Software Installation Guide

Analyst Software 1.7.4

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Introduction 1

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

Important Information to Know Before Installing

Note: The Analyst software 1.7.4 is only supported on the Windows 10 operating system.

Note: Back up the Analyst Data folder to a safe location before upgrading. For more information, refer to the section: Back up the `Analyst Data` Folder to a Safe Location. **Do not rename the existing folder**. This folder contains the API Instrument folder, which contains the basic instrument calibration and parameter settings.

Note: If you upgrade to the Analyst software 1.7.4 from version 1.7.2 or 1.7.3 of the Analyst software, then the previous version will be removed during the upgrade process.

Note: Do not attempt to install or upgrade the software without following the installation instructions provided in this guide.

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

CAUTION: Potential Data Loss. Do not modify the computer date and time after the Analyst software is installed.

- Make sure that the computer date and time is correct on the computer before installing the Analyst software. After the Analyst software is installed, manually modifying the date and time might invalidate the license and cause users to be unable to log into the Analyst software.
- Before the Analyst software is installed, read the software installation guide and release notes that come with the software. Be sure to understand the difference between a processing workstation and an acquisition workstation and then complete the appropriate installation sequence.
- The latest version of the Analyst software data files might not be compatible with any of the previous versions of the Analyst software. However, data acquired in previous versions of the Analyst software can be opened in the Analyst software 1.7.4.
- Results Tables created with the Analyst software 1.7.1 or a later version cannot be opened in version 1.7 or earlier versions of the Analyst software. Results Tables created in any later version of the Analyst software might not be able to be opened in an earlier version.

- Use the task list provided at the beginning of the installation procedure in this guide to verify each task as it is completed. The order in which the installation steps are performed is important.
- CTC PAL autosamplers (HTC and HTS models) are not supported in this version. All of the other peripheral devices supported in the Analyst software 1.5.2 and later continue to be supported in the Analyst software 1.7.4. Refer to the section: Peripheral Devices and Firmware.
- The Analyst software 1.7.4 is available as a web download package for new customers and customers upgrading from supported previous versions of the Analyst software.
- The Analyst software 1.7.4 cannot be installed on the same computer as the Analyst Administrator Console (AAC) Server software.
- Deactivate the hardware profile and then close the Analyst software before installing the Analyst software 1.7.4.
- For more information about the compatibility of the Analyst software 1.7.4 with other software applications, refer to the section: Compatible Software and Incompatible Software.

Software Installation Requirements 2

This section explains the operating system, hardware, and software requirements that acquisition and processing workstations must meet for the Analyst 1.7.4 software to operate.

Operating System Requirements

Previously owned Analyst 1.7 licenses can be used with Analyst 1.7.4 software.

Refer to the following table for a list of computers and operating system requirements.

Table 2-1 Computer and Operating System Requirements for Acquisition and Processing Workstations

Computer	Operating System
SCIEX Workstation - 5860 or SCIEX Workstation Plus - 5860	Windows 10, 64-bit (Windows 10 IoT Enterprise LTSC 2021-21H2 64-bit English)
SCIEX Workstation or SCIEX Workstation+	Windows 10, 64-bit (Windows 10 IoT Enterprise 2019 1809 LTSC EMB 64-bit English)
SCIEX Alpha Workstation 2020	Windows 10, 64-bit (Windows 10 IoT Enterprise 2019 1809 LTSC 64-bit EMB English) operating system

Note: Microsoft Office 365 ProPlus is not compatible with computers with the Windows 10 LTSB/LTSC operating systems.

Network Environment

The Analyst software 1.7.4 supports the Windows 2008 R2 and 2012 servers.

Acquisition Workstation Hardware Requirements

SCIEX Workstation - 5860 or SCIEX Workstation Plus - 5860 computer are recommended for use with the Analyst software 1.7.4. For a complete list of supported computers, refer to the section: Supported Computers.

It is highly recommended that the acquisition workstation, including the communication interface cards, be purchased from SCIEX. The computers supplied by SCIEX meet all requirements and undergo extensive testing and verification with the Analyst software. Specifications for these systems come with the workstation. For more information, contact a SCIEX sales representative.

The Analyst software 1.7.4 has been qualified for acquisition on the current PC configuration. Refer to the section: Current Configuration for the Acquisition Computer.

Note: Make sure that the computer and the Ethernet cable settings are set to **never go to sleep**. SCIEX computer images already have these settings set correctly.

The acquisition computer must support the Windows 10 operating system.

Recommended Computers

- **SCIEX Workstation - 5860**
  - An Intel Xeon W3-2435 processor (22.5 MB, 8 core, 3.1 GHz to 4.5 GHz)
  - 32 GB (2 × 16 GB) DDR5 SPR 1 DPC 4800 MHz
  - 2 × 1 TB SSD (RAID 1) M.2 2280 1 TB PCIe NVMe Gen4×4 SSD Class 40
  - One Intel built-in Ethernet card + one additional Broadcom dual-port Ethernet card
- **SCIEX Workstation Plus - 5860**
  - An Intel Xeon W3-2435 processor (22.5 MB, 8 core, 3.1 GHz to 4.5 GHz)
  - 32 GB (2 × 16 GB) DDR5 SPR 1 DPC 4800 MHz
  - 2 × 2 TB SSD (RAID 1) M.2 2280 1 TB PCIe NVMe Gen4×4 SSD Class 40
  - One Intel built-in Ethernet card + one additional Broadcom dual-port Ethernet card

Note: Newer systems might become available. For more information, contact a SCIEX sales representative.

Supported Computers

- **SCIEX Workstation**
  - Intel Xeon Processor W-2245 (8C 3.9GHz 4.7GHz Turbo HT 16.5MB, 155W DDR4-2933)
  - 32G GB (2 × 16 GB) 3200MHz DDR4 RDIMM ECC
  - 2 × 1 TB SSD (RAID 1) + 2 M.2 carrier
  - One Intel built-in Ethernet card + one additional Broadcom dual-port Ethernet card
- **SCIEX Workstation+**
  - Intel Xeon Processor W-2245 (8C 3.9GHz 4.7GHz Turbo HT 16.5MB, 155W DDR4-2933)
  - 32G GB (2 × 16 GB) 3200MHz DDR4 RDIMM ECC
  - 2 × 2 TB SSD (RAID 1) + 2 M.2 carrier
  - One Intel built-in Ethernet card + one additional Broadcom dual-port Ethernet card

- **SCIEX Alpha Workstation 2020**
  - Intel Core I5-8500
  - 32G GB (2 × 16 GB) DDR4 2666MHz DDR4 UDIMM Non-ECC
  - 2 × 2 TB HDD (RAID 1)
  - One Intel built-in Ethernet card + one additional Broadcom dual-port Ethernet card

Note: Newer systems might become available. For more information, contact a SCIEX sales representative.

Processing Workstation Hardware Requirements

For data processing workstations, SCIEX recommends the following minimum computer configuration:

- Intel Core I5-4570S Processor
- 8 GB (2 × 4 GB) DDR3 1600Mhz SDRAM

Some SCIEX add-on software requires additional memory, disk space, and processing speed. Refer to the documentation included with that software.

Current Configuration for the Acquisition Computer

The SCIEX Workstation - 5860 and SCIEX Workstation Plus - 5860 come with the Windows 10 IoT Enterprise LTSC 2021-21H2 English operating system installed.

This computer is RoHS compliant and can be used as an acquisition workstation or standalone processing computer. All Windows 10 operating systems come with Microsoft Edge. Most of the driver software required for the cards is installed.

The acquisition workstation includes the following:

- Intel built-in Ethernet Card + one additional Broadcom dual-port Ethernet card

The acquisition workstation supports the following external interfaces and card:

- GPIB (not included)
- Serial (not included)
- NI DAQ ADC PCIe card (not included)

Note: National Instruments USB to GPIB might be required for data acquisition but is not included.

Note: Edgeport USB might be required for peripheral device control but is not included.

CAUTION: Potential Acquisition Interference. Do not change the power management settings in the BIOS. Changing the power management settings might interfere with batch acquisition by introducing long delay times between samples.

Supported Cards and Driver Versions

The table shows the driver versions installed on the currently shipping acquisition workstation, the supported driver versions, and the supported slots.

Table 2-2 Supported Cards and Driver Versions: SCIEX Workstation - 5860, SCIEX Workstation Plus - 5860, SCIEX Workstation, and SCIEX Workstation+

Card Name	Driver Version
GPIB	17.0
ADC	17.1
Network card – Broadcom dual-port	14.1 or newer
EdgePort USB	6.4.1.0
Network Card — Intel I219-LM Ethernet	12.1 or newer

Table 2-3 Supported Cards and Driver Versions: SCIEX Alpha Workstation 2020

Card Name	Driver Version
GPIB	17.0
ADC	17.1
Network card – Intel Ethernet Server Adapter I350-T2 - network adapter dual-port (PN 5068976)	9.3.41.0 or later
EdgePort USB	6.4.1.0
Network Card – Intel I210 1Gb Ethernet Adapter (1X1GbE)	12.0.0.0 or later

Requirements for the Reporter Software 3.2

Microsoft Word 2016, Microsoft Word 2021, or Office 365 is required.

Note: Microsoft Office 365 ProPlus is not compatible with computers with the Windows 10 LTSB/ LTSC operating systems.

PDF Reporting Capabilities

Select the option to allow reporting in either all formats (Microsoft Word, Text, Microsoft Excel, HTML, PDF) or only the PDF format during the software installation.

User Account Control Requirements for Windows 10

When the Analyst software 1.7.4 is installed on a computer, then it is recommended that the Windows default settings for User Account Control be used. 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 **Default – Always notify me**.

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

Prerequisite Software

The following software are prerequisite for the Analyst software 1.7.4. All of them, except the .NET Framework 3.5, are automatically installed by the Analyst software installer if they are not already installed on the computer.

Note: Microsoft Word 2016, Microsoft Word 2021, or Office 365 is required to generate reports using the Analyst software Reporter and Instrument Optimization. Refer to the section: Requirements for the Reporter Software 3.2.

- .NET 3.5 SP1

  Note: If .NET Framework 3.5 is not already installed, then the user is informed that the .NET Framework 3.5 is not installed and should be installed after the installation is completed. Users should contact their IT department or refer to the section: Installation Instructions to enable the .NET Framework 3.5. Refer to the figure: Figure 3-1.

- .NET Framework 4.5.1
- MS VC++ 2008 SP1 redistributable
- MS VC++ 2008 SP1 ATL security redistributable
- Visual Studio 2010 Tools for Office runtime
- SCIEX Reporter Template Suite 3.2

Compatible Software

These applications are compatible with the Analyst software 1.7.4 on Windows 10 operating systems:

Table 2-4 Compatible Software

Software Name	Additional Information
AAC server 3.1	Compatible with the Analyst software 1.7.4.
Analyst Device Driver (ADD) software 1.4	—
LibraryView software 1.0.3	Not tested but expected to work.
ChemoView software 2.0.4	Not tested but expected to work.
DiscoveryQuant software 3.0.2 with HotFix 2	—
LightSight software 2.3.1 with the LightSight 2.3.1 Patch for Recognizing Shimadzu HPLC Integrated System	• Not compatible with SCIEX 5500+ systems or SCIEX 6500+ systems. Compatible with all of the other mass spectrometer models. For details on supported models, refer to the document: *Release Notes* for the LightSight software. • Not compatible with ExionLC AC systems, ExionLC AD systems, ExionLC 2.0 systems, or Shimadzu LC-40 systems.
MarkerView software 1.3.1	—
MasterView software 1.1 with HotFix 1	—
MPX software 2.0 with HotFix 4	—
MultiQuant software 3.0.3 with HotFix 4	Not tested but expected to work.
PeakView software 2.2	—
SCIEX OS 3.4.5	—
StatusScope remote monitoring service 2.2.2	—

Note: Earlier versions of all of these applications are not supported by the Analyst software 1.7.4.

For information about the compatibility of AAO applications, refer to the section: Peripheral Devices Controlled via AAO Software Interface.

Incompatible Software

At the time of this release, these applications are not compatible with the Analyst software 1.7.4:

- BioAnalyst software
- MRMPilot software

To inquire about the compatibility of software not included in either of these lists, contact SCIEX support or a sales representative.

Supported Mass Spectrometers

The Analyst software 1.7.4 can control and analyze data from each of the following SCIEX mass spectrometers:

- SCIEX Triple Quad 3500 system
- QTRAP 4500 system
- SCIEX Triple Quad 4500 system
- QTRAP 5500 system
- SCIEX Triple Quad 5500 system
- SCIEX 5500+ system
- QTRAP 6500 system
- SCIEX Triple Quad 6500 system
- QTRAP 6500+ system
- SCIEX Triple Quad 6500+ system
- 4000 QTRAP system
- 3200 QTRAP system
- API 5000 system
- API 4000 system
- API 3200 system

The Analyst software 1.7.4 can also analyze data files generated in the SCIEX OS software by the SCIEX 7500 or SCIEX 7500+ system.

Note: Other, SCIEX models of mass spectrometers might be compatible with the Analyst software 1.7.4. However, these mass spectrometers have not been specifically verified and SCIEX makes no claims as to whether they can be used with the Analyst software 1.7.4.

Contents of the Web Download Package

The following software applications, files, folders, and documents are included in the web download package for the Analyst software 1.7.4:

- Analyst software 1.7.4 folder: Contains the scripts, the software guides, the tutorials, `setup.exe`, all of the files required to install the Reporter software, all of the files required to install all of the prerequisite software, except the .NET Framework 3.5, and all of the files required to install the Analyst software.
- `Drivers` folder: Contains the Edgeport 6.04 driver folder and the ADC folder.
- `Extras` folder: Contains the following subfolders:
  - `AAO`: Contains the Analyst Access Object release notes and user guide.
  - `Instrument Update`: Contains the Firmware/Configuration Table Update Program (`ConfigUpdater.exe`).
  - `Scripting Cookbook`: Contains a guide that provides information about writing applications to control the Analyst software.
  - `Tune Data`: Contains the `TuneData.tun` file.
  - `Analyst Diagnostic Tool 1.0.2`: Contains the Analyst Diagnostic Tool software and related document.
- *Release Notes*.
- *Analyst Software Installation Guide* (this document).
- *license.rtf*

Note: For a complete list of documents and their location, refer to Analyst Software Documentation.

The web download package for the Analyst software 1.7.4 can be downloaded from sciex.com/software-downloads. However, the GPIB 17.0 driver, the Analyst Device Driver (ADD) software 1.4, and the National Instrument ADC driver are not included in the web download package. Excluding the GPIB 17.0 driver, they can be downloaded from sciex.com/software-downloads, under **Additional Downloads** > **Drivers**. If the GPIB 17.0 driver is required, contact the National Instrument support at https://www.ni.com/en-ca/support.html to download the GPIB driver version 17.0 for NI-448.2.

Installation Instructions 3

This section provides procedures for the installation or upgrade of the Analyst software 1.7.4. Upgrades are supported from these earlier versions:

- Analyst software 1.7.2
- Analyst software 1.7.2 Components for the ExionLC 2.0 system
- Analyst software 1.7.2 with HotFix 2 or HotFix 3
- Analyst software 1.7.3
- Analyst software 1.7.3 with HotFix 1, HotFix 2, or HotFix 3
- Analyst software 1.7.3 with HotFix for 5500+ Configuration

Note: To upgrade to the Analyst software 1.7.4 from a version that is earlier than those listed above, upgrade to version 1.7.3 first, and then upgrade to 1.7.4. Refer to the document: *Software Installation Guide* for that version of the software.

Note: The order of the upgrade procedures is important. Refer to the section: Task List for Installation to make sure that each procedure is completed.

Note: Log on as a user with Administrator privileges to install the Analyst software 1.7.4.

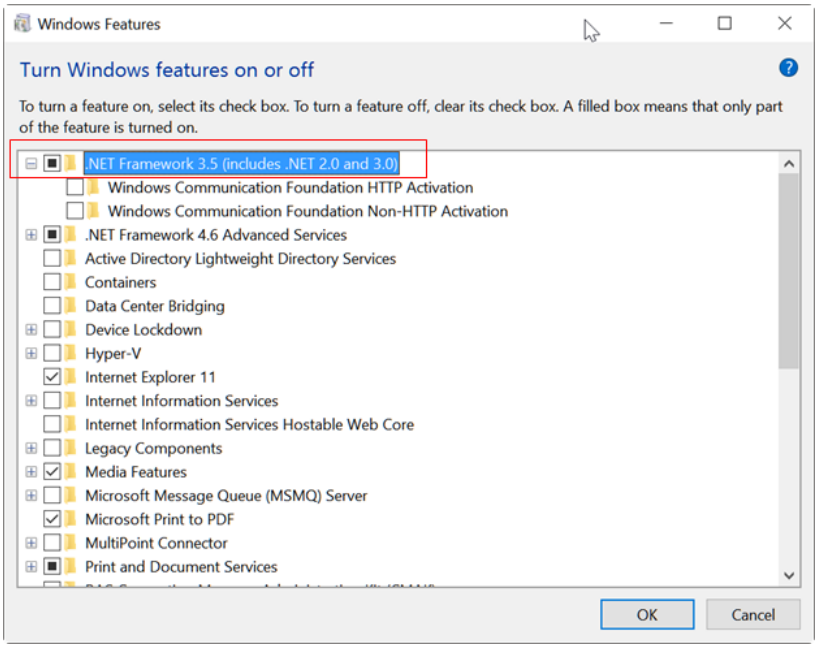
Note: Removing the Analyst software from the system removes the Analyst software completely rather than reverting to the previously installed configuration. The `Analyst Data` folder is not removed, but it is still recommended that the folder be archived. Instrument settings are retained but application settings are not.

Note: If the acquisition workstation is upgraded to the Analyst software 1.7.4, then upgrade the processing workstation to the same version as well.

Note: On the Windows 10 operating system, in **Control Panel** > **Programs and Features**, click **Turn Windows features on or off** to open the Windows Features dialog. Make sure the .**Net Framework** feature is selected. If it is not selected, then the .Net Framework 3.5 is not installed. Click it to enable the installation of .Net Framework 3.5. IT permission might be required to do this. Refer to the figure: Figure 3-1.

Note: The current SCIEX shipping computer images for the Analyst software 1.7.4 has .NET Framework 3.5 installed.

Figure 3-1 Windows Features Dialog



How to Use These Installation Instructions for Acquisition Workstations Versus Processing Workstations

The upgrade instructions in this section can be used for both acquisition and processing workstations. Acquisition workstations are workstations connected to a mass spectrometer. Processing workstations are workstations that are not connected to a mass spectrometer.

Use the following table to understand which upgrade procedures to complete for each type of workstation.

Table 3-1 Procedures for Acquisition and Processing Workstations

Workstation	Procedure
Acquisition workstations	Complete all of the procedures in this section. Some procedures are optional or are required only if certain interface cards are installed in the workstation.

Table 3-1 Procedures for Acquisition and Processing Workstations (continued)

Workstation	Procedure
Processing workstations	Complete all of the procedures excluding those only applicable to acquisition workstations. Omit any upgrade procedures related to: • Cards and driver software • Upgrading firmware and configuration tables

Task List for Installation

Use the following checklist to make sure that you complete all of the required steps.

Tip! Print this task list and then mark each step complete as installation steps are completed.

Table 3-2 Task List

Step	Procedure	Complete
Make sure that the workstation meets the requirements for installing the Analyst software.	Software Installation Requirements	☐
Prepare the instrument and workstation for the installation.	Prepare the Mass Spectrometer and Workstation for Installation	☐
Verify the User Account Control settings.	User Account Control Settings	☐
Back up the `Analyst Data` folder to a safe location.	Back up the `Analyst Data` Folder to a Safe Location	☐
Install the Analyst software 1.7.4.	Install the Analyst Software 1.7.4	☐
Set up the license.	Electronic Licensing	☐
(Optional) Install any scripts.	(Optional) Install Scripts	☐
(Acquisition workstations only) Update the firmware and configuration tables, if required.	Update the Firmware and Configuration Table	☐

Table 3-2 Task List (continued)

Step	Procedure	Complete
Enable the .NET Framework 3.5 feature	In **Control Panel > Program and Features**, select **Turn Windows features on or off** to open the Windows Features dialog. Make sure that **.NET Framework 3.5** feature is selected. If it is not selected, then select it to enable the installation of .NET Framework 3.5. IT permission might be required to do this. Refer to the figure: Figure 3-1.	☐
Open the Analyst software 1.7.4 for the first time.	Use the Software for the First Time after License Activation	☐

Prepare to Install

Prepare the Mass Spectrometer and Workstation for Installation

Note: Do not remove any of the cards from the workstation.

1. Log on to the computer as a user with Administrator privileges.
2. Acquisition workstations: If the workstation has a GPIB connector, then make sure that the mass spectrometer is turned on and connected to the GPIB connector at the back of the workstation.
3. For upgrades from a previous version of the Analyst software, perform these steps before installing the Analyst software1.7.4.
    a. Deactivate the active hardware profile.
    b. Remove the Convert Methods script and the sMRM Calculator script, if installed.
    c. Close the Analyst software.
4. Enable .NET 3.5 if it is not already enabled. Refer to the figure: Figure 3-1.

    Note: The SCIEX computers with Windows 10 operating systems have .NET 3.5 enabled by default.

    a. On the Windows 10 operating system, if .NET 3.5 is not already enabled on the computer, then in **Control Panel** > **Program and Features**, select **Turn Windows features on or off**.
    The Windows Features dialog opens.

b. Select the **.NET Framework 3.5** option to enable the installation of .NET 3.5. IT permission might be required.

c. Confirm the presence of .NET 3.5 in the Windows Features dialog. If it is enabled, then the **.NET Framework 3.5** option will be selected.

Back up the `Analyst Data` Folder to a Safe Location

Do not rename the existing `Analyst Data` folder. We recommend that the same `Analyst Data` folder be used as in the previous installation. This provides access to the existing data, such as hardware profiles, methods, and data files. It also retains the `InstrumentData.ins` and `ParameterSettings.psf` files and the `*.Analyst Backup` files if applicable. For SCIEX 6500 systems and SCIEX 6500+ systems, two backup files for `InstrumentData.ins` file and two backup files for `ParameterSettings.psf` file were created if the mode was switched from low mass to high mass and from high mass to low mass before the upgrade.

- Make a backup copy of the files and subfolders in the `Analyst Data` folder. Do not rename the folder. The default location is `D:\Analyst Data`. Create the backup in a safe location, such as a network drive or a DVD. These files need not be restored as part of a normal upgrade. However, it is good practice to make sure that a backup exists.

The `Analyst Data` folder contains the `API Instrument` folder, which contains the basic instrument calibration and parameter settings.

Note: As part of normal installation, the `API Instrument` folder, `CompoundDB.mdb`, and `CompoundLib.mdb` are automatically backed up to the `TEMP` folder on the system. This folder is normally stored in `C:\Users\<username>\AppData\Local\Temp`. Do not rely on this backup. Always back up the `Analyst Data` folder and only use this folder if absolutely necessary.

Install the Analyst Software 1.7.4

Note: Microsoft Word 2016, Microsoft Word 2021, or Office 365 is required to generate reports using the Analyst Software Reporter and Instrument Optimization. Microsoft Office 365 ProPlus is not compatible with computers with the Windows 10 LTSB/LTSC operating systems.

If Microsoft Word 2016, Microsoft Word 2021, or Office 365 is not installed on the system, then during the installation process a warning is shown informing the user that Microsoft Word 2016, Microsoft Word 2021, or Office 365 is required for the Analyst Software Reporter to function correctly. Either cancel the installation or continue. After the Analyst software 1.7.4 is installed, install Microsoft Word 2016, Microsoft Word 2021, or Office 365, if required.

Note: If the Analyst software will be used with the Analyst Device Driver (ADD) software, then perform these steps:

1. Install or upgrade to the Analyst software 1.7.4. Refer to the section: Install the Software from the Web Download Package.
2. (Not applicable if the ADD software 1.4 is already installed on the computer before upgrading to the Analyst software 1.7.4) Download the ADD software 1.4 from sciex.com/software-support/software-downloads under **Additional Downloads** > **Drivers**. Refer to the section: Install the ADD Software 1.4.

   Note: If the ADD software 1.4 is being downloaded from sciex.com/software-support/software-downloads, make sure to download the ADD software 1.4 *Release Notes* and tutorial documents separately from the ADD software 1.4 package. The separate documents contain the latest updates, which are not included in the *Release Notes* and tutorials that come with the ADDsoftware 1.4 package.

Complete the following procedures to upgrade the workstation to the Analyst software 1.7.4.

Note: Make sure that adequate virus protection is in place to prevent virus corruption of system functionality. Refer to the section: Cybersecurity.

Install the Software from the Web Download Package

Note: Do not directly install the software using the `setup.exe` file that is shown in the Windows Explorer when the compressed web download package is double-clicked.

1. Deactivate the active hardware profile in the Analyst software.
2. Close the Analyst software.
3. Restart the computer.
4. Download the web download package for the Analyst software 1.7.4 (`Analyst174-WebRelease.zip`) to the computer from sciex.com/software-downloads.

   Note: To prevent potential installation issues, we recommend that the file be saved to the local computer in a location other than the computer Desktop.

5. Extract the files from the compressed web download package on the local hard drive.

   Note: If the software is being installed using a deployment tool, such as the Microsoft Endpoint Configuration Manager (MECM), follow the instructions in the section: Use a Deployment Tool to Install the Analyst Software 1.7.4 and then go to step 9.

Note: Do not try to install the software directly from the zipped package without extracting them to a local hard drive.

6. Navigate to the folder where the contents of the `Analyst174-WebRelease.zip` file were extracted.
7. Double-click `setup.exe`.
   The Installation Wizard opens.
8. Follow the on-screen instructions to install the software.

Note: For upgrades from Analyst software version 1.7.2 or 1.7.3, the license remains unchanged when the Analyst software 1.7.4 is installed. After upgrading to version 1.7.4, go to step 10.

9. After the Analyst software is installed, Install the license file, `Analyst1.7.lic`, and then confirm that it is installed in the `C:\ProgramData\AB SCIEX\Analyst\License` folder. To obtain and install a license, refer to the section: Electronic Licensing. If applicable for the SCIEX Triple Quad 5500+ system, make sure to save the license file `QTRAPAnalyst1.7.lic` in the same folder as `Analyst1.7.lic`.

Note: The QTRAP license cannot be installed using the license activation dialog.

10. Acquisition workstations: If applicable, then update the firmware and configuration table, before proceeding to the following steps. Refer to the section: Update the Firmware and Configuration Table.

Install the ADD Software 1.4

Note: For more information, refer to the documentation for the Analyst Device Driver (ADD) software.

Note: If required, install the ADD software 1.4 after the Analyst software 1.7.4 installation is completed.

1. Download the ADD software 1.4 from sciex.com/software-downloads under **Additional Downloads** > **Drivers**, and then extract the contents of the zip file to the local hard drive.
2. Double-click the `setup.exe` file.
3. Follow the on-screen instructions to install the driver.

Use a Deployment Tool to Install the Analyst Software 1.7.4

The Analyst software can be installed with a deployment tool, such as Microsoft Endpoint Configuration Manager (MECM), using either a Windows administrator account or a non-administrator SYSTEM account.

If the SYSTEM account is used, then the users on the workstations where the Analyst software will be installed do not need to have administrator rights in Windows.

This procedure applies to new installations that use the Analyst Administrator Console (AAC) security database.

1. Use the deployment tool to create the `AnalystTemp` folder on the `C:\` drive.

   The software installation log file will be saved in this folder.

2. (Omit this step if only the AAC security database will be used to log on to the Analyst software workstations, and if users will never change between the local security database and the AAC security database to log on to the Analyst software workstations.) If the SYSTEM account is used, then make the **SDBInfo** registry key and deploy it with the deployment tool.

   Note: The **SDBInfo** registry key is not required if a Windows administrator account is used to deploy the software.

   All **Value Name** entries must use the **String Value** type. At least one of **User** or **Group** must be selected. Refer to the table: Table 3-3. For an example **SBDInfo** registry key, refer to the following figure.

Figure 3-2 Example SBDInfo Registry Key

```
[HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\SciexSccm\Analyst\SDBinfo
]
"UseMixedMode"="Yes"
"Domain"="DomainName"
"UserName"="First.Last"
"UserType"="Administrator"
"GroupName"="SharedAccounts"
"GroupType"="Operator"
```

Table 3-3 SBDInfo String Value Requirements

String Value		Comment
Value Name	**Value Data (Example)**	
UseMixedMode	Yes	**Yes**: Mixed Mode will be used in the Analyst software **No**: Integrated Mode will be used in the Analyst software **Note:** This string value is optional. If the string value is not used, then Integrated Mode will be used in the Analyst software.
Domain	DomainName	The name of the domain to which the user name and group name belong. This string value is required.
UserName	FirstName.LastName	The name of the domain user who will log on to Windows on the computers where the Analyst software will be installed.
UserType	Administrator	The Role type for the user in the security configuration for the Analyst software. The default roles include Administrator, Analyst, Operator, End User, QA Reviewer, and Supervisor.
GroupName	ShareAccounts	The Group name on the defined domain.
GroupType	Operator	The Role type for the group in the security configuration for the Analyst software. The default roles include Administrator, Analyst, Operator, End User, QA Reviewer, and Supervisor.

3. To install the software, use the deployment tool to run the silent install command from the installation files location:

   ```
   setup.exe /s /v/qn /v"/l* "c:\AnalystTemp\analyst.txt"" /v/norestart
   ```

   Wait several minutes to let the installation complete.

4. To connect to the AAC server 3.1, do this:

   a. Add the **AnalystAdminConsole** registry key, and then deploy it with the deployment tool.

      All **Value Name** entries must use the **String Value** type. Refer to the table: Table 3-3. For an example **AnalystAdminConsole** registry key, refer to the following figure.

Figure 3-3 Example AnalystAdminConsole Registry Key

```
[HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\PE
Sciex\Analyst\AnalystAdminConsole]
"Default Workgroup"="WorkgroupName"
"Server"="ServerName"
"Use Project Security"="Yes"
"Use Security Server"="Yes"
```

Table 3-4 AnalystAdminConsole String Value Requirments

Value Name	Value Data (Example)
Default Workgroup	WorkgroupName
Server	ServerName
Use Project Security	Yes
Use Security Server	Yes

b. Log on to the AAC server 3.1 or AAC client 3.1 as an AAC administrator from any workstation where the Analyst software 1.7.4 has been installed.

c. Add the Analyst software workstations to the workstation pool for all of the workstations where the Analyst software 1.7.4 has been newly installed and the AAC security database is to be used.

d. Add the workstations to the workgroup defined for the **Default Workgroup** in the **AnalystAdminConsole** registry key in step 4.a.

5. Before the Analyst software is opened, start the computers again on which the Analyst software was installed.

6. Acquisition workstations: If applicable, then update the firmware. Refer to the section: Update the Firmware and Configuration Table.

7. Open the Analyst software, and then activate the hardware profile. Refer to the documentation for the Analyst software.

Update the Firmware and Configuration Table

Note: For information on the firmware and configuration table versions supported in the Analyst software 1.7.4, refer to the section: Firmware and Configuration Tables Files.

Note: Before using the Analyst software for hardware profile activation and acquisition, the firmware, and the configuration table if applicable, must be upgraded.

Use the Firmware and Configuration Table update utility to automatically determine if firmware or configuration tables must be updated on the system. The utility performs only the required updates. The utility might also reset the mass spectrometer system controller. This is normal and is required by the update process.

If the system has a GPIB connection, then, before running this utility, make sure that the mass spectrometer is turned on and connected to the GPIB card and that the GPIB driver software is properly installed.

Note: A firmware and configuration table update is not required to upgrade SCIEX 3200 systems, SCIEX 4000 systems, or API 5000 systems. A firmware and configuration table update is not required to upgrade SCIEX Triple Quad 3500 systems, SCIEX 4500 systems, SCIEX 5500 systems, SCIEX 5500+ systems, SCIEX 6500 systems, and SCIEX 6500+ systems with ICB-4 from the Analyst software 1.7.3 with HotFix 3. A firmware and configuration table update is not required to upgrade SCIEX 5500+ systems with ICB-4 from the Analyst 1.7.3 HotFix for 5500+ Configuration. A firmware or configuration table update is required for all other upgrades for SCIEX Triple Quad 3500 systems, SCIEX 4500 systems, SCIEX 5500 systems, SCIEX 5500+ systems, SCIEX 6500 systems, and SCIEX 6500+ systems.

Note: Make sure to use the version of the ConfigUpdater utility that is supplied with the version of the Analyst software that is installed.

1. Download the web download package for the Analyst software 1.7.4 from sciex.com/software-downloads. Extract the contents of the zip file to the local hard drive.
2. Browse to the `\Extras\Instrument Update\ConfigUpdater` folder.
3. Double-click `ConfigUpdater.exe`.
   The Select Interface dialog opens. The **Ethernet** interface option is selected.
4. Click **OK**.
   The ConfigUpdater utility opens and then identifies the new firmware version to be installed.

   Note: The ConfigUpdater utility will reset the mass spectrometer. This is normal and is required by the update process.
5. Click **Next**.
   The message `Click OK to start the upload and do not interrupt. The buttons will be disabled until the upload finishes.` is shown.
6. Click **OK** to start the upload.
7. Wait until the `Uploaded firmware is ready` message is shown, and then click **OK**.
   The Firmware/Configuration Table Update Program dialog with a list of supported instruments opens.
8. Click **Next**.
   A dialog with the detected newer configuration table version opens.

Note: If the utility provides more than one choice for the configuration file name, choose the version listed in the section: Firmware and Configuration Tables Files.

9. Click **Next**.
   The message `Click OK to start the upload and do not interrupt. The buttons will be disabled until upload finishes.` is shown.
10. Click **OK** and wait until the message `Uploaded Configuration Table is ready.` is shown.
11. Click **OK**.
    The configuration table update is complete and the ConfigUpdater confirms that the configuration table is the current version.
12. Click **Finish** to close the utility.

Install the GPIB Driver

Note: GPIB 17.0 is pre-installed on all applicable SCIEX Windows 10 computer images.

Note: This procedure is only required for an acquisition workstation for SCIEX 3200 systems, SCIEX 4000 systems, or API 5000 systems and if GPIB 17.0 is not installed on the computer.

Perform this procedure to install the current version of the GPIB driver.

1. Log on to the computer as a user with Windows local administrator privileges.
2. Contact National Instrument support at https://www.ni.com/en-ca/support.html to download the GPIB driver version 17.0 for NI-488.2. Extract the contents of the zip file to the local hard drive.
3. Double-click the `NI4882_1700f0.exe` file.
4. Follow the on-screen instructions to install the driver.

Install the National Instrument ADC Driver

Note: Install this driver only if a National Instrument ADC card is used with an LC device for acquisition.

Perform this procedure to install the current version of the ADC driver.

1. Log on to the computer as a user with Windows local administrator privileges.
2. Download the ADC driver from sciex.com/software-downloads under **Additional Downloads** > **Drivers**. Extract the contents of the zip file to the local hard drive.
3. Double-click the `setup.exe` file.

4. Follow the on-screen instructions to install the driver.

Install the Edgeport 6.04 Driver

Note: This procedure is not required for the SCIEX Workstation.

Note: Install this driver only if an Edgeport device is used with an LC device for acquisition.

1. Make sure that the Edgeport device is not connected to the computer.
2. (If applicable) Remove the existing Edgeport driver version 5.7 using the Edgeport Configuration Utility under Digi USB from the **Start** menu.
3. Restart the computer.
4. Log on to the computer as a user with Windows local administrator privileges.
5. Download the web download package for the Analyst software 1.7.4 from sciex.com/software-downloads. Extract the contents of the zip file to the local hard drive.
6. Browse to the `Drivers\Edgeport 6.04` folder.
7. Double-click the Edgeport driver file, `40002537_M.exe`.
8. Click **Setup** in the Edgeport Drivers dialog.
   A command prompt opens during the installation.
9. Connect the Edgeport device once the command prompt closes on its own. The Edgeport driver will automatically install.

   To make sure the Edgeport drivers were installed properly:

   a. Select **Digi USB** in the Start menu.

   b. Click **Edgeport Configuration Utility**.

   c. Make sure that the Edgeport device is shown on the General tab.

   d. Double-click **Edgeport** to expand the list, and confirm that all of the serial (COM) ports are listed.

(Optional) Install Scripts

A number of research-grade scripts are available to extend the functionality of the Analyst software. Refer to the document: *Scripts User Guide*. It is available from the Start menu:

- **Start** > **SCIEX** > **SCIEX Analyst** > **Analyst Documentation** and then double-click the `Software Guides` folder.

Electronic Licensing

The Analyst software supports node-locked licensing for both acquisition and processing workstations. Server-based licensing is only supported for processing workstations. The license file name must be `Analyst1.7` with the file extension `lic` and it must be located at `C:\ProgramData\AB SCIEX\Analyst\License` on the computer where the Analyst software is installed, for both node-locked and server-based licenses.

Note: To activate a hardware profile including a mass spectrometer, or to acquire data, a node-locked license for acquisition is required.

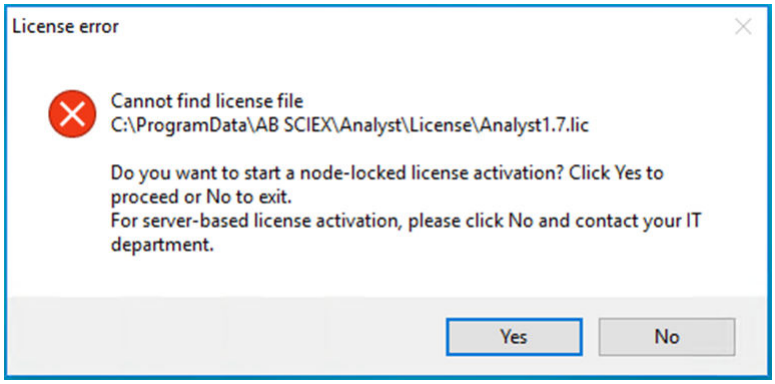
Note: For both node-locked and server-based licenses, do not change the computer date and time after the license is activated. If the date and time are changed after the license is activated, then the software might not operate correctly.

Note: Do not edit a node-locked license file, regardless of whether it is for an acquisition computer or a license server. Changes to the license file make the license invalid. The license cannot be recovered.

Activate a Node-Locked License for the Analyst Software

1. Double-click the Analyst software icon on the desktop.
   A message is shown indicating that the license file `Analyst1.7.lic` cannot be found in the `C:\ProgramData\AB SCIEX\Analyst\License` folder.

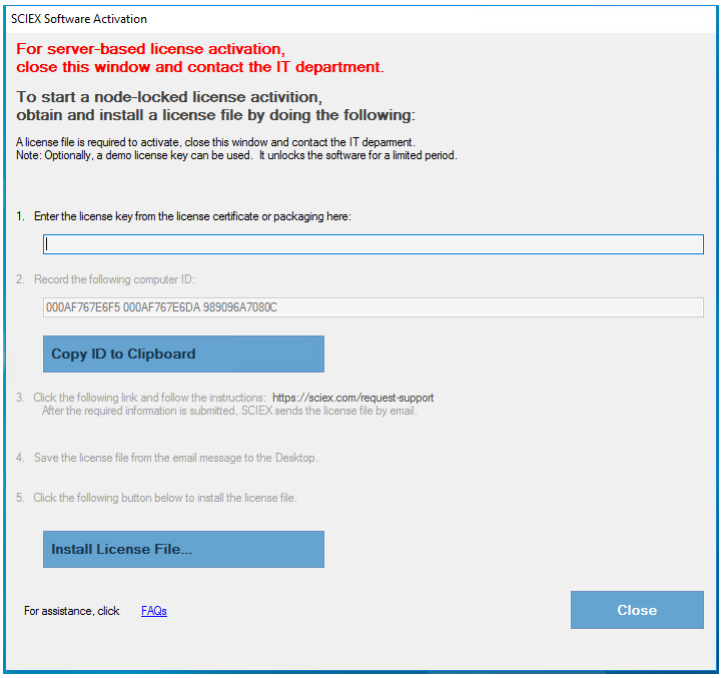
   Figure 3-4 License Message

2. Click **Yes** to start node-locked license activation.

   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 3-5 Software Activation Dialog



3. Type the license key from the license certificate in step 1 in the Software Activation dialog.
   The license key might be distributed on a printed activation certificate or in an e-mail from SCIEX Now. If the license key is missing, then contact a SCIEX sales representative.

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

4. Click the link in the Software Activation dialog.
   The SCIEX Login web page opens.
5. Either click **Log In** to log on to an existing SCIEX account or click **Create an Account** to 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 ID of the user are shown in the first three fields in the form in addition to Computer ID and license key.
6. Select and then enter the required information under **Select Your Instrument**.

   Note: To activate a node-locked license for a processing workstation, use a serial number for one of the SCIEX mass spectrometers. Contact SCIEX Support at sciex.com/contact-us if the mass spectrometer serial number is not available.

7. If a license is being activated for the Analyst software on a different computer, then type the computer ID and the license key.

The computer ID is the MAC address of the network port used to connect the computer to the network.

If a license is being activated for the Analyst software on this computer, then the **Computer ID** and **license key** fields are already populated with the correct information.

8. Click **Submit**.
   A message is shown indicating that an e-mail with the license file will be sent.
9. After the e-mail is received, download the attached license file, and then put it on the Desktop.
10. Go to step 5 of the Sciex Software Activation dialog and then click **Install License File**. Browse to and select the downloaded license file and then click **Open**.
11. Make sure that the `Analyst1.7.lic` is installed in the `C:\ProgramData\AB SCIEX\Analyst\License` folder.

    (Optional) Instead of doing steps 9 to 11, the license file can be directly put into the `C:\ProgramData\AB SCIEX\Analyst\License` folder.

Note: Make sure that the license file name is `Analyst1.7.lic`.

Activate Server-Based License

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

1. Set up a license server.
2. Create a license file named `Analyst1.7.lic` for the client computers.
3. Distribute the license file to each client computer on which the Analyst software is installed.

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-downloads.

For the license server setup procedure, refer to the document in the downloaded package: *License Server Setup Guide*.

Note: To change the license file on a computer on which the Analyst software is installed, first restart the computer. Do not start the Analyst software until the license file has been changed.

Activate a Node-locked QTRAP License for the SCIEX 5500+ System

The system can be upgraded to activate the QTRAP features.

1. Go to https://sciex.com/support/activate-software and then click **login**.

2. Either click **Log In** to log on to an existing SCIEX account or click **Create an Account** to 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 ID of the user are shown in the first three fields in the form in addition to Computer ID and License key.
3. Select and then enter the required information under **Select Your Instrument**.
4. 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** for the QTRAP license.
5. Click **Submit**.
   A message is shown indicating that an e-mail with the license file will be sent.
6. After the e-mail is received, download the attached license file, and then put it in the `C:\ProgramData\AB SCIEX\Analyst\License` folder.

Note: Make sure that the QTRAP license file name is `QTRAPAnalyst1.7.lic`.

Use the Software for the First Time after License Activation

1. Double-click the icon on the desktop to open the Analyst software 1.7.4.
2. (For acquisition workstations) Configure and then activate a hardware profile.
3. Test the software to make sure that data can be acquired or processed.

Troubleshooting A

At SCIEX, we are committed to providing the highest level of support for Analyst software users. To obtain answers to questions about any of our products, report problems, or suggest improvements, visit the website at sciex.com.

Issue	Possible Cause	Corrective Action
The installation stops part way through the process.	N/A	1. Remove the partially installed software using the Windows Add/ Remove Programs control panel. 2. Shut down the system and wait at least 15 minutes. 3. Start the installation by navigating to the `Install` folder in the extracted web download package, and then double-clicking the `setup.exe` file. 4. If the partially installed software still cannot be removed, or the software still cannot be installed, then contact SCIEX technical support, at sciex.com/request-support.
The installation seems to be taking a long time to install.	There may be a large amount of data in the `D:\Analyst Data\Projects\API Instrument\Data` folder.	Before installing the software, back up and then delete the contents of `D:\Analyst Data\Projects\API Instrument\Data` folder.

Issue	Possible Cause	Corrective Action
After installing, I cannot log on to the Analyst software .	• The user name might not have been successfully added to the security database or the computer name might have been changed after the Analyst software was installed. • The license file has an incorrect name or it is stored in an incorrect folder. • The license either is invalid or has expired. • Server-based license: The computer cannot connect to the license server. • Server-based license: The license file is not pointing to the correct server. • Server-based license: The license server is down. • Server-based license: The maximum number of licenses has been reached. • The computer time or the license server computer time has been manually changed after the license activation.	To resolve this, log in as a network user who is in the Security database and has administrator rights. Then add the local Administrator in the People tab in the Security Configuration dialog and give it the administrator privilege. If a network user is not available in the Security Database, then change the computer name back to what it was before the Analyst software was installed. To change the computer name, make sure to first add a network user with Administrator privilege. Make sure a valid software license is installed.
I see the error message “Failed to load the parameter settings file” when I try to start a profile in the Analyst software .	If the user restored any files or folders from a DVD, or copied over files shipped with the instrument, then these files might be set as read only.	To use these files, remove the read-only setting from the files using File Explorer.

Firmware and Configuration Tables Files

B

The following instrument firmware and configuration table versions must be used with the Analyst software 1.7.4. Instructions for making sure that the latest versions of these files are installed are provided in the section: Update the Firmware and Configuration Table. These tables are for reference purposes only.

Table B-1 Firmware and Configuration Table Versions for SCIEX Triple Quad 3500 Systems, SCIEX 4500 Systems, SCIEX 5500 Systems, SCIEX 5500+ Systems, SCIEX 6500 Systems, and SCIEX 6500+ Systems

Mass Spectrometer	Firmware Version	Configuration Table Version
SCIEX Triple Quad 3500 system with ICB-4	PIL2007	FWTripleQuad3500R13
SCIEX Triple Quad 3500 system with ICB-5	QIL0203	FWTripleQuad3500R514
SCIEX Triple Quad 4500 system with ICB-4	PIL2007	FWTripleQuad4500R23
SCIEX Triple Quad 4500 system with ICB-5	QIL0203	FWTripleQuad4500R524
QTRAP 4500 system with ICB-4	PIL2007	FWQTrap4500R22
QTRAP 4500 system with ICB-5	QIL0203	FWQTrap4500R523
SCIEX Triple Quad 5500 system with ICB-4	PIL2007	FWTripleQuad5500R09
SCIEX Triple Quad 5500 system with ICB-5	QIL0203	FWTripleQuad5500R510
QTRAP 5500 system with ICB-4	PIL2007	FWQTrap5500R08
QTRAP 5500 system with ICB-5	QIL0203	FWQTrap5500R509
SCIEX Triple Quad 5500+ system with ICB-4	PIL2007	FWTripleQuad5500+R04

Table B-1 Firmware and Configuration Table Versions for SCIEX Triple Quad 3500 Systems, SCIEX 4500 Systems, SCIEX 5500 Systems, SCIEX 5500+ Systems, SCIEX 6500 Systems, and SCIEX 6500+ Systems (continued)

Mass Spectrometer	Firmware Version	Configuration Table Version
SCIEX Triple Quad 5500+ system with ICB-5	QIL0203	FWTripleQuad5500+R505
SCIEX Triple Quad 6500 system with ICB-4	PIL2007	FWTripleQuad6500R06
SCIEX Triple Quad 6500 system with ICB-5	QIL0203	FWTripleQuad6500R507
QTRAP 6500 system with ICB-4	PIL2007	FWQTrap6500R05
QTRAP 6500 system with ICB-5	QIL0203	FWQTrap6500R506
SCIEX Triple Quad 6500+ system with ICB-4	PIL2007	FWTripleQuad6500+R05
SCIEX Triple Quad 6500+ system with ICB-5	QIL0203	FWTripleQuad6500+R506
QTRAP 6500+ system with ICB-4	PIL2007	FWQTrap6500+R04
QTRAP 6500+ system with ICB-5	QIL0203	FWQTrap6500+R505

Table B-2 Firmware Files for Other Mass Spectrometers

Firmware	Version
340 Main	M401402
332 Main	M3L1417
425 Main	MIL3004

Table B-3 Configuration Table Files for Other Mass Spectrometers

System	Configuration Table File
4000 QTRAP system (U series serial number)	B9609010.fw
4000 QTRAP system (AR series serial number)	B9609031.fw

Table B-3 Configuration Table Files for Other Mass Spectrometers (continued)

System	Configuration Table File
3200 QTRAP system	B9631002.fw
API 5000 system	B9669001.fw
API 4000 system	B5366005.fw
API 4000 system (for the NanoDCI source)	B5366020.fw
API 3200 system	B9633002.fw

Peripheral Devices and Firmware C

The Analyst software 1.7.4 supports the devices listed in the following table. Firmware versions that have been fully qualified with the Analyst software 1.7.4 are listed without parentheses. Versions shown in parentheses have functioned acceptably in more limited testing.

In most cases, more recent firmware versions from the device manufacturer will operate with the Analyst software 1.7.4. If issues occur, then change the device firmware to the version listed in the table. For information about firmware verification or upgrades, refer to the documentation that was supplied by the device manufacturer or contact a SCIEX Field Service Employee (FSE). For information on installation and configuration of devices, refer to the document: *Peripheral Devices Setup Guide*.

Devices supported in older versions of the Analyst software continue to be supported, including the ExionLC series devices. In addition, the Analyst software 1.7.4 supports the Analyst Device Driver (ADD) software 1.4. Refer to the *Release Notes* for the ADD software 1.4 for a list of supported devices.

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

Note: The Agilent Infinity II series of devices and CTC PAL 3 are controlled by the Analyst Device Driver (ADD) software.

Table C-1 ExionLC 2.0 Systems

Peripheral Device	Model	Tested Firmware (Other Firmware[1])	Communication Cable Required
LPG Pump	LPGP-200	(1.07)	Ethernet
Binary Pump	BP-200	1.07	Ethernet
Binary Pump+	BP-200+	(1.01)	Ethernet
Autosampler	AS-200	1.23, (1.22)	Ethernet
Autosampler+	AS-200+	(1.22)	Ethernet
Column Switching (Valve drive)	DR-200	6.21, (6.20)	Ethernet
Column Oven	CO-200	2.02	Ethernet

[1] Not tested but expected to work.

Table C-1 ExionLC 2.0 Systems (continued)

Peripheral Device	Model	Tested Firmware (Other Firmware)	Communication Cable Required
Multiwavelength Detector	MWD-200	(01.11.282)	Ethernet
Diode Array Detector	DAD-200	(01.11.282)	Ethernet
Diode Array Detector - HS	DADHS-200	(1.24.03)	Ethernet
Wash System	WS-200	1.13, (1.14)	Ethernet

Table C-2 ExionLC AC and ExionLC AD Systems

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
ExionLC 100	(0.3, 0.34)	Ethernet
ExionLC Controller	(3.2, 3.3, 3.61, 5.10)	Ethernet
ExionLC CBM-Lite	N/A	Ethernet
ExionLC AC Pump	(2.11, 3.11, 5.01)	Optic
ExionLC AC Autosampler	(2.05, 5.00)	Optic
ExionLC AC Column Oven	(2.10, 2.03, 5.00)	Optic
ExionLC AD Pump	(3.11, 3.21)	Optic
ExionLC AD Autosampler	(3.12)	Optic
ExionLC AD Multiplate Sampler	(3.12, 3.11)	Optic
ExionLC AD Column Oven	(3.11)	Optic
ExionLC PDA Detector	(3.11, 4.02)	Ethernet [2]
ExionLC UV Detector	(2.03, 3.11)	Optic
ExionLC Degasser	N/A	N/A

[2] The PDA detector requires a switching hub to connect to the system controller and the acquisition computer. Refer to the document: *Analyst Devices Setup Guide*.

Table C-3 Eksigent Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
ekspert ultraLC 100 autosampler	(1.29 or higher)	WC024736 (RS-232)
ekspert ultraLC 100-XL autosampler	(1.02 or higher)	WC024736 (RS-232)
ekspert ultraLC 100 pump	(1.12 or higher)	N/A
ekspert ultraLC 100 column oven	(2.04 or higher)	N/A
Eksigent Ultra 2D+	(2.45)	N/A
Eksigent Ultra 2D	(2.46)	N/A
Eksigent nanoLC 400	(4.2)	N/A

Table C-4 Agilent 1290 Infinity and Infinity II Devices

Peripheral Device	Model	Tested Firmware (Other Firmware[1])	Communication Cable Required
1290 Infinity Devices			
Binary pump	G4220A	A07.37[3], (A.06.55, B.06.30, B.06.32, B.06.54, B06.73[3] [4], B07.01)	WC024736 (RS-232) or Ethernet
Standard autosampler	G4226A	(A.06.30, A.06.32, A.06.54, A.07.01[3] [4])	WC024736 (RS-232) or Ethernet
Column compartment	G1316C	A.07.02[3], (A.06.30, A.06.32, A.07.01 [3] [4])	WC024736 (RS-232) or Ethernet
DAD	G4212A	(B.06.30, B.06.32, B.07.01)	Ethernet
1290 Infinity II Devices (Controlled through the ADD software)			
High-speed pump	G7120A	(B.07.10)	CAN or Ethernet
Flexible pump	G7104A	(B.07.10, B.07.25, D.07.20)	CAN or Ethernet

[3] Tested with the ADD software.
[4] Tested as an integrated device

Table C-4 Agilent 1290 Infinity and Infinity II Devices (continued)

Peripheral Device	Model	Tested Firmware (Other Firmware[1])	Communication Cable Required
Vialsampler	G7129B	(B.07.10)	CAN
Multisampler	G7167B	(D.07.17, D.07.20, D.07.25)	CAN or Ethernet
Multicolumn-thermostat	G7116B	(D.07.10 D. 07.20, D.07.23)	CAN
DAD	G7117B	(D.07.10, D.07.23)	Ethernet

Table C-5 Agilent 1260 Infinity and Infinity II Devices

Peripheral Device	Model	Tested Firmware (Other Firmware[1])	Communication Cable Required
Agilent 1260 G Model Devices			
Isocratic pump	G1310B	(A.06.32)	WC024736 or Ethernet
Quaternary pump	G1311B	(A.06.32)	WC024736 or Ethernet
Binary pump	G1312B	A.07.01[3], (A.06.32)	WC024736 or Ethernet
Standard autosampler	G1329B	(A.06.32, A.06.54)	WC024736 or Ethernet
High performance autosampler	G1367E	A.07.02[3], (A.06.32, A.06.54 [3 4])	WC024736 or Ethernet
Thermostatted column compartment (TCC)	G1316A	(A.06.32)	WC024736
Diode array detector (DAD)	G4212B	(B.06.32)	Ethernet
Infinity II Devices (Controlled through the ADD software)			
Isocratic pump	G7110B	(D.07.13)	CAN
Binary pump	G7112B	(D07.33)	CAN or Ethernet
Binary pump	G7120A	(B.07.34)	CAN or Ethernet
Quarternary pump	G7111B	(D.07.24, D.07.13)	CAN or Ethernet

Table C-5 Agilent 1260 Infinity and Infinity II Devices (continued)

Peripheral Device	Model	Tested Firmware (Other Firmware[1])	Communication Cable Required
Vialsampler	G7129A	(B.07.10)	CAN
Multisampler	G7167A	(D.07.16, D.07.23, D.07.25)	Ethernet or, if the system contains a DAD, then CAN
Multisampler	G7167B	(D.07.34)	Ethernet or, if the system contains a DAD, then CAN
Column Compartment	G7116B	(D.07.34)	CAN
Multicolumn thermostat	G7116A	(D.07.13, D.07.16, D.07.24)	CAN
DAD	G7117C	(D.07.10)	Ethernet

Table C-6 Agilent 1200 Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
Isocratic Pump	(A.06.32, A.06.02)	WC024736 (RS-232) or Ethernet
Quaternary Pump	(A.06.32, A.06.02)	WC024736 or Ethernet
Binary Pump	(A.06.32, A.06.04, A.06.02)	WC024736 or Ethernet
Binary SL Pump	(A.06.32, A.06.53, A.06.04, A.06.02)	WC024736 or Ethernet
Capillary Pump	(A.06.06, A.06.32, A.06.02)	WC024736 or Ethernet
Nanoflow Pump	(A.06.32, A.06.02)	WC024736 or Ethernet
Standard Autosampler	(A.06.32, A.06.54, A.06.10)	WC024736 or Ethernet
High Performance Autosampler	(A.06.32, A.06.54, A.06.04, A.06.02)	WC024736 or Ethernet
High Performance Autosampler SL	(A.06.03, A.06.32, A.06.54)	WC024736 or Ethernet
Micro Well-plate Autosampler	(A.06.32, A.06.02)	WC024736 or Ethernet
High Performance Autosampler SL Plus	(A.06.32)	WC024736 or Ethernet

Table C-6 Agilent 1200 Devices (continued)

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
TCC—Thermostatted Column Compartment (G1316A)	(A.06.32, A.06.02)	WC024736 or Ethernet
TCC SL—Thermostatted Column Compartment (G1316B)	(A.06.32, A.06.02)	WC024736 or Ethernet
DAD—Diode Array Detector	(A.06.02, A.06.32, B.06.32, B.06.53[3])	WC024736 or Ethernet
DAD SL—Diode Array Detector SL	(B.06.32, B.01.02)	Ethernet

Table C-7 Agilent 1100 Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
Binary pump	(A.06.10, A.05.11, A.05.06, 4.11)	WC024736[5] (RS-232), WC021365 (GPIB), or Ethernet
Quarternary pump	(A.05.11, A.06.10, 5.04, A.05.11, A.04.11)	WC024736, WC021365, or Ethernet
Isocratic pump	(A.06.10, A.04.11)	WC024736, WC021365, or Ethernet
Capillary pump	(A.06.30, A.04.11)	WC024736, WC021365, or Ethernet
Nano pump	(A.06.30, A.05.06, 5.05, 5.04)	WC024736, WC021365, or Ethernet
Standard autosampler	(A.05.11, A.06.10, A.05.11, 5.04, A.04.10)	WC024736, WC021365, or Ethernet
Micro autosampler	(A.06.10, A.05.04, 4.10)	WC024736, WC021365, or Ethernet
Well-plate autosampler	(A.06.31, A.05.07, 4.14, 5.02)	WC024736, WC021365, or Ethernet

[5] WC024736 is a Standard Null Modem cable DB9/DB9 female

Table C-7 Agilent 1100 Devices (continued)

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
Micro Well-plate autosampler	(A.06.31, A.05.09, 4.14)	WC024736, WC021365, or Ethernet
Thermostatted column compartment	(A.06.01, A.06.10, A.05.06, 5.05, 4.11)	WC024736, WC021365, or Ethernet
Diode array detector (DAD)	(B.06.30, A.06.10, 5.09, A.05.06, 4.11)	WC024736, WC021365, or Ethernet
Diode array detector (DAD) SL	(B.06.30, B.01.01)	WC024736, WC021365, or Ethernet

Table C-8 CTC PAL 3 Devices (Controlled by the ADD Software)

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
CTC PAL 3 RTC	2.4.17310.1610	N/A

Table C-9 Gilson Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
215 Autosampler	(2.20)	WC024735[6]
with 819 Valve	(1.00)	Gilson GSIOC
233 Autosampler	(BV1.11)	WC024735
with 402 Syringe	(SV1.10, SV2.3)	Gilson GSIOC

Table C-10 Harvard Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
Harvard	(22 Syringe Pump)	22.90

[6] WC024735 is a Standard Modem cable DB25 male/DB9 female.

Table C-11 LC Packings Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
UltiMate Integrated System	(5.06, 6.00)	Cables available from LC Packings
Famos Autosampler (Well-plate)	(2.02)	Cables available from LC Packings
Famos Autosampler (Carousel)	(1.14)	Cables from LC Packings

Table C-12 PE Series 200 Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
Autosampler	(1.08)	WC024736
Column oven	(1134)	WC024736
Micro pump	(2.43)	WC024736
Quaternary pumps	(2.43)	WC024736

Table C-13 Shimadzu Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
CBM-20 A with Ethernet switch (system controller with 8 fiber optic ports)	3.30[7], (1.05, 1.06, 1.21, 1.30, 2.30, 2.81, 3.61[7 8 9], 5.10[7])	Ethernet
CBM-20 A Lite with Ethernet switch (system controller with 4 fiber optic ports; installs onto pump or autosampler)	N/A	Ethernet
CBM-40 system controller	(1.30, 1.50)	Ethernet
CBM-40 Lite system controller	(1.30)	Ethernet

7 Tested on a Shimadzu LC-20 system or a Shimadzu LC-30 system that was activated through the Integrated System Shimadzu LC-20/30 Controller, and not through the Integrated System Shimadzu LC Controller.
8 Tested on a Shimadzu LC-20 system or a Shimadzu LC-30 system that was activated through the Integrated System Shimadzu LC Controller.
9 Tested on a Shimadzu LC-20 system or a Shimadzu LC-30 system that was activated through the Integrated System Sciex LC Controller.

Table C-13 Shimadzu Devices (continued)

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
SCL-40 system controller	1.50, (1.30)	Ethernet
SIL-20A autosampler	N/A	Optic
SIL-20AC autosampler	(1.20)	Optic
SIL-20ACXR autosampler	(1.22, 1.20, 1, 1.22, 1.23, 1.25[7 8], 5.00 [7])	Optic
SIL-20AXR autosampler	(1.20)	N/A
SIL-30AC autosampler	N/A	Optic
SIL-30ACMP autosampler	3.22[7 8], (1.03, 3.12)	Optic
SIL-40 autosampler	(1.05)	Optic
SIL-40C autosampler	(1.05)	Optic
SIL-40C X3 autosampler	1.08, (1.05)	Optic
SIL-40C XR autosampler	(1.05, 1.08)	Optic
LC-20AB pump	N/A	Optic
LC-20AD pump	(1.04 or later, 1.07, 1.10, 2.11[7 8 9])	Optic
LC-20AD XR pump	(1.20, 1.21, 1.22, 5.01[7])	Optic
LC-20AT pump	N/A	Optic
LC-30AD pump	3.21[7 8], (1.04, 2.01, 2.1, 3.01)	Optic
LC-40B X3 pump	1.06, (1.04)	Optic
LC-40B XR pump	(1.04)	Optic
LC-40D pump	(1.04)	Optic
LC-40D X3 pump	(1.04)	Optic
LC-40D XR pump	(1.04)	Optic
CTO-20A column oven	N/A	Optic
CTO-20AC column oven	(1.06, 1.07[7 8 9])	Optic
CTO-30A column oven	(2.1, 3.0, 3.11, 5.00[7])	Optic
CTO-30AS column oven	(0.07)	Optic

Table C-13 Shimadzu Devices (continued)

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
CTO-40C column oven	(1.00)	Optic
CTO-40S column oven	(1.00)	Optic
SPD-20A UV-Vis detector	N/A	Ethernet, Optic
SPD-20AV UV-Vis detector	(1.03, 1.11)	Ethernet, Optic
SPD-40V UV-Vis detector	(1.04)	Optic
SPD-M40 PDA detector	(2.00)	Ethernet[10]
RF-20A XS fluorescence detector	(2.02)	Optic
OptionBox-L subcontroller	(3.2)	WC024736 (RS-232 cable) or Ethernet
SubcontrollerVP	(5.20)	WC024736 (RS-232 cable) or Ethernet
FCV-12AH valve	N/A	N/A
FCV-13AL valve	N/A	N/A
FCV-14AH valve	N/A	N/A
FCV-0607H3 high-pressure flow-line switching valve (6-position, 7-port)	(1.02)	N/A
Rack Changer	N/A	N/A
Rack Changer II	(2.0)	
Nexera Plate Changer	(1.05)	N/A

Table C-14 Spark Holland Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
Endurance autosampler	(2.05)	Requires Analyst Software Driver Kit, PN 0920-768, from Spark (sales@spark.nl)

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

Table C-14 Spark Holland Devices (continued)

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
Symbiosis Pico system	N/A	N/A

Table C-15 Valco Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
2-Position Valve	(1-PD-EPX88RL)	N/A
UMDA-C10W 2-position 10-port valve	(MUA_MAIN_G_1)	N/A

Table C-16 Acquity Devices

Peripheral Device	Tested Firmware (Other Firmware[1])	Communication Cable Required
Acquity Binary Solvent Manager	(1.50.1521)	N/A
Acquity Sample Manager	(1.50.2730)	N/A
Acquity Column Manager	(1.50.1678)	Ethernet

Peripheral Devices Controlled via AAO Software Interface

The Analyst Access Object (AAO) software is an interface to the Analyst software 1.7.4 that lets device vendors develop device control software that can be plugged into the Analyst software to enable integrated LC/MS control.

Note: Each AAO application must be verified on the Windows 10 64-bit operating system and Analyst 1.7.4. Contact the AAO vendor to confirm application compatibility.

Following is a list of vendors that have released AAO software. For additional information, contact the vendors directly.

- Alcott Chromatography
- Cohesive Technologies
- Dionex Corp.

- Eksigent Technologies
- ESA Inc.
- Flux Instruments AG
- Jasco Inc.
- Leap Technologies
- Maylab Analytical Instruments
- Shimadzu Corporation
- Shiseido Co. Ltd.
- Spark Holland
- Waters Corp.

Note: On the 64-bit operating system, AAO applications are compatible with the Analyst software only if they run as 32-bit applications in the WOW64 mode.

Windows Operating System Configuration D

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:

- 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 AnalystService.
- 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.

User Account Control Settings

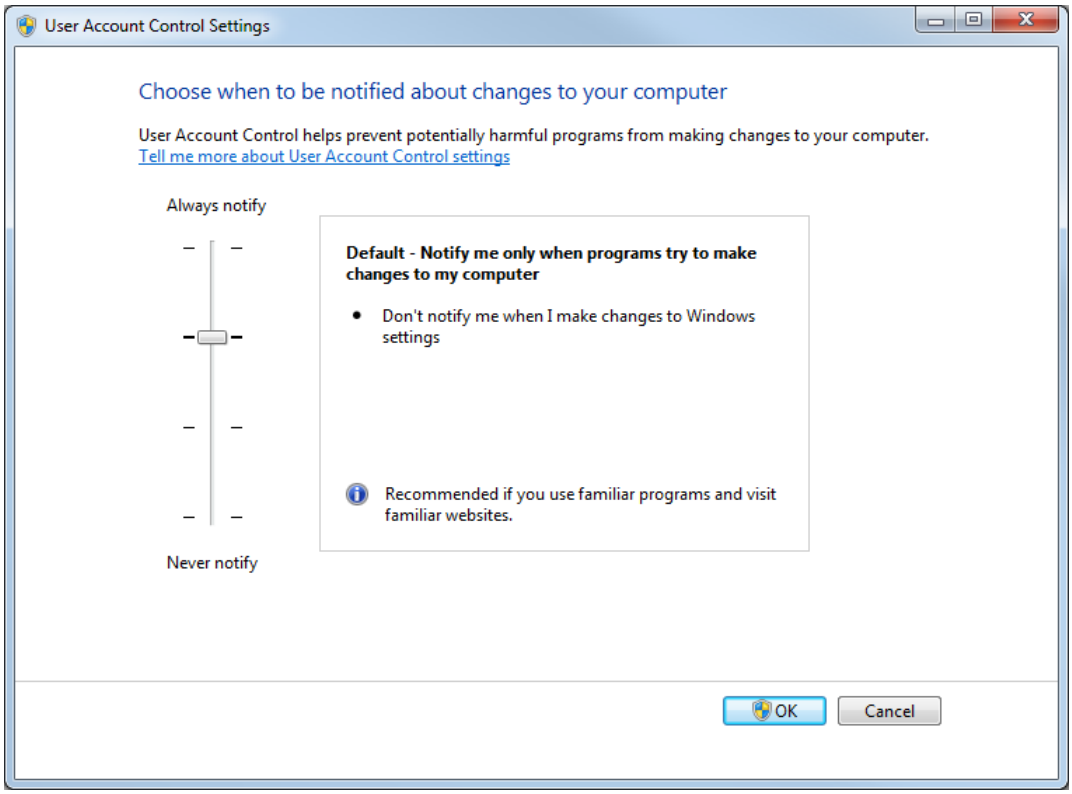
User Account Control Settings

We recommend the use of the default User Account Control Settings when the Analyst software 1.7.4 is installed on the Windows 10, 64-bit, operating system. For the Administrator, the default setting is **Default - Notify me only when programs try to make changes to my computer**. For standard users, it is **Always notify me**.

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

1. Open Control Panel.
2. Click **Security and Maintenance** > **Change User Account Control settings**.
   The User Account Control Settings dialog opens.
3. Move the slider bar to the required level.
4. For the Administrator, select **Notify me only when programs try to make changes to my computer (default)**, and then click **OK**.

Figure D-1 User Account Control Settings: Administrator



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

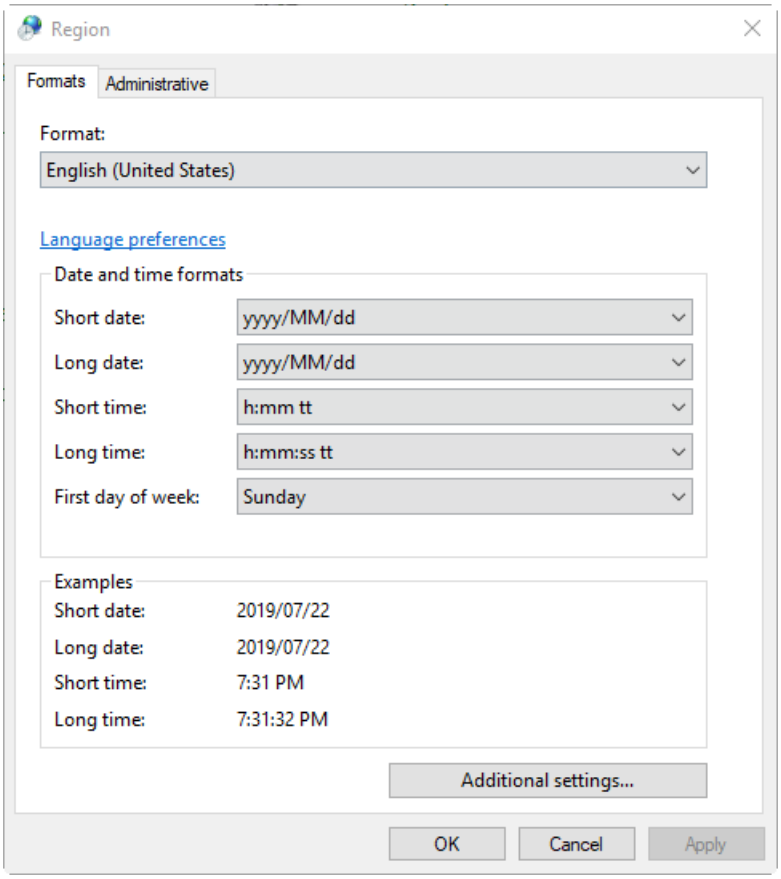
Region and Language Settings

Region Settings

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-2 Region Dialog



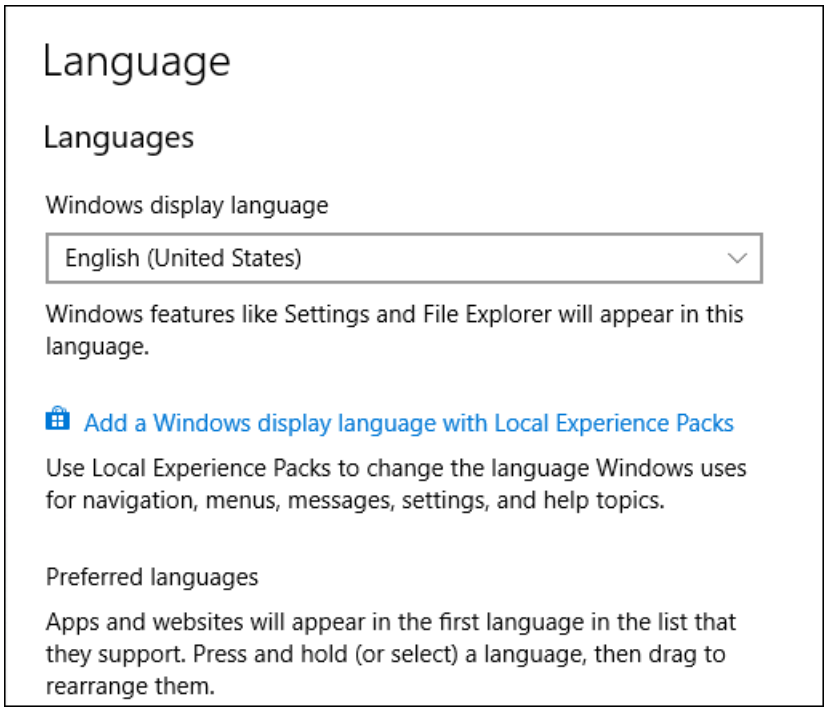
3. Make sure that the **Format** field is set to **English (United States)**, **French (France)**, or **German (Germany)**.
4. Click **Apply**.
5. Click **OK**.

Language Settings

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-3 Language Dialog



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

Analyst Software Documentation E

Refer to the following table for a list of the software guides and tutorials that are installed with the Analyst software . These guides and tutorials can be accessed at **Start** > **SCIEX** > **SCIEX Analyst** > **Analyst Documentation**, and then by clicking the **Software Guides** or the **Tutorials** folder.

The software guides and tutorials are installed in the `C:\Program Files (x86)\Analyst Help` folder.

Table E-1 Software Documentation

Document	Description
Analyst Software User Guide	Provides procedures for setting up and using the Analyst software to create methods, acquire samples, and analyze data.
Advanced User Guide	Describes the features and functionality of the Analyst software.
Laboratory Director Guide	Describes the security functionality of the Analyst software.
Scripts User Guide	Provides procedures for installing and using the Analyst software scripts.
Manual Tuning Tutorial	Provides procedures for manually tuning the system.
Manual Compound Optimization Tutorial	Provides procedures for manually optimizing the instrument for a particular analyte.
Automatic Optimization Tutorial	Provides procedures for using Compound Optimization to optimize the instrument for a particular analyte.
IDA Tutorial	Provides procedures for using the IDA Method Wizard to create an IDA experiment.
Scheduled MRM Tutorial	Provides procedures for using the Scheduled MRM (sMRM) algorithm feature.
Ion Optics Tutorial	Provides information about the instrument ion optics.

Table E-1 Software Documentation (continued)

Document	Description
Peripheral Devices Setup Guide	Provides procedures for connecting peripheral devices to the computer and instrument.
Standard Quantitation Tutorial	Provides procedures for creating a method that can be used to obtain a quantitation curve using prepared standards.
Peptide and Protein Quantitation Tutorial	Provides procedures for creating methods for peptide and protein quantitation.
ExionLC 2.0 Software User Guide	Provides procedures for configuring and using ExionLC 2.0 devices in the software.
Help	Provides procedures for setting up and using the Analyst software to create methods, acquire samples, and analyze data.

The system user guides, hardware guides, *SelexION and SelexION+ Technology User Guide*, safety guides, and QMPs are no longer installed with the Analyst software. They are available on the Customer Reference DVD for the mass spectrometer or at sciex.com/customer-documents. Ion source guides are delivered with the ion sources.

For a copy of a site planning guide, contact the local sales representative.

Table E-2 Hardware Guides

Document	Description
System User Guides	For SCIEX 3200 systems, SCIEX 3500 systems, SCIEX 4500 systems, SCIEX 5500 systems, SCIEX 5500+ systems,SCIEX 6500 systems, and SCIEX 6500+ systems: Contains safety information and a system overview, system operation, system maintenance, and troubleshooting.
SelexION and SelexION+ Technology User Guide	Provides information about the SelexION and SelexION+ device supported in the Analyst software for separation of compounds.
Safety Practices	Provides information in six languages about instrument safety as well as safety requirements for the laboratory.
Hardware Guide	Provides information about the SCIEX 4000 systems and SCIEX 5000 systems.

Table E-2 Hardware Guides (continued)

Document	Description
Qualified Maintenance Procedures	Provides procedures for cleaning and maintaining the instrument. **Note:** Cleaning and maintenance procedures should only be performed by a site service representative who is suitably aware of the electrical, chemical, burn, and mechanical risks, associated with servicing laboratory equipment.
Site Planning Guide	Provides information about preparing the site as well as about materials required for installing the instrument.
Ion Source Guides	Provide procedures for installing and testing the ion sources.

Contact Us

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SCIEX Headquarters

AB Sciex LLC
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Marlborough, MA 01752
USA

Customer Training

- Global: sciex.com/contact-us

Online Learning Center

- SCIEX Now Learning Hub

SCIEX Support

SCIEX and its representatives have a global staff of fully-trained service and technical specialists. They can supply answers to questions about the system or any technical issues that might occur. For more information, go to the SCIEX website at sciex.com or use one of the following links to contact us.

- 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 supersedes all of the previous versions of this document.

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 that comes with 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.