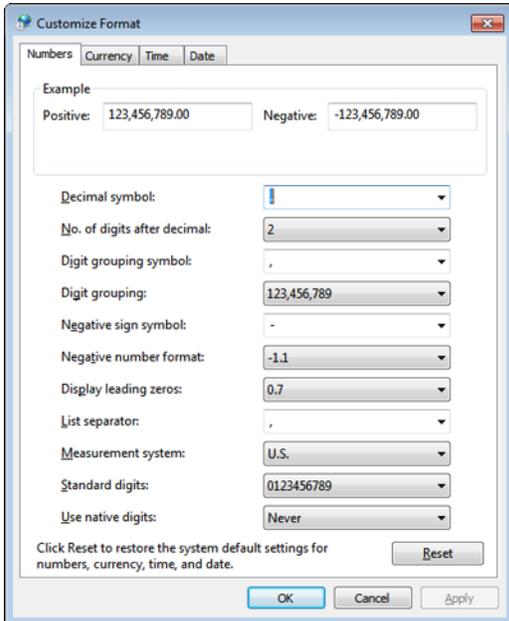**Figure D-8 Language Dialog: Windows 10 Operating System**
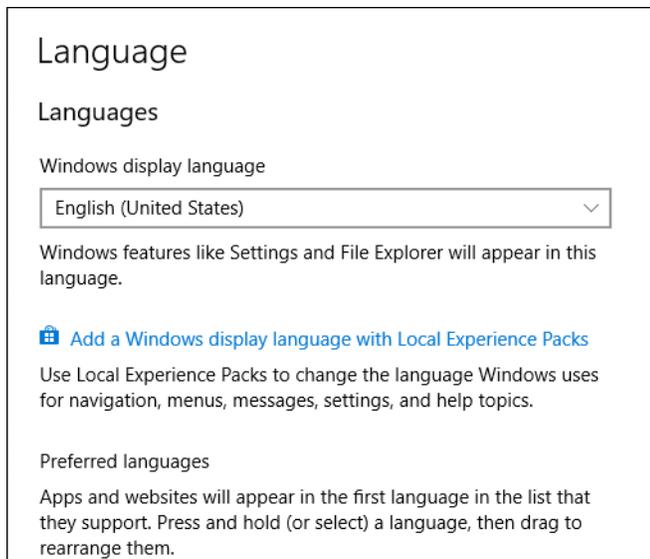


4.     For the **Windows display language**, select **English (United States)**.

# Local Settings

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

**Figure D-9 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. |
| Use native digits | Not supported. |

# SCIEX OS Documentation E

For a list of the software guides that are installed with SCIEX OS, refer to Table E-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 E-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 E-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.<br><br>**Note:** Only qualified operators should perform the procedures in this guide. |
| *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$^{TM}$ Ion Source Operator Guide* | (X500 QTOF Systems) Provides procedures for installing the ion source. |
| *OptiFlow$^®$ Pro Ion Source Operator Guide* | (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 University™

## 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

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**Contact Us**

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 *Customer Reference* DVD that comes with the system or component.

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

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