

License Server

Setup Guide

This document is provided to customers who have purchased SCIEX equipment to use in the operation of such SCIEX equipment. This document is copyright protected and any reproduction of this document or any part of this document is strictly prohibited, except as SCIEX may authorize in writing.

Software that may be described in this document is furnished under a license agreement. It is against the law to copy, modify, or distribute the software on any medium, except as specifically allowed in the license agreement. Furthermore, the license agreement may prohibit the software from being disassembled, reverse engineered, or decompiled for any purpose. Warranties are as stated therein.

Portions of this document may make reference to other manufacturers and/or their products, which may contain parts whose names are registered as trademarks and/or function as trademarks of their respective owners. Any such use is intended only to designate such products as those manufacturers' products and does not imply any right and/or license to use or permit others to use such manufacturers' and/or their product names as trademarks.

SCIEX warranties are limited to those express warranties provided at the time of sale or license of its products and are the sole and exclusive representations, warranties, and obligations of SCIEX. SCIEX makes no other warranty of any kind whatsoever, expressed or implied, including without limitation, warranties of merchantability or fitness for a particular purpose, whether arising from a statute or otherwise in law or from a course of dealing or usage of trade, all of which are expressly disclaimed, and assumes no responsibility or contingent liability, including indirect or consequential damages, for any use by the purchaser or for any adverse circumstances arising therefrom.

(GEN-IDV-09-10816-E)

The SCIEX clinical diagnostic portfolio is For *In Vitro* Diagnostic Use. Product(s) not available in all countries. For information on availability, please contact your local representative or refer to sciex.com/diagnostics. All other products are For Research Use Only. Not for use in Diagnostic Procedures.

Trademarks and/or registered trademarks mentioned herein, including associated logos, are the property of AB Sciex Pte. Ltd., or their respective owners, in the United States and/or certain other countries (see sciex.com/trademarks).

AB Sciex™ is being used under license.

© 2024 DH Tech. Dev. Pte. Ltd.

Contents

1 Introduction	4
Requirements for the License Server	4
2 Get a License for the License Server	5
3 Install the License Manager Administrator (Imadmin-x64) Server	6
4 Deploy the License Server	9
Create a New Inbound or Outbound Rule	15
5 Create and Install the Client License	17
6 Licensing Rules	19
7 Upgrade the License	20
8 Move the License	21
9 Troubleshooting	22
Contact Us	23
Addresses	23
Customer Training	23
Online Learning Center	23
SCIEX Support	23
Cybersecurity	23
Documentation	23

This guide gives instructions for the installation and usage of the license server with Windows Server 2022, Windows Server 2019, Windows 11 (64-bit), and Windows 10 (64-bit).

Requirements for the License Server

To operate the license server, the computer on which the license server is installed must meet the requirements in the sections that follow:

Hardware

- Processor: 1 gigahertz (GHz) or faster
- 1 GB RAM
- 1 GB available hard disk space
- Ethernet card with TCP/IPV4 configured

Operating System

These operating systems are supported:

- Windows 11 (64-bit)
- Windows 10 (64-bit)
- Windows Server 2022 (64-bit)
- Windows Server 2019 (64-bit)

Note: It is a best practice to install the license server on a server-based operating system.

Note: The license server requires Java Runtime Environment (JRE) 17, which is installed with the operating system. To get the latest version of Java, go to <https://www.oracle.com/java/technologies/downloads/>.

Get a License for the License Server 2

Note: If both SCIEX OS-Q and SCIEX OS-MQ are installed on the same server, then the license count is pooled. To identify the number of licenses available, the server subtracts the number of licenses of all types that are in use from the total number of license.

The license for a license server is node-locked to the host machine for the license server. To get the license, make sure that the information in the list that follows is available, and then contact SCIEX Sales.

- The software name and version number for which the license is required.
- The MAC address of the network interface card (NIC) that connects the computer to the network.

Note: There can be more than one in a multi-homed host.

- The number of concurrent licenses to deploy.

This node-locked license file is required for deployment of the license server.

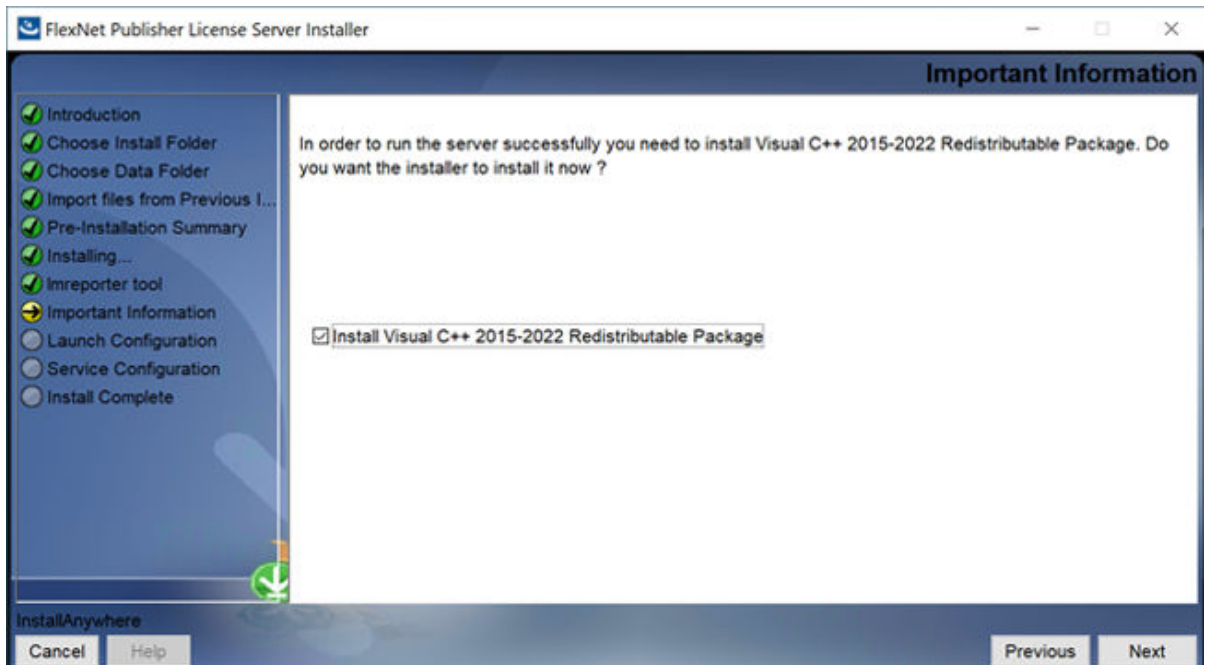
Note: Keep a copy of the license file on the D:\ drive, in case the license cannot be found or is corrupted.

The license server can have multiple license files, for example, one with four seats, and one with three seats, for a total of seven seats. When licenses are added, do not overwrite the license unless the intention is to remove any existing licenses and replace them with the new one.

Install the License Manager Administrator (ladmin-x64) Server 3

1. Download the `License-Server-Setup-Software-Windows-Server-2019-2022.zip` file from the licensing server setup section of [sciex.com/software-downloads](https://www.sciex.com/software-downloads).
2. Extract the contents of the downloaded file.
`License-Server-Setup-Software-Windows-Server-2019-2022.zip` contains these files:
 - `ladmin-x64_n6-11_19_6_2.exe`: FlexNet Publisher software
 - `ScxMSSW0.exe`: Sciex Vendor Daemon software
 - `License-Server-Setup-Guide.pdf`: *License Server Setup Guide*
 - `Example_License.lic`: Example Client License File
3. On the license server computer, make sure that the Java Virtual Machine is installed. To get the latest version of Java, go to <https://www.oracle.com/java/technologies/downloads/>.
4. Right-click the `ladmin-x64_n6-11_19_6_2.exe` file and click **Run**.
5. Click **Next**.
6. Click **Next** on all of the subsequent pages until the Important Information page is shown.
7. Select the **Install Visual C++ 2015 – 2022 Redistributable Package** check box.

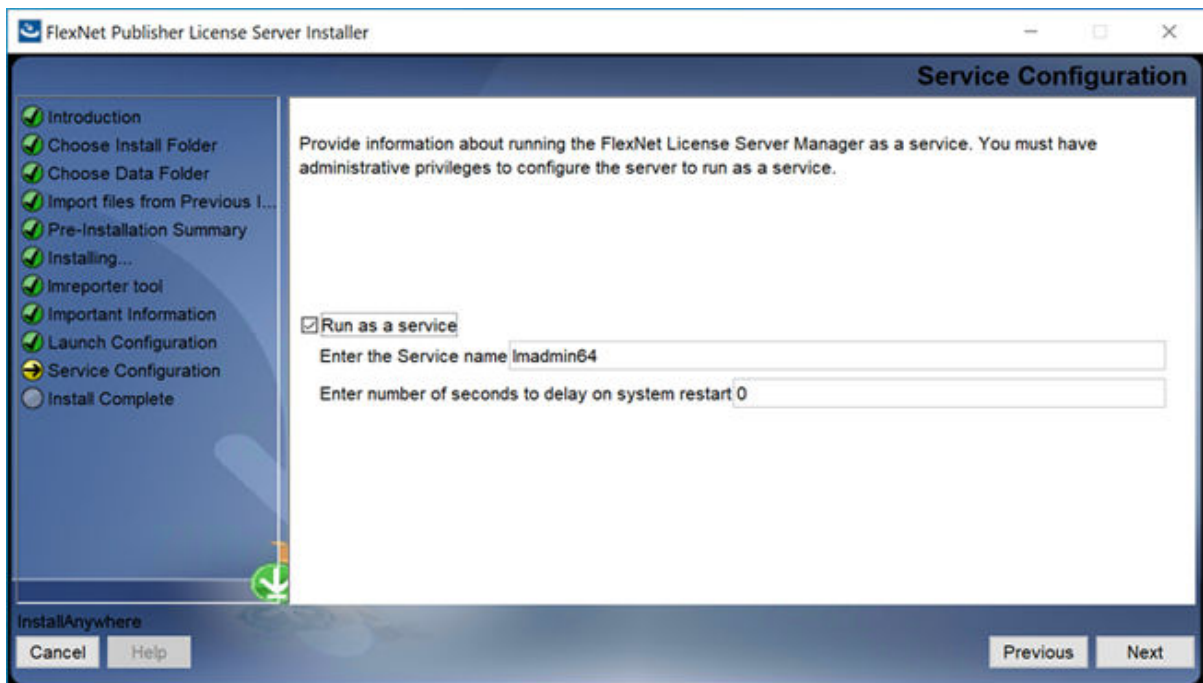
Figure 3-1 Important Information Page



8. Click **Next**.
9. Click **Next** until the Service Configuration page is shown.
10. Select the **Run as a service** check box.

Install the License Manager Administrator (lmadmin-x64) Server

Figure 3-2 Service Configuration Page



11. Click **Next**.
12. Click **Done**.

Deploy the License Server

4

1. Make sure that the properties of the Imadmin-x64 service are set correctly.
 - a. In the Services control panel, select the Imadmin-x64 service.
 - b. On the Log On tab, click **Local System Account**, and then select the **Allow service to interact with desktop** check box.
 - c. Click **OK**.

Figure 4-1 Imadmin-x64 Properties



2. Start the Imadmin-x64 service.

Deploy the License Server

3. Go to <http://localhost:8090/>.
4. On the Administration tab, type the username and password.
The default username and password are `admin`.

Note: The software prompts the user to change the default password after the first login. Make sure to record the password and keep it in a safe place.

5. Copy `ScxMSSW0.exe` from the unzipped package, and then paste it directly in the `C:\Program Files\FlexNet Publisher 64-bit License Server Manager` folder.
6. Put the license file that is node-locked to the Ethernet MAC address of the licensing server in the `C:\Program Files\FlexNet Publisher 64-bit License Server Manager\licenses\ScxMSSW0` folder.

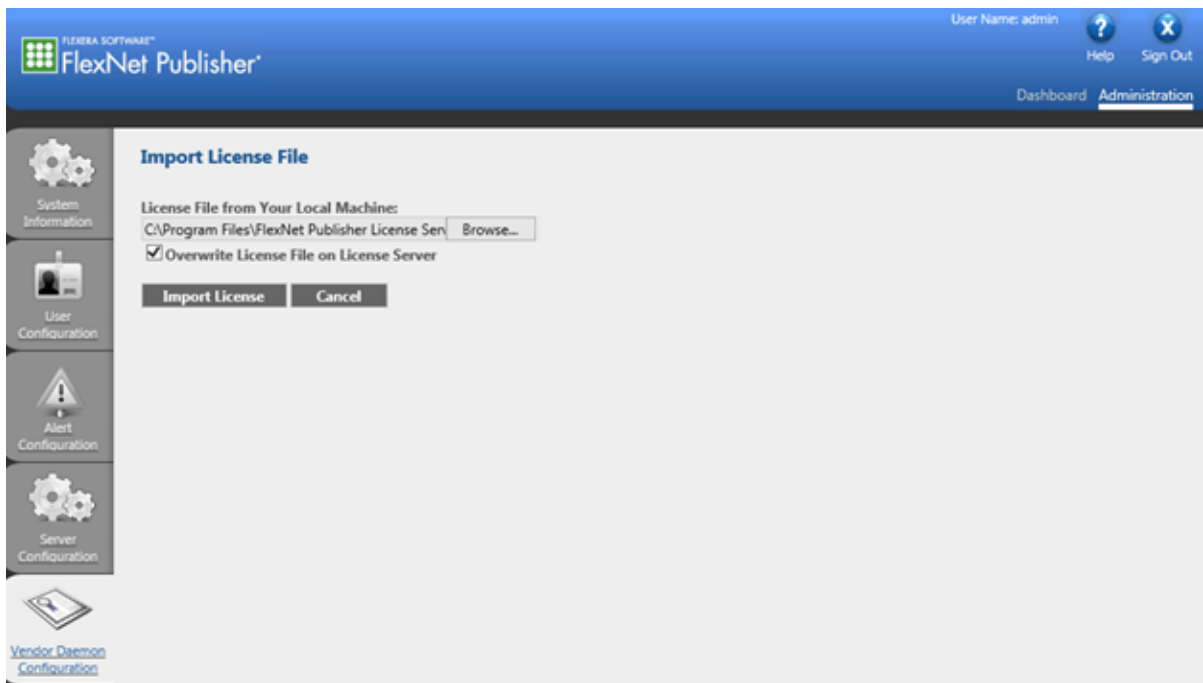
To get the license file, refer to the section: [Get a License for the License Server](#).

Note: If the `C:\Program Files\FlexNet Publisher 64-bit License Server Manager` folder does not include the `licenses\ScxMSSW0` folder, then create this directory structure. This is done to keep the license file.

Note: To protect against server failure and loss of files, keep the license files in a different location.

7. Go to <http://localhost:8090/vendor>.
8. In Vendor Daemon Configuration, click **Import License**.
9. Browse to the folder identified in step 6, select the license file, and then click **Open**.
10. Select the **Overwrite License File on License Server** check box, and then click **Import License**.

Figure 4-2 Import License File Page



Note: For server-based licensing to operate correctly, the license must be imported.

If the import is completed, then a message that the license file was uploaded successfully is shown. Close the message. The FlexNet Publisher window shows the Vendor Daemons is active with the status **Up**.

Deploy the License Server

Figure 4-3 Vendor Daemons

The screenshot shows the FlexNet Publisher Administration interface. The top navigation bar includes the FlexNet Publisher logo, the user name 'admin', and links for Help and Sign Out. The main content area is titled 'Vendor Daemons' and features an 'Import License' button. Below this is a table with the following data:

Name	Status	FlexNet Publisher Version	Port	Administer	Delete
ScvMSSW0	Up	11.14	21568	Administer	Delete

11. Click **Administer**.

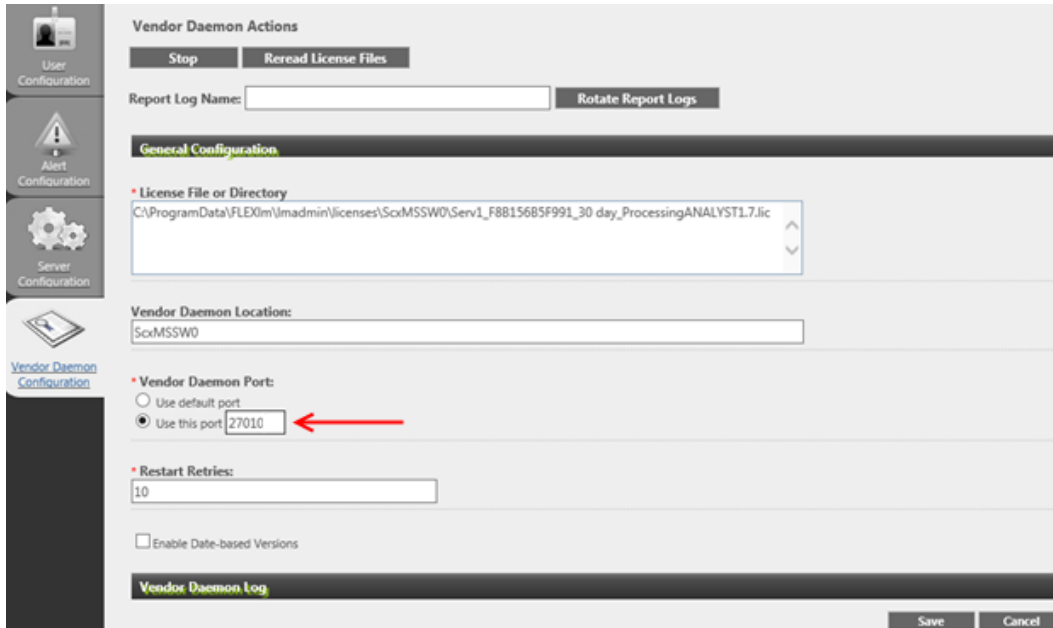
Figure 4-4 Administer

This screenshot is identical to Figure 4-3, but with the 'Administer' button in the table highlighted with a red box. The table data remains the same:

Name	Status	FlexNet Publisher Version	Port	Administer	Delete
ScvMSSW0	Up	11.14	21568	Administer	Delete

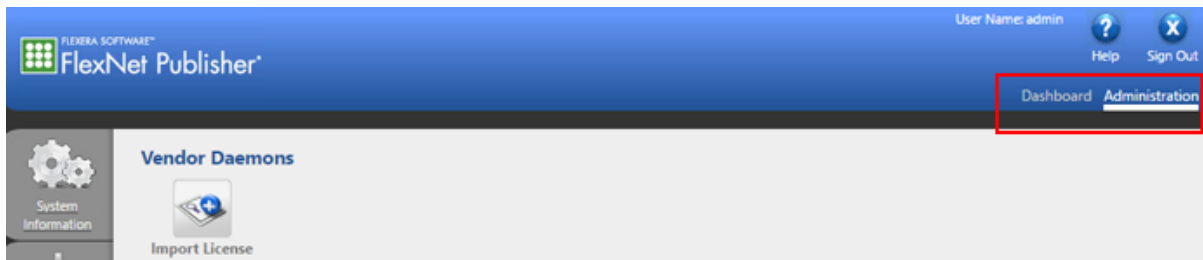
- To configure the **Vendor Daemon:ScxMSSW0** to use port **27010**, in the **Use this port** field, type 27010.

Figure 4-5 Configure the Vendor Daemon Port



- At the bottom of the page, click **Save**.
- To stop the Vendor Daemon Actions, click **Stop**.
- Click **Administer** again.
- To start the Vendor Daemon Actions, click **Start**.
- Open the Dashboard tab, and then select the Administration tab again.

Figure 4-6 Dashboard and Administration Tabs



The status for Vendor Daemons shows as **Up**.

- To enable both inbound and outbound TCP connections, in the Windows Defender Firewall with Advanced Security pane, add one new inbound Windows Firewall rule and one new outbound Windows Firewall rule for these ports:

Deploy the License Server

- 8090 (for remote access to the FlexNet Publisher Administration)
- 27000 (for FlexNet Publisher server)
- 27010 (for Vendor Daemon)

Note: For information on the creation of inbound and outbound rules, refer to the section: [Create a New Inbound or Outbound Rule](#).

Figure 4-7 Inbound Rule

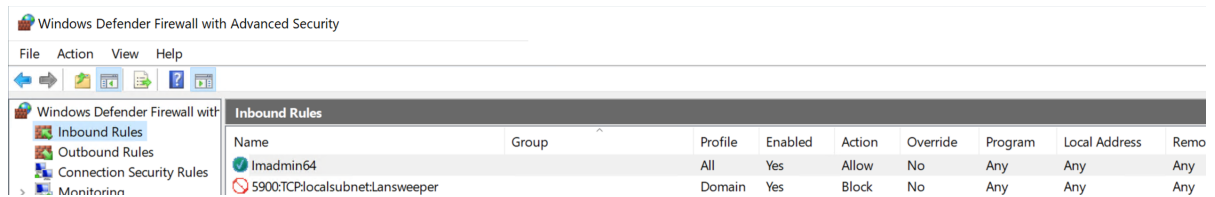
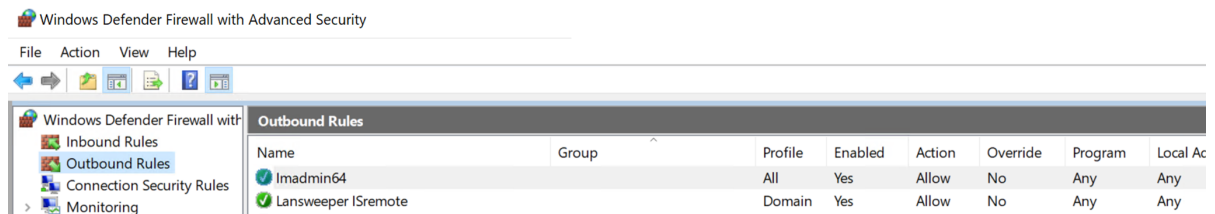


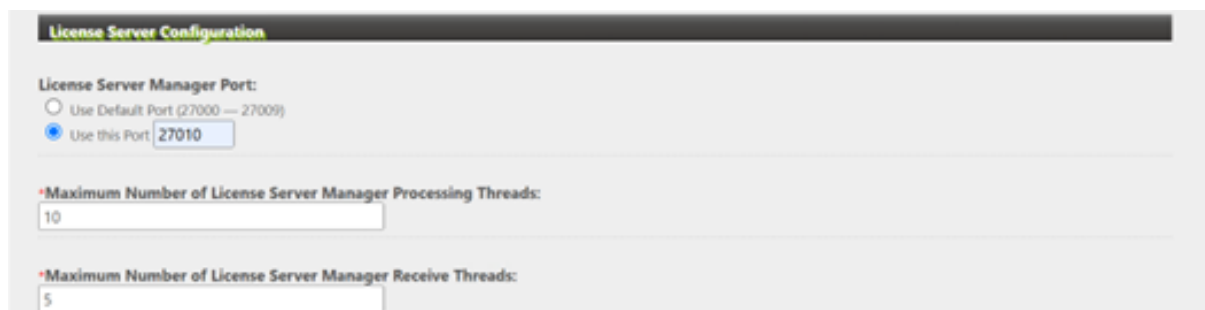
Figure 4-8 Outbound Rule



If a different port, in the range of 27000 to 27009, is used for the FlexNet Publisher server, then adjust the Windows Firewall settings to enable this communication, if required.

19. On the server, go to <http://localhost:8090/>.
20. To set the port for the Imadmin-x64 service, do these steps:

Figure 4-9 Check Port Used by Imadmin-x64



- a. Open the Server Configuration tab.

- b. In the **License Server Configuration** section, select **Use this port**, and then type 27000.
 - c. Click **Save**.
21. In Task Manager, stop the FlexNet Publisher Manager (Imadmin-x64) service, and then start it again.

Note: If the default range 27000 to 27009 is used, then to find out which port runs the Imadmin-x64 service, open the System Information tab.

22. Activate the server license. Go to sciex.com/request-support, and then create a support ticket.

Create a New Inbound or Outbound Rule

1. In the Navigation panel of the Windows Defender Firewall with Advanced Security on Local Computer window, click either **Inbound Rules** or **Outbound Rules**.

Figure 4-10 Inbound Rule

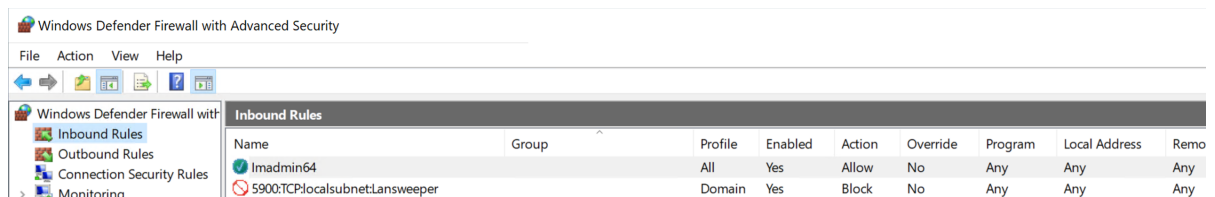
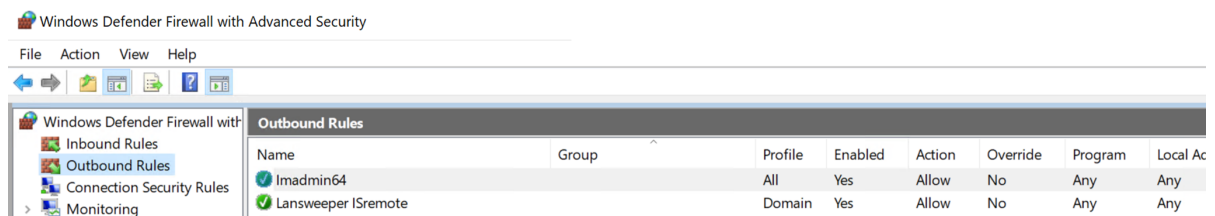


Figure 4-11 Outbound Rule



2. In the Actions pane, click **New Rule**.
The New Inbound Rule Wizard or New Outbound Rule Wizard dialog opens.
3. Click **Port**, and then click **Next**.
The Protocol and Ports window opens.
4. Click **TCP**, and then click **Specific local ports**. Type the following ports:
 - 8090
 - 27000

Deploy the License Server

- 27010
5. Click **Next**.
The Action pane opens.
 6. Click **Allow the connection**, and then click **Next**.
The Profile pane opens.
 7. Click **Next**.
The Name pane opens.
 8. In the **Name** field, type `Imadmin`.
 9. Click **Finish**.

Create and Install the Client License 5

Note: The client computers on which the licensed SCIEX software is to be installed must be on a network that has access to the server.

A `USE_SERVER` license file is a special type of license file that contains a special keyword, `USE_SERVER`. The license file can be created in a text editor and then saved as an `lic` file with the **All Files** file type selected.

The `SERVER` line must always be:

```
#PLEASE DO NOT DELETE THIS COMMENT LINE:  
SERVER <IP or HOSTNAME> ANY <PORT>
```

The last line must be:

```
USE_SERVER.
```

We recommend that the server name be used instead of the TCP/IP address of the license server. The server name (`<HOSTNAME>`) should be the full computer name with the domain. For example `ServerComputerName.Domain.Net`.

Create and save a `USE_SERVER` license file, and then install it on each client.

Note: On the client computer, put the license file in the applicable directory for the software being licensed.

Table 5-1 License File Locations

Software	File Location
Analyst software and CFR	C:\ProgramData\AB SCIEX\Analyst\License
SCIEX OS and CFR	C:\Program Files\SCIEX\SCIEX OS

Multiple licenses can be installed on the same client, for different software. For example, a client computer might have two license files, one for the Analyst software, and one for the SCIEX OS software.

Create and Install the Client License

Note: A specific license file name might be required for each software version for which the license is used.

For examples of `USE SERVER` licenses, refer to the sections that follow. To create a new license file, copy these examples to a text editor, and then replace the information with the information for the server.

License File Name

Use the following format for the file name: `<software><version>_<seats>_Seats.lic`.

Where:

- `<software>` is the name of the software, the SCIEX OS or Analyst software.
- `<version>` is the software release number.
- `<seats>` is the number of seats.

Example 1

```
#Please Do not delete this comment line.  
SERVER CO.SERV.NET ANY 27000  
Vendor ScxMSSW0  
USE_SERVER
```

Example 2

```
#Please Do not delete this comment line.  
SERVER 168.254.0.80 ANY 27000  
Vendor ScxMSSW0  
USE_SERVER
```

- The server license must be a server concurrent license, not a node-locked license.
- The client license must not be imported on the license server.
- Before a previously imported license is imported again, the user must make sure that the **Overwrite License file on License Server** option is selected.
- When a different license file is imported for the same software application, the user must select the old license file path in the **License File or Directory** field, and then press **Delete**. Click **Save**, stop the Vendor Daemon, and then start the Vendor Daemon again.
- After the licensed number of clients gets to the maximum, no more users can log on to the software application until after some client computers log off.
- Users can borrow a license from their software application to work offline for up to seven days. When a license is borrowed, the available number of licenses on the license server is decreased by one. The available number of licenses increases by one when the user returns the borrowed license or after seven days, whichever occurs first.
- A user can only return a license if the client has access to the server.
- A user can only borrow a license if the user is logged on to the software application and the license will not expire in seven days.

Upgrade the License

7

When a new software version becomes available, upgrade the licenses on the server and the client computer.

1. Get a license for the new software version. Refer to the section: [Get a License for the License Server](#).
2. Deploy the license on the server. Refer to the section: [Deploy the License Server](#). Do not overwrite the existing license.
3. (If required) Create a new client license and install it on the client computers. Refer to the section: [Create and Install the Client License](#).
4. After all of the licenses are distributed, delete the old license versions.

Move the License

8

To move the server license to a different server, or to move the client license to a different computer, go to sciex.com/request-support, and then create a support ticket.

- If the Vendor Daemon is deleted from the Vendor Daemon Configuration tab in the FlexNet Publisher, then make sure to reset the **Vendor Daemon Port** to 27010 after the license is imported. Do not reset the default port. Save, and then start the Vendor Daemon again.
- If a borrowed license is not returned properly, then close the SCIEX software and shut down the computer for eight to ten minutes. Then start the software to see if the license has been returned.

This issue might occur if there is a failure in communication between the client and server during the return of a license. The software tries to re-establish communication five times, at one-minute intervals. If communication is re-established in this five-minutes interval, then the license is not returned.

- To restart the license server, restart the computer or restart the lmadmin-x64 service in the Services tab of the Task Manager.
- Make sure that the lmadmin service is running as a **Local System Account**, with the **Allow service to interact with Desktop** check box selected. Refer to the section: [Deploy the License Server](#).
- Make sure that the lmadmin-x64 service is configured as **Automatic** (not **Delayed Start**).
- When passwords are changed, make sure to record them and keep them in a safe place.
- For any other issues, contact sciex.com/request-support.

Contact Us

Addresses

**SCIEX
Headquarters** AB Sciex LLC
500 Old Connecticut Path
Framingham, Massachusetts 01701
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 see this document electronically, Adobe Acrobat Reader is required. To download the latest version, go to <https://get.adobe.com/reader>.

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

Contact Us

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