EXata

License Setup Guide

KEYSIGHT
TECHNOLOGIES

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Notices

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CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

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1 License Setup

EXata supports three types of licenses: node-locked, floating, and dongle.

- **Node-locked License**: This type of license is tied to a specific machine and cannot be used on a different machine. Use this license scheme if you plan on using EXata always on the same machine. This type of license does not require a license server and is very easy to use. To use a node-locked license, follow the instructions in Section 1.2.

- **Floating License**: This type of license requires a license server to be configured. The license server provides a client license that can be served to a number of client machines. Any machine on the sanctioned network can use a client license, if it can connect to the license server. To use a floating license, follow the instructions in Section 1.3.

> **Notes:** 1. When using a license server, each client machine must have EXata installed and must have a client license file. The client license file directs EXata to check out the actual license from the server. The license is returned to the server upon completion of use. Only the purchased number of licenses can be in use at any given time, but they are not tied to particular machines.
>
> 2. This chapter describes how to activate a license on a machine running EXata. For instructions for configuring a license manager, see Chapter 2.

- **Dongle License**: This is a special type of license that is associated with an external USB device. In order to use this license, the associated USB device must be plugged into your computer. To use a dongle license, follow the instructions in Section 1.4.

> **Note:** In this document, INSTALL_DIR refers to the directory where EXata is installed. This is typically C:/Program Files/Scalable/exata/w.x.y.z on Windows and /opt/Scalable/exata/w.x.y.z on Linux.

For help with license issues, contact KeysightCare Support by email. You can also open a support ticket by logging into your KSM account at the Keysight Support Portal and clicking on SUPPORT. Please include your Keysight Order Number and Certificate Number in the email or support ticket.

1.1 Redeeming Your License

You can redeem your license from the Keysight portal as follows:

1. Using a web browser, navigate to https://www.keysight.com/find/epsoftware.

2. If you have a Keysight account, go to step 3. Otherwise, click on **First Time User** and complete the registration step. You will need the Keysight Order Number and Keysight Certificate Number from your entitlement certificate to register.

3. Login to your KSM account.

4. If you have additional certificates, click on **You can add a new certificate** and follow the on-screen instructions for each order.

5. Click on **You can request new licenses**.

6. Follow the prompts to redeem your license.

   You will need your Host ID (MAC address for node-locked or floating licenses and dongle ID for dongle licenses).

Once you have redeemed your license, you will receive an email with your license file.

1.2 Using a Node-locked License

To use your node-locked license, do one of the following:

- Place the license file that you received via email (see Section 1.1) into the INSTALL_DIR/license_dir folder.

  Note: There should be only one file with the .lic extension in the license_dir folder. Rename or delete any previous files with the .lic extension.

- Use the License Application utility.

  1. Launch the License Application from the EXata GUI by going to **Help > License and Librarie**s and clicking on **Activate License**.
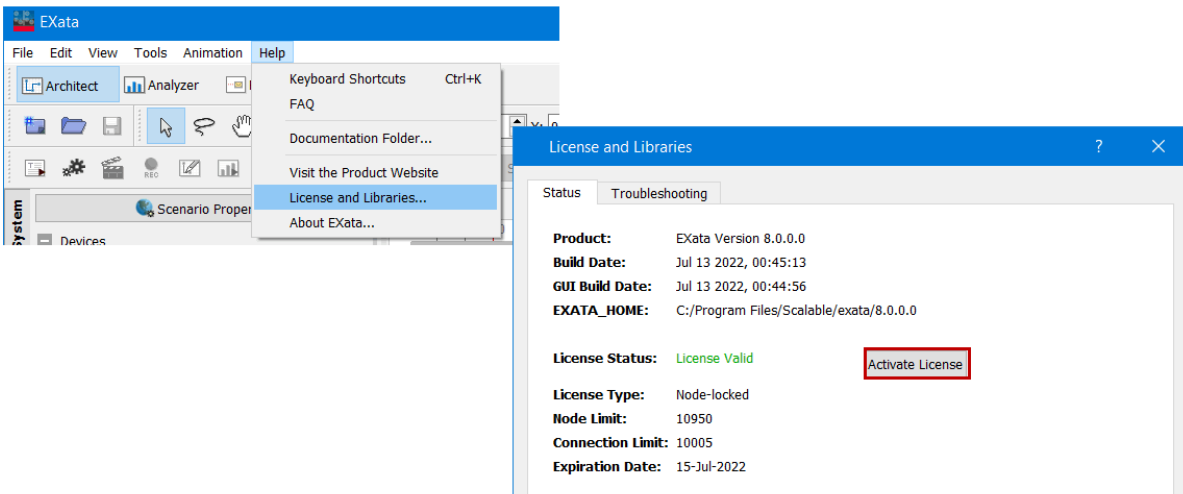

FIGURE 1-1.   Launching License Application from EXata GUI

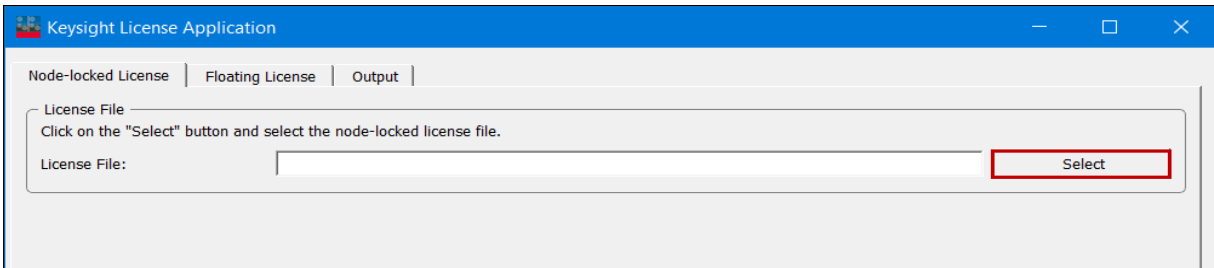 2. Go to the **Node-locked License** tab.

FIGURE 1-2.   Using a Node-locked License File

  3. Click on **Select** and browse to the license file.

1.3 Using a Floating License

To use a floating license, do the following:

1. Import the license file that you received via email (see Section 1.1) into the license server vendor daemon (see Section 2.3).

2. Create a client license file (see Section 1.3.1.1) and copy it onto each client machine (see Section 1.3.1.2).

   Alternatively, you can provide the IP address or hostname of the license server to the EXata GUI on each client machine (see Section 1.3.1.2).

1.3.1 Using a Client License File

1.3.1.1 Creating a Client License File

To make your floating license available to the end users, you need to create a client license file and distribute it to the end users.

To create the client license file, download the License Application package (see Section 2.1) make a copy of the file scalable.lic that is included in the License Application package. In the client license file:

- Replace `this_host` with the IP address or hostname of the license server.
- If you had selected a value other than `27000` for the License Server Port Number when installing lmadmin (see Section 2.2), then replace `27000` with the selected port number

For example, the following is the client license file if the license server's IP address is `10.10.2.50` and the License Server Port Number is `27000`:

```
SERVER 10.10.2.50 ANY 27000
VENDOR scalable
USE_SERVER
```

1.3.1.2 Copying Client License File on a Client Machine

To use the client license file on a client machine (i.e., the machine running EXata), do one of the following:

- Copy the client license file (see Section 1.3.1.1) into the INSTALL_DIR/license_dir folder.

    Note: There should be only one file with the .lic extension in the license_dir folder. Rename or delete any previous files with the .lic extension.

- Launch the License Application as described in Section 1.2.
    1. Go to the **Floating License** tab.
    2. If you have a client license file provided by your license administrator, do the following:
        a. Select **License File**.
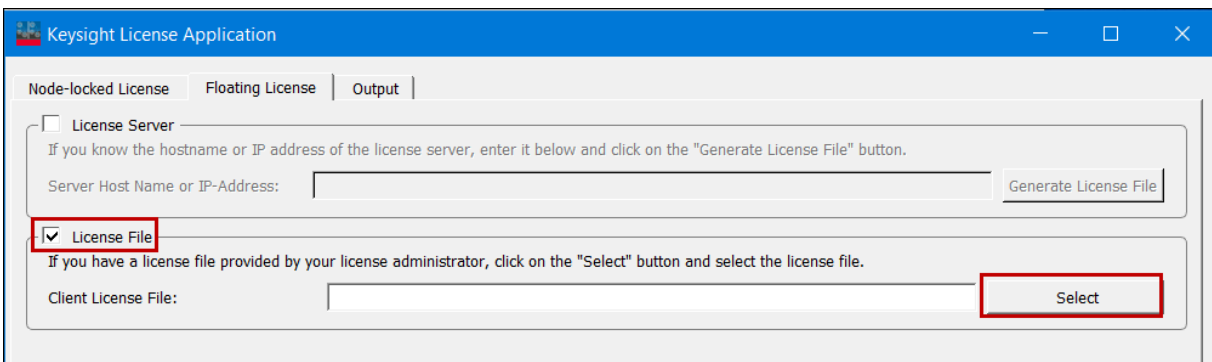   b. Click on **Select** and browse to the client license file.

FIGURE 1-3.   Using a Floating License with a Client License File

1.3.2 Using License Server's IP Address

If you know the hostname or IP address of the license server, you can do the following (instead of using a client license file):

1. Launch the License Application as described in Section 1.2.

2. Go to the **Floating License** tab.

3. Select **License Server**.

4. Enter the hostname or IP address of the license server and click on the **Generate License File** button.
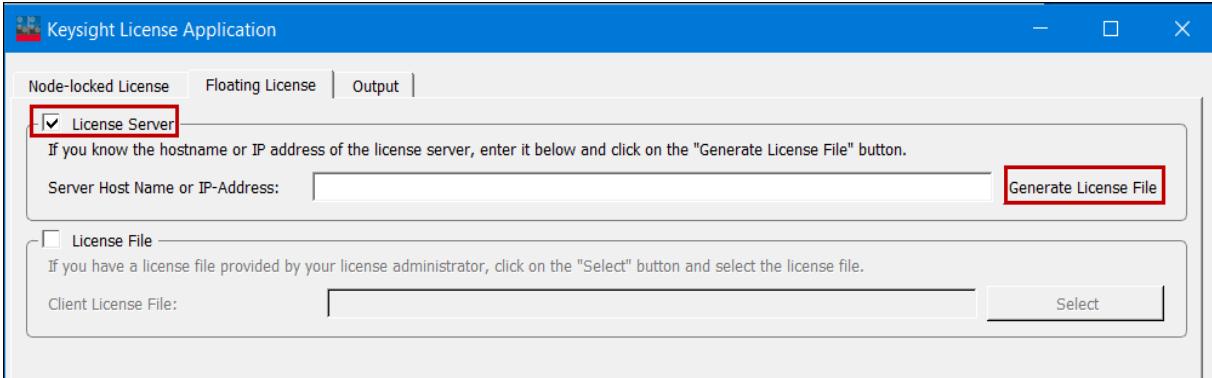

FIGURE 1-4.   Using a Floating License with Server's IP Address

1.4 Using a Dongle License

To use a dongle license, do the following:

1. Download the dongle device driver for your system as follows:

   a. Using a web browser, navigate to https://www.keysight.com/find/epsoftware and login to your KSM account. (See Section 1.1 if you do not have a KSM account.).

   b. Click on **You can get updates**.

   c. In the **License Tools** row, click on **License Managers and Drivers**.

   d. Download the dongle driver for your platform.

2. Install the dongle driver by running the downloaded file.

3. Copy the license file that you received via email (see Section 1.1) into the INSTALL_DIR/license_dir folder.

   > **Note:**   There should be only one file with the .lic extension in the license_dir folder. Rename or delete any previous files with the .lic extension.

4. Plug the dongle device into your system.

EXata License Setup Guide

2 License Server Manager Setup

This chapter describes how to install the FlexNet license server manager on Windows and Linux platforms. This procedure is intended for individuals with some background in system administration. It is required that you are logged in as the Administrator, or logged in as a user in the Administrators group.

> **Notes: 1.** You need to set up a license sever only if you are using a floating license. You do not need to set up a license server if you are using a node-locked or dongle license.
>
> **2.** If you are upgrading your license server, uninstall the old license server before installing a new one.

2.1 Requirements for License Server Manager

To configure the license server manager, you need the software packages listed in the following sections.

2.1.1 License Server Software Packages

Download the license server software package for your system as follows:

1. Using a web browser, navigate to https://www.keysight.com/find/epsoftware and login to your KSM account. (See Section 1.1 if you do not have a KSM account.)
2. Click on **You can get updates**.
3. In the **License Tools** row, click on **License Managers and Drivers**.
4. Download the License Server package for your platform.

Extract the contents of the downloaded package. The package contains the following files and folders:

- License server manager (lmadmin) installer (file lmadmin-x64_xxxxxx.exe for Windows and lmadmin-x64_xxxxxx.bin for Linux).

  > **Note:** lmadmin is a license server manager software developed by Flexera Software. EXata supports versions 11.16.0 and above.

- ScalableVendorDaemon folder: This folder contains the vendor daemon files.

- Bootstrap license file (scalable.lic).

2.1.2 Third-party Software

Java

The following version of Java is required. If the required Java package is not already installed on your system, then download and install the appropriate Java package.

- For Windows: Java Runtime Environment (JRE) 7 or later.
- For Linux: OpenJDK (versions 8 through 15).

Additional Requirements for CentOS and RHEL Systems

The LSB package is also required for CentOS and RHEL systems:

Use the following command to install the LSB package on CentOS and RHEL systems:

```
sudo yum install redhat-lsb
```

Additional Requirements for Ubuntu Systems

The following packages are also required for Ubuntu systems:

- LSB package
- lib32gcc1

Use the following commands to install these packages on Ubuntu systems:

```
sudo apt-get install lsb-core
sudo apt-get install lib32gcc1
```

2.2 Installing and Running License Server Manager

This section describes how to install and run the license server manager (lmadmin).

2.2.1 Installing and Running lmadmin on Windows

To install and run lmadmin on Windows, do the following:

1. Run the lmadmin installer (file lmadmin-x64_xxxxxx.exe, see Section 2.1.1) as administrator and follow the prompts.

   - When prompted, specify the installation directory. (The default installation directory is "C:\Program Files\FlexNet Publisher 64-bit License Server Manager".)
   - When prompted, select the option to install Visual C++ 2013 Redistributable Package if it is not already installed on your system.
   - When prompted, set the HTTP Port Number (the default HTTP port number is 8090) and set the License Server Port Number to 27000. (If you choose a different value for the License Server Port Number, make a note of it since it will be needed later.)
   - When prompted, select the "Run as a service" option and set the service name to lmadmin64.

- Use the default values for the other prompts.

2. After the installation has completed, go to the Services tab of the Windows Task Manager and start the lmadmin64 service if it is not already running. The license server manager will run in the background.

3. Copy the following files from the ScalableVendorDaemon folder (see Section 2.1.1) into the lmadmin installation folder:

- scalable.exe
- scalable_libFNP.dll

2.2.2 Installing and Running lmadmin on Linux

This section describes how to install and run lmadmin on Linux systems.

> **Note:** On CentOS systems, before installing lmadmin, set SELinux in permissive mode by executing the following command:

```
sudo /usr/sbin/setenforce 0
```

To install and run lmadmin on Linux, do the following:

1. Create a folder /opt/FNPLicenseServerManager and change its permissions to grant **read and write permission to all users**.

2. Run the lmadmin installer (file lmadmin-x64_xxxxxx.bin, see Section 2.1.1) as **non-root** and follow the prompts.

- When prompted, select the default location, /opt/FNPLicenseServerManager, as the installation directory.
- When prompted, set the HTTP Port Number (the default HTTP port number is 8090) and set the License Server Port Number to 27000. (If you choose a different value for the License Server Port Number, make a note of it since it will be needed later.)
- Use the default values for the other prompts.

3. lmadmin should start automatically after all steps have been completed. To confirm that lmadmin has started, type the following in the command prompt:

```
ps -aux | grep lmadmin
```

4. If lmadmin does not start automatically, you can start it by typing the following in the command prompt:

```
./lmadmin
```

5. Copy the following files from the ScalableVendorDaemon folder (see Section 2.1.1) into the lmadmin installation folder (/opt/FNPLicenseServerManager) and change their permissions to make them executable:

- scalable
- scalable_libFNP.so

2.3 Configuring License Server Manager

To configure the license server manager, do the following:

1. Open a browser and in the URL bar type `<localhost>:<port>` to manage the license server, where `<localhost>` is the IP address or hostname of the license server machine and `<port>` is the HTTP port number selected for lmadmin (see Section 2.2).

   For example, if the license server is running on a machine with IP Address 10.10.2.50 and 8090 is the port selected for lmadmin, type `10.10.2.50:8090` in the URL bar to manage the license server.

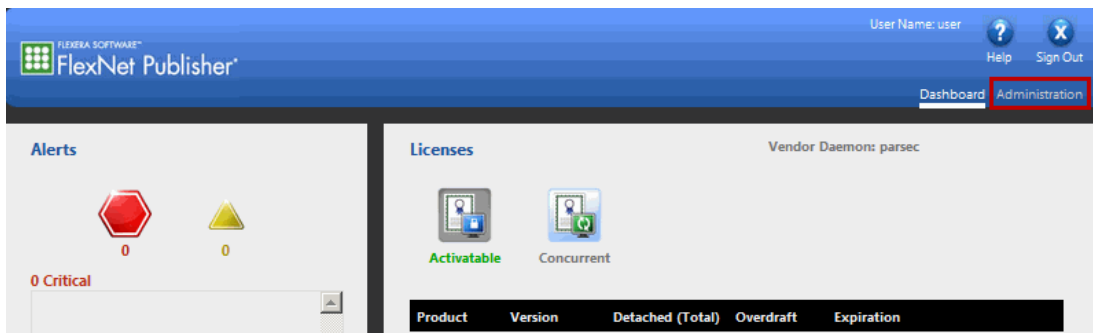2. On the license manager screen click on **Administration**.

FIGURE 2-1.   FlexNet Portal

3. You will be prompted for a user name and password. The default user name and password are both `admin`. You will be prompted to change the password when you log in for the first time.

4. Click on the **Vendor Daemon Configuration** tab and then click on **Import License** under **Vendor Daemons**.
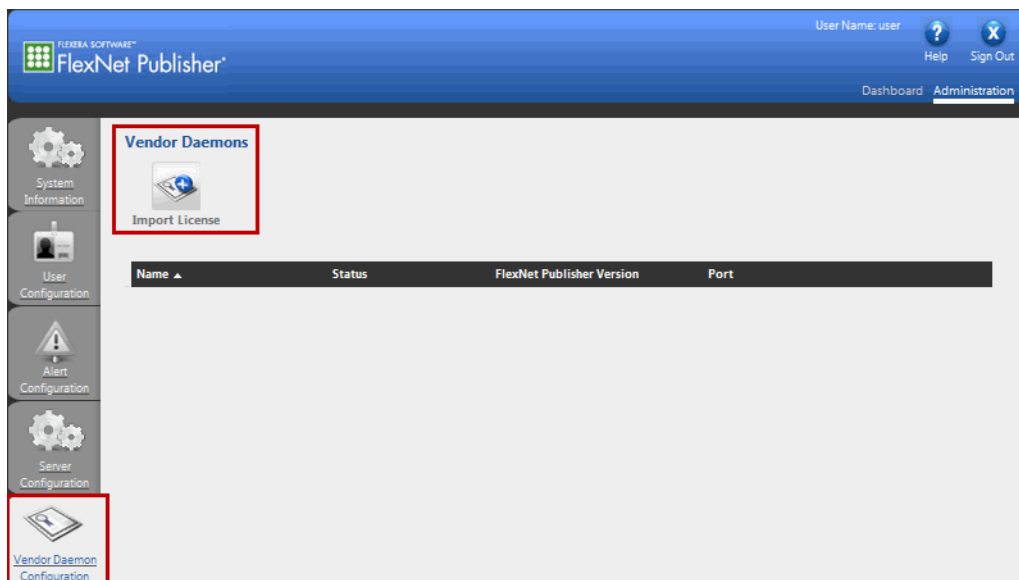

FIGURE 2-2.   Vendor Daemon Configuration Tab

5. Click on **Browse**, select the license file that you received via email (see Section 1.1), and click on **Import License**.
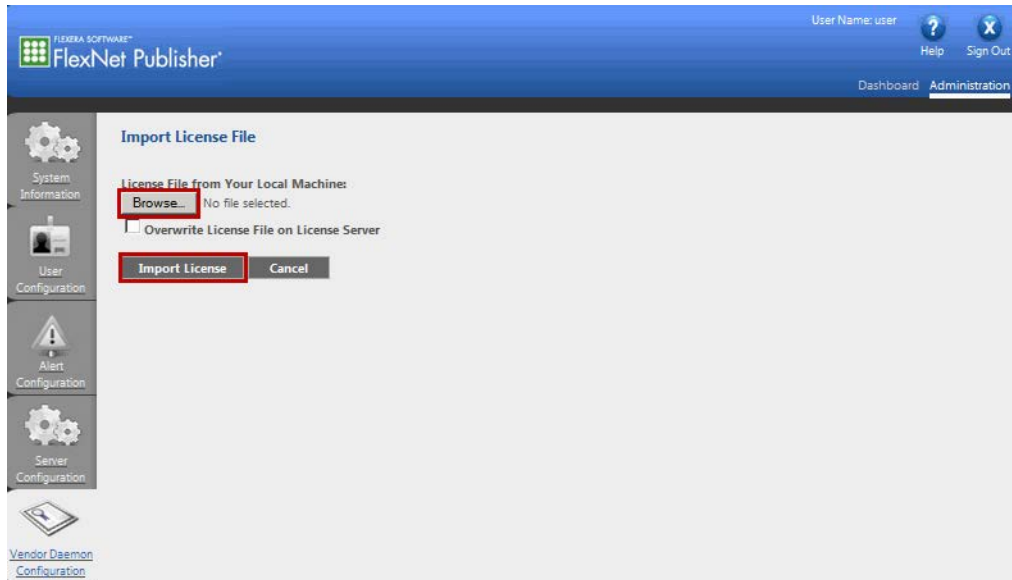

FIGURE 2-3.   Importing License

If the installation is running correctly and the license file is valid, then the **Status** column should display "Running" or "Up", indicating that the license manager has been successfully configured.

FIGURE 2-4.   License Successfully Imported

If the **Status** column does not display "Running" or "Up", then see the troubleshooting section below.

Troubleshooting

1. If the **Status** column displays "Down", then click on "scalable" in the Vendor Daemons screen. The following screen will be displayed. Click on **Vendor Daemon Log**.
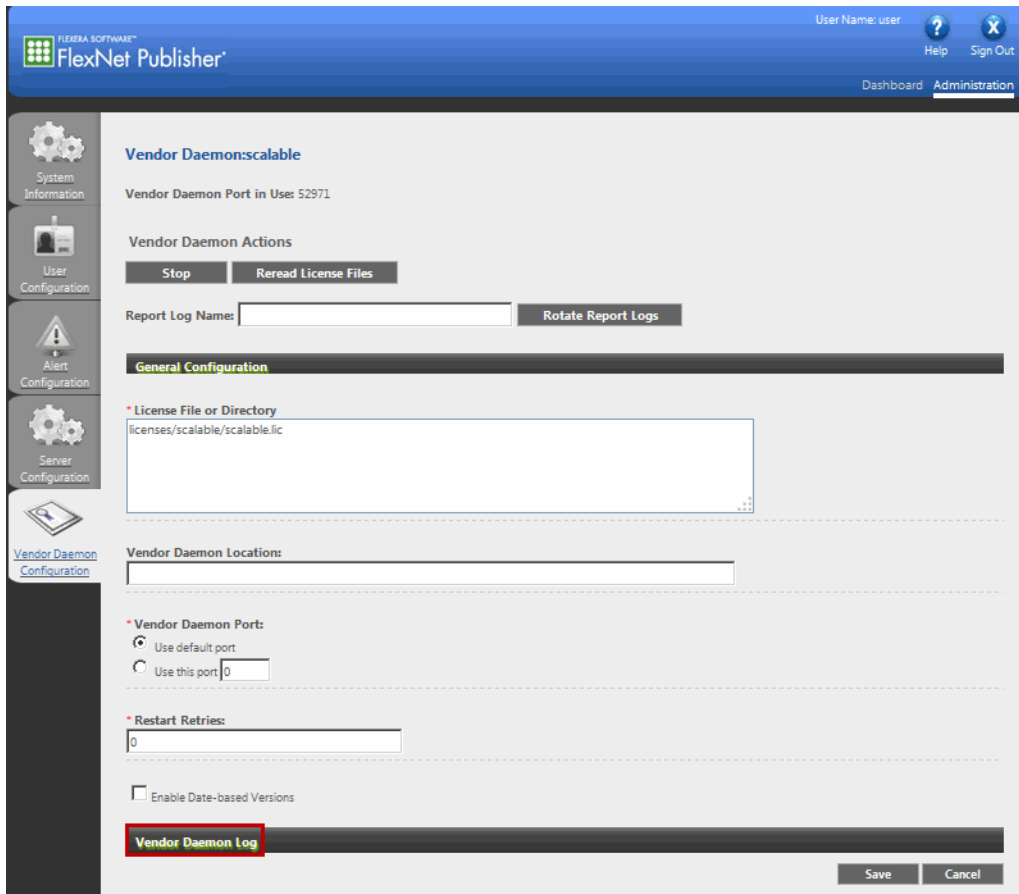

FIGURE 2-5.   Viewing Vendor Daemon Log

2. The following screen is displayed. Click on **View file externally** to view any errors.
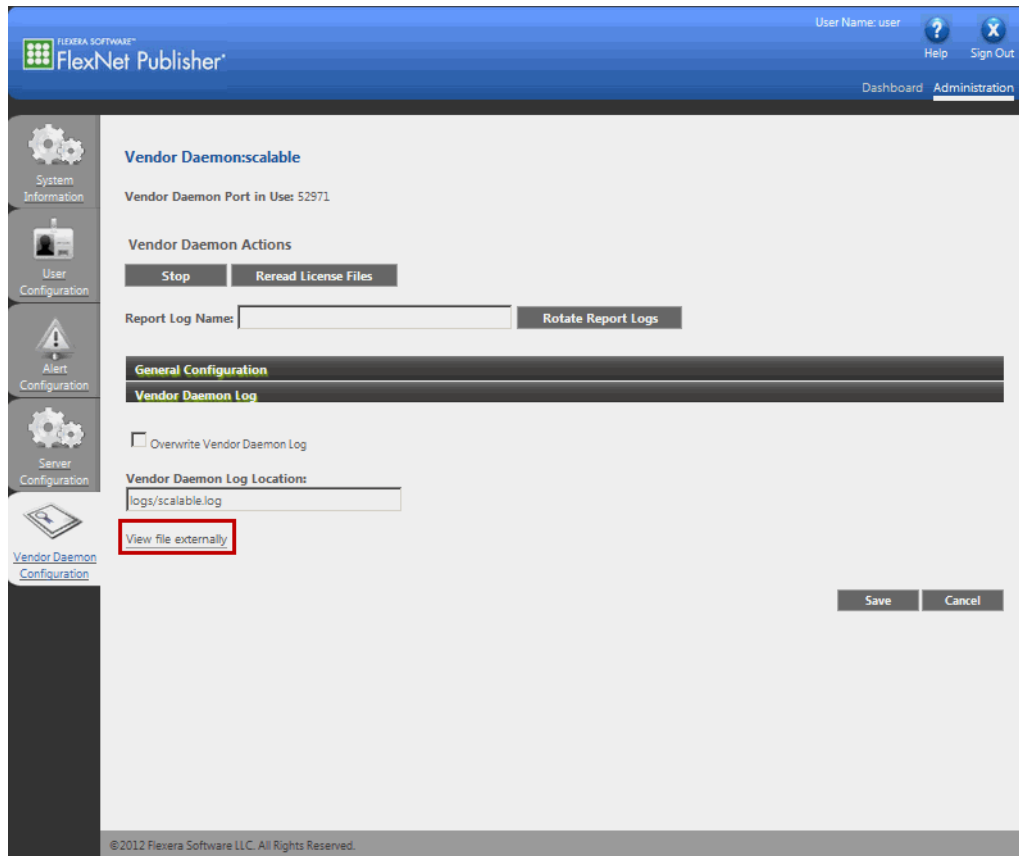
FIGURE 2-6.   View Log File Externally

3. The file scalable.log is displayed in a separate window.

4. Click on the **System Information** tab to view the system information.

5. For help with resolving errors, send the screenshots of the scalable.log file and System Information display along with your Keysight Order Number and Certificate Number to KeysightCare Support by email. You can also open a support ticket by logging into your KSM account at the Keysight Support Portal and provide this information.

2.4 Troubleshooting

If you encounter issues installing or using the license server manager, check the following:

1. Before installing a newer version of lmadmin, the older version should be uninstalled.

2. The correct versions of the software packages for your platform listed in Section 2.1 must be installed. The lmadmin version number should be 11.16.0 or later.

3. On Linux systems, the license server manager must be installed as *non*-root. If it is installed as root, non-root users will be locked out.

   If you have installed the license server manager as root, then change the permissions to allow access to all users by running the following command:

   ```
   sudo chmod 775 -R /opt/FNPLicenseServerManager
   ```

4. Make sure that the HTTP port used for the license server manager and the license server port are open (step 1 of Section 2.2.1 for Windows and step 2 of Section 2.2.2 for Linux).

5. On Windows systems, after installation, the license server manager must be started as a service (step 2 of Section 2.2.1)

6. The vendor daemon files must be manually copied to the location where the license server manager is installed (step 3 of Section 2.2.1 for Windows and step 5 of Section 2.2.2 for Linux).