Flexera Software Product Download and License Guide for InstallAnywhere 2011 and Later

Legal Information

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Downloads and Licensing for InstallAnywhere

This document contains background information on the different licensing models that are available for InstallAnywhere 2011 or later. This document also contains instructions for various tasks:

- Obtaining installations of InstallAnywhere
- Setting up licensing for InstallAnywhere

Licensing Options

Two different licensing models are available for InstallAnywhere:

- **Node-locked licensing**—With this model, the product license is tied to a specific user and machine. This model is the traditional option and the one that is most often purchased.

  A node-locked license of InstallAnywhere requires a Flexera Software–generated license file for the machine on which you install InstallAnywhere.

  If you are using the node-locked type of license, it is your responsibility to maintain your license on your machine. Sharing this type of license between multiple users does not comply with Flexera Software products' end-user license agreements (EULAs).

- **Concurrent licensing**—This model enables sharing or floating of InstallAnywhere licenses among multiple users; it is also sometimes called *floating licensing*. Concurrent licensing can provide you with greater flexibility and cost efficiency than the traditional node-locked licensing.

  If your organization purchased concurrent licenses for a Flexera Software product, you need to connect your product to the licensing server that you are using. Subsequently, every time that you start a Flexera Software product on your machine, the server is queried to verify that the required license is available. If the license is available, you are granted access to a Flexera Software product.

Neither licensing model for InstallAnywhere uses activation.

Both types of licensing models require a Flexera Software-generated license file:

- For the node-locked model, the license file is based on the host ID (that is, the Ethernet/MAC address of the network interface card) for the machine that has InstallAnywhere.
- For the concurrent licensing model, the license file is based on the host ID (that is, the Ethernet/MAC address of the network interface card) for the licensing server. This license file, as well as the FlexNet Licensing Server software, must be installed on the licensing server, the machine that manages the concurrent licenses.

  The FlexNet Licensing Server software is available as a free download from Flexera Software; you can use it to manage licensing for any FlexEnabled products.

You can acquire InstallAnywhere license files from the Flexera Software Product and License Center; this guide explains how.

Downloading InstallAnywhere, Service Packs, and Other Installations

The following installations are available for download from the Flexera Software Product and License Center:

- InstallAnywhere
- InstallAnywhere service packs (if available)
- FlexNet Licensing Server software (if you purchased concurrent licenses and you need to set up your organization's license server)

Note • *When your InstallAnywhere purchase is made, an account is created for your organization in the Flexera Software Product and License Center. A user account for the purchaser is added to the account in the Product and License Center, and a welcome email message with sign-in credentials is sent to the purchaser. If you are the purchaser of the product, you can sign in to the Product and License Center with the credentials that are included in the welcome email message. If you are not the purchaser and a user account has not been added to the account for you, you can request access by visiting the Join New Account page (https://flexerasoftware.flexnetoperations.com/control/inst/registertoaccount), and entering your organization's account ID (which is included in the order confirmation email message).*

Task: ***To download any of the installations:***

1. Sign in to the Product and License Center (https://flexerasoftware.flexnetoperations.com/).
2. In the left navigation, under **Entitlements**, click **Product List**.

   The **Product List** page shows all of the product lines to which your account is entitled. If you do not have access to multiple products, clicking the **Product List** link opens the **Product Information** page directly.
3. If the **Product List** page shows multiple products, click the **InstallAnywhere** link. The **Product Information** page opens.
4. In the **Product and File Downloads** column, click the InstallAnywhere link for the version that you want to download. The **Product Download** page opens.
5. Click the appropriate download button.

Once you have downloaded an installation, run the downloaded installation on the machine on which you want to use the product.

Licensing Overview for InstallAnywhere

The following table explains how to set up the licensing for the type of license that you purchased.

Table 1-1 • License Types

License Type	Description of License Type	Instructions
Node-locked license of InstallAnywhere	This type is tied to a specific user and machine. A node-locked license for InstallAnywhere requires a Flexera Software–generated license file for the machine on which you install InstallAnywhere.	For instructions, see Configuring a Node-Locked License of InstallAnywhere.
Concurrent license of InstallAnywhere	This type enables sharing or floating of licenses among a maximum number of simultaneous users. The product on each user's machine must be connected to a licensing server that your organization sets up. The licensing server must have a Flexera Software–generated license file.	To set up a new or existing license server, see Setting up the Concurrent Licensing Environment for InstallAnywhere. To add the concurrent license file to the license server, see Adding Concurrent License Files to the FlexNet Licensing Server. To connect a machine that has the product to the license server, see Connecting a User's Machine to the License Server for InstallAnywhere License Check-Outs and Check-Ins.

Configuring a Node-Locked License of InstallAnywhere

Once you have purchased a node-locked license of InstallAnywhere, obtained the InstallAnywhere installation, and installed the product, you can configure your node-locked license. Configuring a node-locked license of InstallAnywhere requires that you obtain a license file (.lic) from the Product and License Center. The following procedure explains how to obtain and configure the node-locked license.

Note • *If you are using InstallAnywhere on a Linux system that is not Linux Standard Base (LSB) 3 compliant, you may need to manually create a symbolic link.*

When you install InstallAnywhere on a Linux system, the installation attempts to create a symbolic link to the default Linux loader (`/lib/ld-linux.so.2`*) if a link with the same name is not already present. The symbolic link is necessary for the host ID to be displayed on the Host ID dialog of the licensing wizard, and it is also necessary for successful node-locked licensing. (When you are generating a a node-locked license file, you need to enter the host ID of the machine that has InstallAnywhere.) The link is present on LSB-compliant systems, but it may not be present on systems that are not LSB compliant. If the installation cannot create the symbolic link because you do not have permission to do so, you can manually create it.*
To manually create the symbolic link:

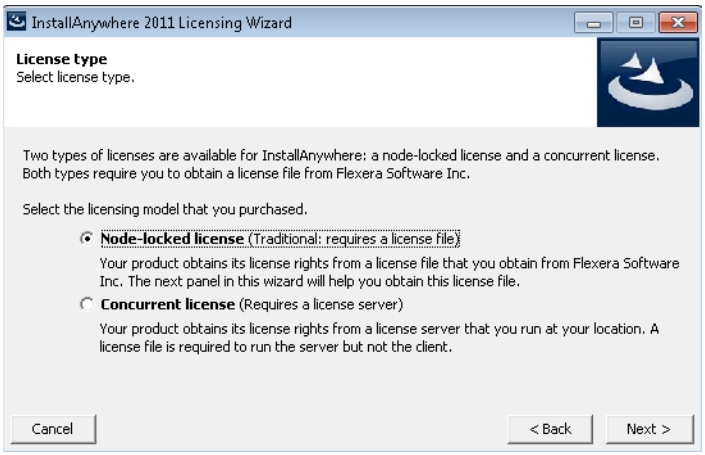
1. Log in as root.
2. Execute the following command:

```
ln -s /lib/ld-linux.so.2 /lib/ld-lsb.so.3
```

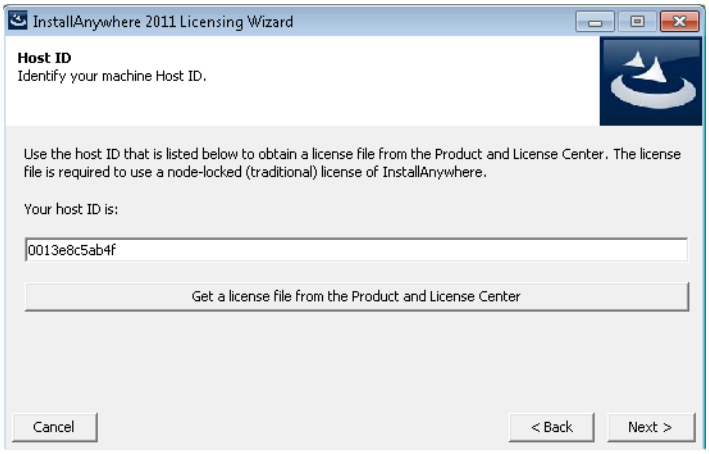
Task: ***To obtain and configure a node-locked license file (.lic):***

1. Launch InstallAnywhere. Before the product starts, the licensing wizard opens.
2. Select the **Specify license information** option and then click the **Next** button.

3. On the **License Type** dialog, select the **Node-locked license** option.



4. On the **Host ID** dialog, click the **Get a license file from the Product and License Center** button.



Clicking this button opens the Product and License Center in a Web browser. Sign in to the Product and License Center.

Tip • *If you do not have an Internet connection on the machine on which you are installing InstallAnywhere, sign in to the Product and License Center (https://flexerasoftware.flexnetoperations.com/) on a machine that does have an Internet connection.*

5. In the Product and License Center, acquire the license file for the specific machine on which you are installing InstallAnywhere:

   a. In the left navigation, under **Entitlements**, click **Product List**.

      The **Product List** page shows all of the product lines to which your account is entitled. If you do not have access to multiple products, clicking the **Product List** link opens the **Product Information** page directly.

   b. If the **Product List** page shows multiple products, click the **InstallAnywhere** link. The **Product Information** page opens.

   c. Click the **Licenses** link for the product that you are installing and configuring. The **License Information** page opens. This page shows details about the used and unused licenses of the product.

   d. Find an unused license in the list and select the **License Applicable to Product(s)** option that pertains to that license.

   e. At the bottom of the page, click the **Generate** button. The **Generate Licenses** page opens.

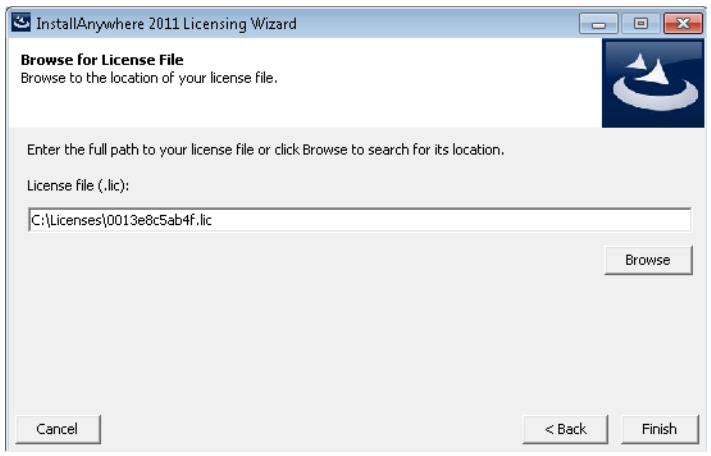
   f. In the **Node Host ID** box for the license, enter the host ID that pertains to the specific machine on which you are installing InstallAnywhere. The host ID is displayed on the **Host ID** dialog of the InstallAnywhere installation.

   g. Click the **Generate** button. The **View Licenses** page opens.

   h. Click the **Save All** button. The Product and License Center displays a dialog box that lets you specify the location where you want to download the license file.

   i. Specify a location that is accessible by the machine on which you are installing InstallAnywhere. The Product and License Center downloads the .lic file or files to the location that you specified. The file is named *HostID*.lic, where *HostID* is the host ID that you specified when you obtained the .lic file. You can change the name of this file if it makes it easier to manage it.

6. Return to the **Host ID** dialog in the InstallAnywhere licensing wizard, and click the **Next** button. The **Browse for License File** dialog opens.

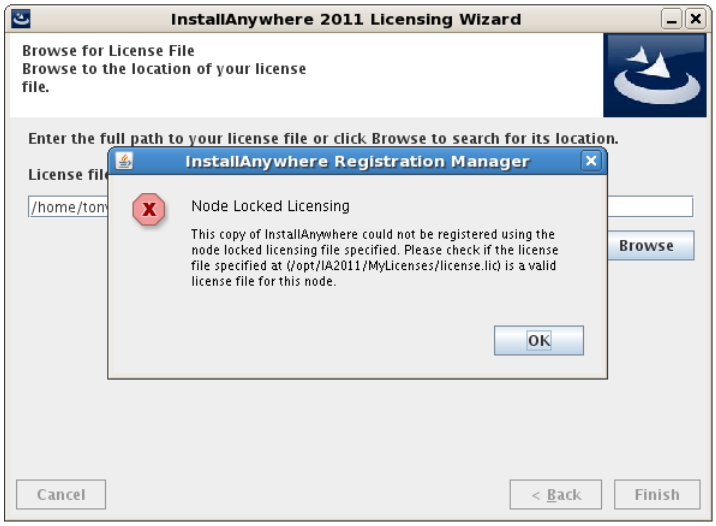


7. In the **License file (.lic)** box, enter the path for the .lic file that you want to use on the machine, or click the **Browse** button to navigate to the file.
8. Complete the remaining dialogs in the wizard.

The wizard copies the .lic file that you specified to the InstallAnywhere folder and names it `License.lic`.

Specifying the License File for a 64-Bit Version of InstallAnywhere on a 64-Bit Linux Machine

If you are using a 64-bit version of InstallAnywhere on a 64-bit Linux machine, you may encounter an error when specifying the correct path for the .lic file:



The following error is written to the debug log file (console.txt):

```
Trying to checkout IAEE version=12.0
Library for Native Hostid Couldn't Be Loaded (-521,7024)
Trying to checkout IAEB version=12.0
Library for Native Hostid Couldn't Be Loaded (-521,7024)
```

For instructions on how to resolve this issue, see Knowledge Base article Q214129: Unable To License 64 Bit Version Of InstallAnywhere 2011 Using A Node Locked License File On 64 Bit Linux Operating Systems (http://support.installshield.com/kb/view.asp?articleid=Q214129).

Passing Command-Line Parameters to Build.exe to Specify Node-Locked License Information

If you try to use `build.exe` to build installations without configuring the licensing for either the full InstallAnywhere product or `build.exe`, `build.exe` runs in evaluation mode for a limited number of days, and it creates evaluation installations.

At any time when you launch `build.exe` from the command line, you can configure node-locked licensing information by passing the `-registerNodeLocked` parameter to `build.exe` as follows:

```
build.exe -registerNodeLocked LicenseFilePathAndName
```

LicenseFilePathAndName represents the path and file name of the license file (.lic).

Whenever you run a build with the same user account that was used to specify the node-locked license information, you can build installations. Specifying the license information is required only once—either through the licensing wizard for the full InstallAnywhere product, or through the command line for `build.exe`.

To determine the host ID of the machine, use the following command:

```
build.exe -generateHostID
```

To clear license information from your machine—for example, if you are moving the license to a different machine—use the following command:

```
build.exe -unregister
```

Setting up the Concurrent Licensing Environment for InstallAnywhere

If your organization has purchased concurrent licenses of InstallAnywhere, a FlexNet Licensing Server that you set up in your environment manages how many instances of the product can be run simultaneously. Each user who wants to launch one of these products needs to establish a connection with the licensing server to check out and check in licenses when needed.

Background Information about Concurrent Licensing for InstallAnywhere

The following process describes what occurs each time that a user in your organization starts the product.

1. A user launches the product.
2. The FlexEnabled code on the user's machine establishes a connection with the FlexNet Licensing Server and requests a license.
3. The FlexNet Licensing Server checks whether a license is available. If a license is available, the FlexNet Licensing Server checks it out. In addition, the server sends a message to the user's machine. The message grants permission to run the product.
4. The FlexEnabled code on the user's machine receives the message and opens the product.

When the user exits the product, the FlexEnabled code on the user's machine sends a message to the FlexNet Licensing Server, and the license is checked back in, making it available for another machine.

Components of a FlexNet Licensing Server

A FlexNet Licensing Server consists of the following components.

Table 1-2 • FlexNet Licensing Server Components

Component	Description
FlexEnabled Product	A FlexEnabled product is one that uses FlexNet Publisher Licensing Toolkit to implement its license models. InstallShield, AdminStudio, and InstallAnywhere are all FlexEnabled products. These FlexEnabled product communicate with the FlexNet Licensing Server to request a license when needed.
License File	A license file (.lic) is a text file that contains a licensing certificate. It contains information about the server machine and vendor daemons. It also contains data about the number of concurrent licenses that were purchased.

Table 1-2 • FlexNet Licensing Server Components (cont.)

Component	Description
License Server Manager	The license server manager on the FlexNet Licensing Server handles the initial contact with the FlexEnabled product, passing the connection on to the vendor daemon. The license server manager starts and maintains vendor daemons for serving license rights. Two versions of the license server manager are available: • **lmadmin**—This is the latest version of the license server manager. This version has a graphical user interface. • **lmgrd**—This is the original version of the license server manager. This version has a command-line interface.
Vendor Daemon	A vendor daemon is a file that is associated with the vendor who developed the FlexEnabled product. If you are using a FlexNet Licensing Server to manage licenses for InstallShield, AdminStudio, or InstallAnywhere, as well as for products that are developed by other companies and are also FlexEnabled, your FlexNet Licensing Server will have one vendor daemon for Flexera Software, and one additional vendor daemon for each additional vendor. The vendor daemon handles the communication between the FlexEnabled product and the FlexNet Licensing Server; it also keeps track of how many licenses are checked out and who has them.

Note the following about the FlexNet Licensing Server components:

- **Communication via TCP/IP**—InstallShield, AdminStudio, and InstallAnywhere communicate with the vendor daemon through TCP/IP network communications. The products and the daemon processes can run on separate machines on your network, across any size wide-area network.
- **Machine-independent communication**—The format of the traffic between the Flexera Software product and the FlexNet Licensing Server is machine independent, allowing for heterogeneous networks. This means that the FlexNet Licensing Server machine and the machine that is running the Flexera Software product can be different hardware platforms or even different operating systems (for example, UNIX and Windows).
- **Vendor daemon termination scenario**—If the vendor daemon terminates for any reason, all users lose their licenses (though this does not mean that the applications suddenly stop running). Users normally regain their license automatically when the license server manager restarts the vendor daemon; however, they may exit the product if the vendor daemon remains unavailable.

Determining the Host ID of a Licensing Server

Before you can obtain a license file for your licensing server, you need to determine the host ID (that is, the Ethernet/MAC address of the network interface card) of the licensing server.

You can download the following tool and launch it on any Windows-based system to determine its host ID:

FlexNetHostIDExe.exe (http://saturn.installshield.com/product/is/FLEXnetLicenseServer/FlexNetHostIDExe.exe)

As an alternative on Windows-based systems, and for non-Windows-based systems, you can use lmutil to determine the host ID for your machine. For instructions on how to obtain the download for lmutil, see Downloading InstallAnywhere, Service Packs, and Other Installations.

The following table provides the commands that you can use for obtaining the host ID on various platform.

Table 1-3 • Determining the Host IDs on Various Platforms

Operating System	Command for Obtaining the Host ID	Sample Host ID
Linux	`lmutil lmhostid -ether`	00400516E525
Solaris	`lmutil lmhostid -ether`	00400516E525
Windows	`lmutil lmhostid`	00B0A9DF9A32

Make a note of the host ID so that you can refer to it when obtaining a concurrent license file.

Setting Up a New Concurrent License Server

If you are setting up a new concurrent licensing environment to manage concurrent licenses of InstallAnywhere, you will need to download and install the FlexNet Licensing Server software and obtain the license file. This section explains how:

- Obtaining the FlexNet Licensing Server Software and Installing It on the Licensing Server
- Obtaining a Concurrent License File for a New FlexNet Licensing Server

Note that if you are going to use an existing FlexNet Licensing Server to manage your concurrent licenses, you need to obtain the license file. To learn more, see Obtaining a Concurrent License for an Existing Licensing Server.

Obtaining the FlexNet Licensing Server Software and Installing It on the Licensing Server

The FlexNet Licensing Server software manages license check-out and check-in requests from users who have concurrent licenses. You can install this software on the machine that you are designating as your concurrent licensing server. The installation is needed only if you have purchased concurrent licenses of InstallAnywhere. The software has support for managing licenses of the current version of InstallAnywhere, as well as earlier versions.

Different platform-specific FlexNet Licensing Server installations are available for download from the Product and License Center, along with the InstallAnywhere installation. For instructions on how to obtain the download, see Downloading InstallAnywhere, Service Packs, and Other Installations.

To install the FlexNet Licensing Server software, launch the installation.

Tips for Installing the FlexNet Licensing Server Software

Note the following tips when installing the FlexNet Licensing Server software on the machine that you are designating as your concurrent licensing server:

- In the installation wizard, enter the appropriate port numbers for the HTTP port number and the license server port number.
  - The HTTP port number is used to host a Web server for monitoring which licenses are in use and which machines are using them.
  - The license server port number is used for communication between the vendor daemon on the FlexNet Licensing Server and FlexNet Enabled products (such as InstallAnywhere).
- For Windows-based licensing server systems: To achieve the highest level of availability, it is recommended that you choose to run the FlexNet License Server Manager as a Windows service. If it is run as a Windows service and the FlexNet Licensing Server machine needs to be restarted, the service is also restarted. Therefore, no manual intervention is needed to make the FlexNet Licensing Server available again to users or machines who try to check out licenses.

Obtaining a Concurrent License File for a New FlexNet Licensing Server

Once you have obtained the FlexNet Licensing Server software and installed it on the machine that you want to use as your licensing server, you can configure the FlexNet Licensing Server. Configuring a FlexNet Licensing Server for managing concurrent licenses of InstallAnywhere requires that you obtain a license file (.lic) from the Product and License Center.

Task: ***To obtain a concurrent license file (.lic):***

1. Sign in to the *Product and License Center (https://flexerasoftware.flexnetoperations.com/)*.

2. In the Product and License Center, acquire the license file for the specific machine on which you are installing the FlexNet Licensing Server:

   a. In the left navigation, under **Entitlements**, click **Product List**.

      The **Product List** page shows all of the product lines to which your account is entitled. If you do not have access to multiple products, clicking the **Product List** link opens the **Product Information** page directly.

   b. If the **Product List** page shows multiple products, click the **InstallAnywhere** link. The **Product Information** page opens.

   c. Click the **Licenses** link for the product that you are installing and configuring. The **License Information** page opens. This page shows details about the used and unused licenses of the product.

   d. Find an unused license in the list and select the **License Applicable to Product(s)** option that pertains to that license.

   e. At the bottom of the page, click the **Generate** button. The **Generate Licenses** page opens.

   f. In the **Number of Licenses to Generate** box, enter the number of licenses that you want to allow the FlexNet Licensing Server to manage.

   g. In the **Server Host ID** box, enter the host ID that pertains to the specific machine on which you are installing the FlexNet Licensing Server. Do not enter any dashes in this setting.

      For instructions on determining the host ID, see Determining the Host ID of a Licensing Server.

   h. If you are configuring a redundant licensing server cluster, complete the other settings as needed.

   i. Click the **Generate** button. The **View Licenses** page opens. This page shows details that the Product and License Center will use to create the license file for the FlexNet Licensing Server.

   j. Click the **Save All** button. The Product and License Center displays a dialog box that lets you specify the location where you want to download the license file.

   k. Specify a location that is always accessible by the machine on which you are installing InstallAnywhere.

The Product and License Center downloads the .lic file to the location that you specified. The file is named *HostID*.lic, where *HostID* is the host ID that you specified when you obtained the .lic file. You can change the name of this file if it makes it easier to manage it.

Once you have obtained the concurrent license file, you need to add it into the FlexNet Licensing Server. For instructions, see Adding Concurrent License Files to the FlexNet Licensing Server.

Obtaining a Concurrent License for an Existing Licensing Server

If you are going to use an existing FlexNet Licensing Server to manage your concurrent licenses, you need to obtain a concurrent license file, but you do not need to install the FlexNet Licensing Server software.

The procedure for obtaining a license file from the Product and License Center for an existing licensing server differs slightly, depending on whether you purchased a standard concurrent license file or an upgrade concurrent license file:

- A standard concurrent license file lets you manage concurrent licenses for one version of InstallAnywhere.

  For instructions on how to obtain this type of license file, see Generating a New Concurrent License for an Existing Licensing Server.

- An upgrade concurrent license file lets you manage concurrent license files for the new version of InstallAnywhere, as well as for earlier versions that you previously purchased. Note that an upgrade concurrent license file does not provide additional licenses. It simply upgrades the licenses that are contained in an existing file.

  For instructions on how to obtain this type of license file, see Generating an Upgrade Concurrent License for an Existing FlexNet Licensing Server.

Generating a New Concurrent License for an Existing Licensing Server

A standard concurrent license file lets you manage concurrent licenses for one version of InstallAnywhere. Use the Product and License Center to acquire the license file for the specific machine on which you are using the FlexNet Licensing Server software.

Task: ***To obtain a standard concurrent license file (.lic) that lets you manage concurrent licenses for a single version of InstallAnywhere:***

1. Sign in to the *Product and License Center (https://flexerasoftware.flexnetoperations.com/)*.
2. In the Product and License Center, acquire the license file for the specific machine on which you are installing the FlexNet Licensing Server:
   a. In the left navigation, under **Entitlements**, click **Product List**.

      The **Product List** page shows all of the product lines to which your account is entitled. If you do not have access to multiple products, clicking the **Product List** link opens the **Product Information** page directly.

   b. If the **Product List** page shows multiple products, click the **InstallAnywhere** link. The **Product Information** page opens.

   c. Click the **Licenses** link for the product that you are installing and configuring. The **License Information** page opens. This page shows details about the used and unused licenses of the product.

d. Find an unused license in the list and select the **License Applicable to Product(s)** option that pertains to that license.

e. At the bottom of the page, click the **Generate** button. The **Generate Licenses** page opens.

f. In the **Number of Licenses to Generate** box, enter the number of licenses that you want to allow the FlexNet Licensing Server to manage.

g. In the **Existing License Hosts** list, select the appropriate option. If any existing servers are configured for this concurrent license, they are listed in this box.

h. If you are configuring a redundant licensing server cluster, complete the other settings as needed.

i. Click the **Generate** button. The **View Licenses** page opens. This page shows details that the Product and License Center will use to create the license file for the FlexNet Licensing Server.

j. Click the **Save All** button. The Product and License Center displays a dialog box that lets you specify the location where you want to download the license file.

k. Specify a location that is always accessible by the machine on which you are installing InstallAnywhere. The Product and License Center downloads the .lic file to the location that you specified. The file is named *HostID*.lic, where *HostID* is the host ID that you specified when you obtained the .lic file. You can change the name of this file if it makes it easier to manage it.

Once you have obtained the concurrent license file, you need to add it into the FlexNet Licensing Server. For instructions, see Adding Concurrent License Files to the FlexNet Licensing Server.

Generating an Upgrade Concurrent License for an Existing FlexNet Licensing Server

An upgrade concurrent license file lets you manage concurrent license files for the new version of InstallAnywhere, as well as for earlier versions that you previously purchased. Note that an upgrade concurrent license file does not provide additional licenses. It simply upgrades the licenses that are contained in an existing file.

Task: ***To obtain an upgrade concurrent license file (.lic) that lets you manage concurrent licenses for multiple versions of InstallAnywhere:***

1. Sign in to the *Product and License Center (https://flexerasoftware.flexnetoperations.com/)*.
2. In the Product and License Center, acquire the license file for the specific machine on which you are installing the FlexNet Licensing Server:
   a. In the left navigation, under **Entitlements**, click **Product List**.

      The **Product List** page shows all of the product lines to which your account is entitled. If you do not have access to multiple products, clicking the **Product List** link opens the **Product Information** page directly.

   b. If the **Product List** page shows multiple products, click the **InstallAnywhere** link. The **Product Information** page opens.

   c. Click the **Licenses** link for the product version that you are configuring. The **License Information** page opens. This page shows details about the used and unused licenses of the product. Typically, the details on this page show that you have no available licenses; this is because an upgrade concurrent license does not provide additional licenses. It simply upgrades the existing licenses.

   d. Find the license that you want to upgrade, and click its **Upgrade** button. The **View Licenses** page opens. Note that if you are not eligible for an upgrade license, the **Upgrade** button is not displayed.

   e. Click the **Save All** button. The Product and License Center displays a dialog box that lets you specify the location where you want to download the license file.

   f. Specify a location that is accessible by the FlexNet Licensing Server machine. The Product and License Center downloads the .lic file or files to the location that you specified. The file is named *HostID*.lic, where *HostID* is the host ID that you specified when you obtained the .lic file. You can change the name of this file if it makes it easier to manage it.

Once you have obtained the concurrent license file, you need to add it into the FlexNet Licensing Server. For instructions, see Adding Concurrent License Files to the FlexNet Licensing Server.

Adding Concurrent License Files to the FlexNet Licensing Server

The process for adding a concurrent license file to a FlexNet Licensing Server differs, depending on whether you are using lmadmin or lmgrd. For more information, see the appropriate section:

- Using the License Server Manager (lmadmin) on a FlexNet Licensing Server to Import Concurrent Licenses and Perform Related Tasks
- Using the License Server Manager (lmgrd) on a FlexNet Licensing Server to Select Concurrent Licenses

Using the License Server Manager (lmadmin) on a FlexNet Licensing Server to Import Concurrent Licenses and Perform Related Tasks

The FlexNet Licensing Server software includes a license server manager (lmadmin). The license server manager has a local Web-based user interface that lets you perform tasks such as the following ones:

- Import existing concurrent license files for your Flexera Software products.
- Perform all server configuration and most administration functions.
- Add or remove users, and configure their privileges.

To see detailed information on how to use lmadmin, see the documentation that is displayed when you click the Help button in the upper-right corner of this site.

Launching lmadmin

You can launch lmadmin and sign in to it regardless of whether you are using the machine that has the FlexNet Licensing Server or a different machine in your organization.

Task: ***To launch lmadmin:***

1. Open a Web browser and do one of the following:
   - If you are using the machine that has the FlexNet Licensing Server, visit the following site:

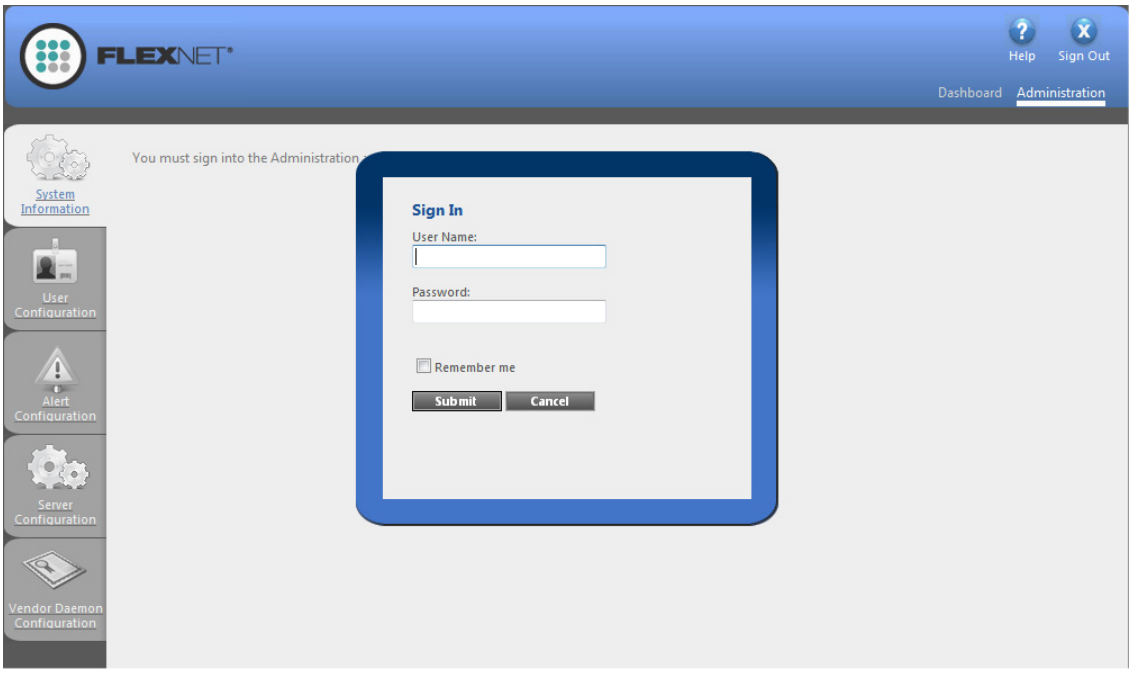
     http://localhost:*Port*

     Port is the HTTP port number that is used to host the Web server; this is configured when the FlexNet Licensing Server software is installed. The default port number is 8080.
   - If you are using a different machine (one that is not your FlexNet Licensing Server), visit the following site:

     http://*MachineName*:*Port*

     MachineName represents the name of the machine that has the FlexNet Licensing Server software. *Port* is the HTTP port number that is used to host the Web server. The default port number is 8080.

2. In the upper-right corner of the site, click the **Administration** link. The site displays the **Sign In** page.



3. Sign in. The default sign-in information is as follows. If this is the first time that you are signing in with these credentials, lmadmin prompts you to change the password.

   - User Name: admin
   - Password: admin

Tip • *If the FlexNet Licensing Server is configured to run as a service, you can start the FlexNet Licensing Server service by using the Windows Services administrative tool. If the FlexNet Licensing Server is not configured to run as a service, you can start it by running* `lmadmin.exe`. *The FlexNet Licensing Server must be started in order to allow users to check out and check in licenses.*

Setting up the mvsn Vendor Daemon and Importing a License File into lmadmin

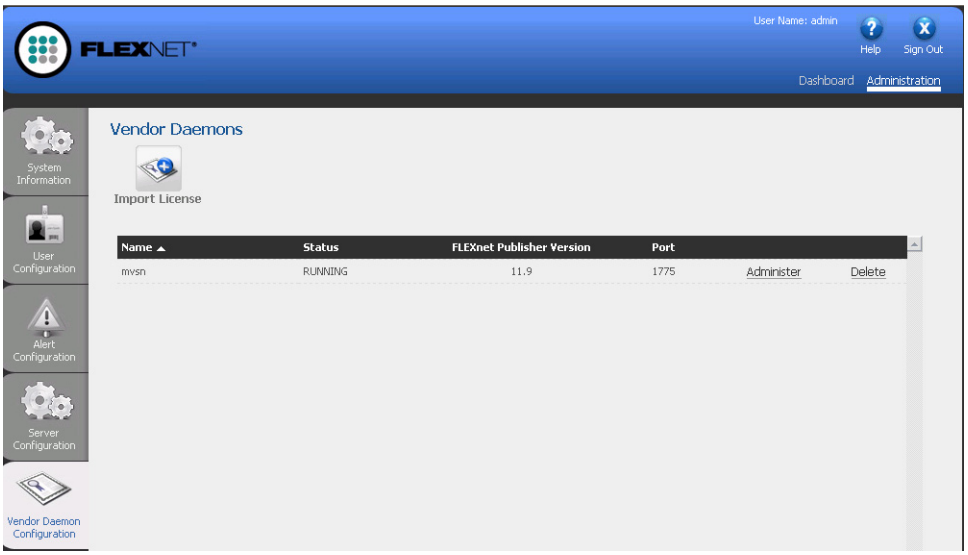
The Vendor Daemon Configuration page in lmadmin enables you to import license files for a vendor daemon. Before you import a license file, copy the mvsn vendor daemon to the appropriate location, as explained in the following procedure. The mvsn vendor daemon is used for running Flexera Software products—such as InstallAnywhere—that are FlexEnabled.

Task: ***To set up the mvsn vendor daemon and import a license file:***

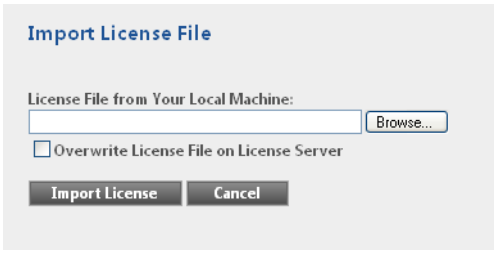
1. Ensure that you have downloaded the appropriate mvsn vendor daemon that corresponds with the operating system of your FlexNet Licensing Server. If it is not already present, copy the mvsn vendor daemon to the same folder that contains the `lmadmin.exe` file that was installed by the FlexNet Licensing Server software installation.

   To learn how to download the mvsn vendor daemon, see Downloading InstallAnywhere, Service Packs, and Other Installations.

2. Click the **Administration** link, and then click the **Vendor Daemon Configuration** tab.



3. Click the **Import License** button. The **Import License File** page opens.



4. Specify the path to the license file (.lic) that you want to use, or click the **Browse** button to navigate to it.

5. Optionally, select the **Overwrite License File on License Server** check box. If a license file exists in the upload directory on the licensing server with the same name, the licensing server will overwrite that file. This option should not be required when you are adding a new vendor daemon to the license server manager.
6. Click the **Import License** button. If this is a license file for an existing vendor, the license server manager copies the file to the appropriate directory on the licensing server.
7. If you are importing a license file for an existing vendor and you cleared the **Overwrite License File on License Server** check box, you must stop and start the vendor daemon. The new license file is read, and the licenses it contains are loaded when the vendor daemon is started.

If you imported a license file for an existing vendor and you selected the Overwrite License File on License Server check box, the updated license file is reread automatically by the vendor daemon; users can begin using any new licenses once this reread has completed. The new licenses are also displayed on the Dashboard.

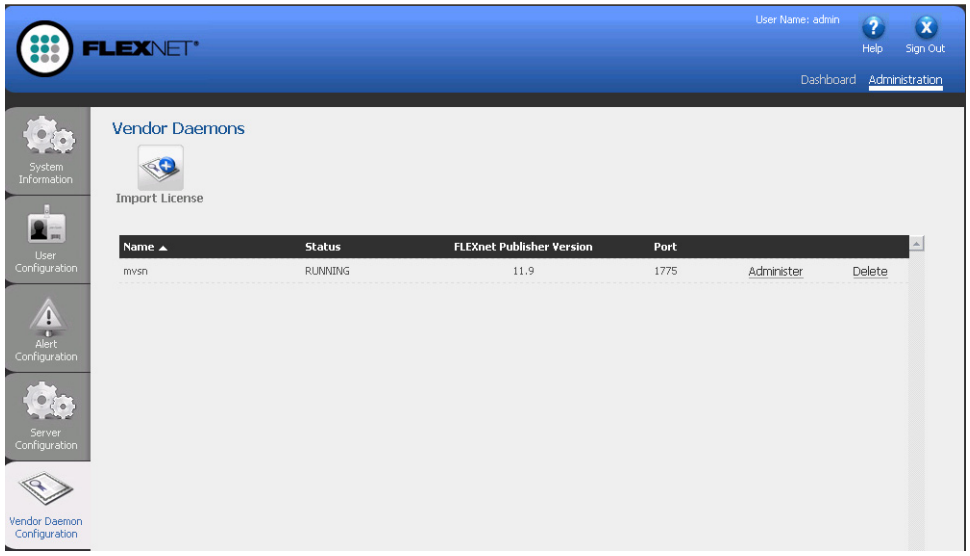
If you imported a license file for a new vendor, the license server manager adds the vendor daemon information to the license server configuration file so that the licensing server can manage it. The license server manager copies the file to the appropriate directory on the licensing server.

Administering a Vendor Daemon

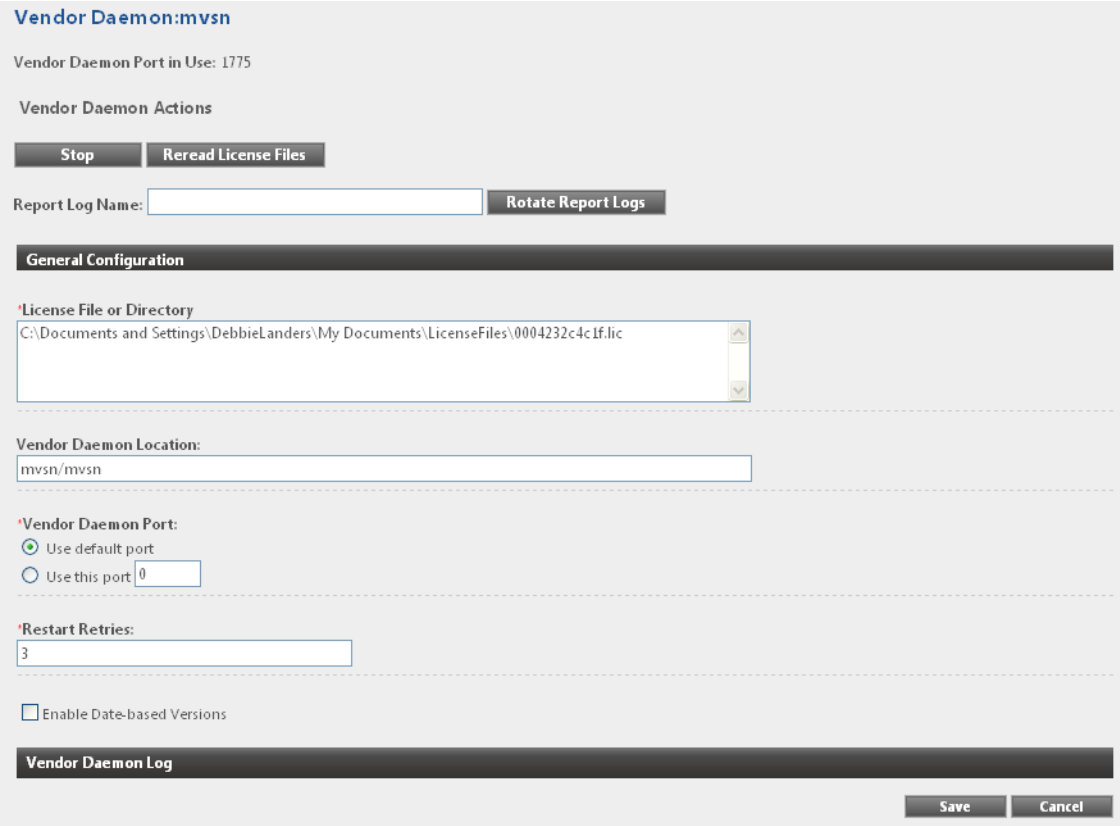
The Vendor Daemon Configuration page in lmadmin enables you to stop a vendor daemon, start a vendor daemon, and reread a license file for a vendor daemon.

Task: ***To administer a vendor daemon:***

1. Click the **Administration** link, and then click the **Vendor Daemon Configuration** tab.



2. In the vendor daemon summary grid, click the **Administer** hyperlink. Several settings are displayed.



3. Use the following settings to perform the required tasks.

   - **Vendor Daemon Port in Use**—This read-only setting displays the TCP/IP port number that the vendor daemon uses for communication with FlexEnabled applications.
   - **Stop**—This button stops the vendor daemon but leaves lmadmin running. When you stop a vendor daemon, this button changes to Start.
   - **Start**—This button starts the vendor daemon. This button is displayed only if the vendor daemon is stopped. When you start the vendor daemon, the vendor daemon reads the license files to load the license rights into memory. When you start a vendor daemon, this button changes to Stop.
   - **Reread License Files**—This button rereads the contents of the license files, trusted storage, and any vendor daemon options file and then loads the information into memory. The license files that are specified in the License File or Directory setting in the General Configuration section are reread, unless the value of the License File or Directory setting has been changed when a restart of the vendor daemon is required. Typically this button is used when the content of the license file or options file has been edited.
   - **Report Log Name**—Enter the name of the file in which to save the current report log.

- **Rotate Report Logs**—When you click this button, the FlexNet Licensing Server renames the existing report log to the name in the Report Log Name setting and creates a new empty report log file using the name in the options file. To use this capability, you must enable report logging using the options file.

To test to see if the server is running, open a Web browser on the machine on which you ran the FlexNet Licensing Server installation and go to the following URL (but substitute the appropriate port number in place of *PortNumber*):

`http://localhost:PortNumber/`

You can also visit this portal from another machine by going to the following URL. Note that your machine's firewall settings may need to be modified in order to access this site.

`http://MachineName:PortNumber/`

MachineName is the name of the machine that has the FlexNet Licensing Server software. *PortNumber* is the port number that you entered in the installation; 8080 is the default port number.

Important • *In many organizations, the person who sets up the FlexNet Licensing Server to manage concurrent licenses is not the same person who installs and uses InstallAnywhere. If this is the case in your organization, ensure that you inform users of InstallAnywhere the following information, since they will need to know it when they install InstallAnywhere and connect to the FlexNet Licensing Server:*

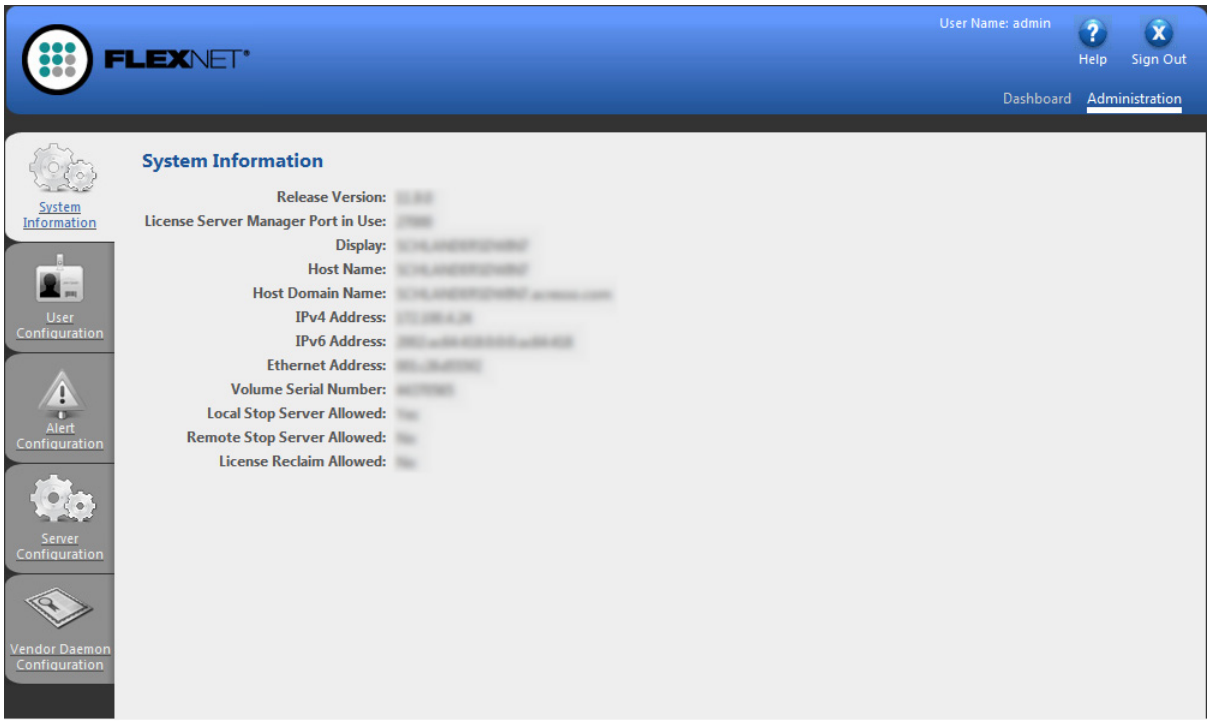
- *Name or IP address of the server on which the FlexNet Licensing Server software was installed*
- *License server port number that you entered on the Launch Configuration dialog. (In most cases, this value is left blank. If you leave this blank, inform users of InstallAnywhere that they should leave the port number setting in the InstallAnywhere installation blank.)*

Viewing System Information about the FlexNet Licensing Server

The license server manager (lmadmin) shows information about the FlexNet Licensing Server and the system that is running the FlexNet Licensing Server software.

Task: ***To view system information in lmadmin:***

Click the **Administration** link, and then click the **System Information** tab.



The System Information tab shows the following information:

- **Release Version**—Release version of the FlexNet Licensing Server.
- **License Server Manager Port in Use**—Port number that the lmadmin uses to listen for communication. To configure the port number, use the Server Configuration tab.
- **Display**—On Windows-based systems, this is the system name or the terminal server client name (in a terminal server environment). On UNIX-based systems, this is the X-Display name or the value that is returned by the ttyname() (or comparable) function.
- **Host Name**—The host name of the system where the FlexNet Licensing Server is running (for example, **prod01**).
- **Host Domain Name**—The fully qualified host name of the system on the domain where the licensing server is running (for example, **prod01.flexerasoftware.com**).
- **IPv4 Address**—IP version 4 address that is used to identify the system (for example, **255.255.255.255**). The IPv4 address is shown when the system has IPv4 enabled.

- **IPv6 Address**—IP version 6 address that is used to identify the system (for example, **ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff**). The IPv6 address is shown when the system has IPv6 enabled.
- **Ethernet Address**—The machine's host ID (which is the MAC address of the machine and is also called the physical address) that identifies the system where the FlexNet Licensing Server software is running.
- **Volume Serial Number**—The hard disk serial number that identifies the system where the licensing server is running.
- **Local Stop Server Allowed**—Indicates whether you can stop the FlexNet Licensing Server using the lmdown utility running on the machine where the FlexNet Licensing Server is running (the local machine) or from the license server management interface. To configure this setting, use the `-allowStopServer` command-line parameter when you run the lmadmin.
- **Remote Stop Server Allowed**—Indicates whether you can stop the FlexNet Licensing Server.

  If No is selected, you cannot stop the FlexNet Licensing Server from a remote machine using lmdown or the license server management interface.

  If Yes is selected, you can stop the FlexNet Licensing Server using either of the following methods:

  - Use lmdown from a remote machine—that is, a machine other than the one on which lmadmin is running.
  - Click the Stop Server button on a license server management interface that is running on a remote machine.
- **License Reclaim Allowed**—Indicates whether you can use the lmremove utility to reclaim a license from a user. To configure this setting, use the `-allowLicenseReclaim` command line parameter when you run lmadmin.

If you configured the licensing server for three-server redundancy, the Three-Server Redundancy Group Information section on the System Information tab shows the following information:

- **Quorum State**—This is the state of the quorum. As the licensing server starts up and attempts to establish a quorum, the following states are set in the order listed:
  - **None**—The licensing server is not configured for three-server redundancy.
  - **Initialize**—A quorum is being initialized.
  - **Wait**—The initialization phase is complete, but a quorum has not yet been established.
  - **Confirm**—The FlexNet Licensing Server is waiting for a confirmation message from at least one other FlexNet Licensing Server before the quorum is established.
  - **Up**—At least two licensing servers have established a quorum.
- **Master**—This is the host name of the Master.
- **Primary Is Master**—Indicates either True or False, specifying whether the PRIMARY_IS_MASTER attribute is defined in the license file.
- **Group Member Host**—The host names of the three systems that are configured in the license file.
- **Port**—Port number of each system that is displayed in Group Member Host column.

- **Status**—Status of each system in the Group Member Host column. As each FlexNet Licensing Server joins the quorum, it has one of the following statuses.
  - **None**—The FlexNet Licensing Server is not a member of the quorum.
  - **Active**—The FlexNet Licensing Server is an active member of the quorum.
  - **Connected**—The FlexNet Licensing Server has connected to the quorum.
  - **Connection Failed**—The FlexNet Licensing Server attempted to connect to another FlexNet Licensing Server, but it failed.
  - **In Process**—The FlexNet Licensing Server is attempting to connect with another FlexNet Licensing Server to establish a quorum.
  - **Initialize**—The FlexNet Licensing Server is being initialized as part of the quorum.
  - **Sent**—The FlexNet Licensing Server sent a message to another FlexNet Licensing Server in the quorum.

Using the License Server Manager (lmgrd) on a FlexNet Licensing Server to Select Concurrent Licenses

The FlexNet Licensing Server software includes a command-line based license server manager (lmgrd). The license server manager lets you perform tasks such as specify existing concurrent license files for your Flexera Software products. Before you specify a new license file, copy the mvsn vendor daemon to the appropriate location, as explained in the following procedure. The mvsn vendor daemon is used for running Flexera Software products—such as InstallAnywhere—that are FlexEnabled.

Task: ***To set up the mvsn vendor daemon and specify the concurrent license file:***

1. Ensure that you have downloaded the appropriate mvsn vendor daemon that corresponds with the operating system of your FlexNet Licensing Server. If it is not already present, copy the mvsn vendor daemon to the same folder that contains the `lmgrd.exe` file that was installed by the FlexNet Licensing Server software installation.

   To learn how to download the mvsn vendor daemon, see Downloading InstallAnywhere, Service Packs, and Other Installations.

2. If applicable, copy the InstallAnywhere concurrent license file (.lic) along with any other concurrent licenses files that you want to be managed by the FlexNet Licensing Server to the same directory.

3. Launch lmgrd from the command line. On a Windows-based machine, use the following command line:

   ```
   lmgrd.exe -c PathToDirectoryOfLicenseFiles
   ```

   On a non-Windows-based system, use the following command line:

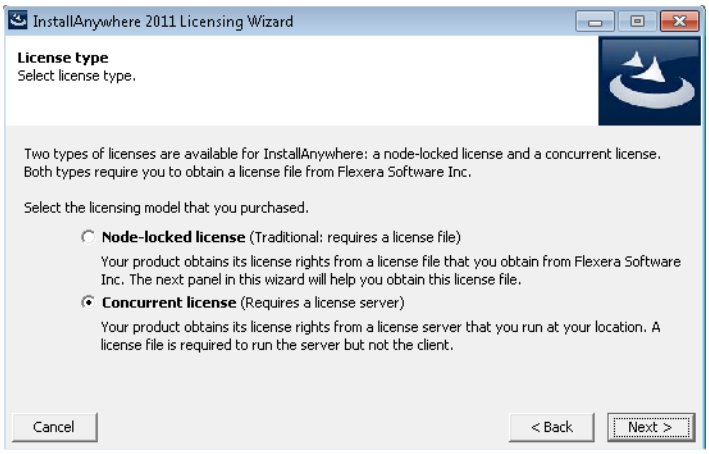
   ```
   lmgrd -c PathToDirectoryOfLicenseFiles
   ```

Connecting a User's Machine to the License Server for InstallAnywhere License Check-Outs and Check-Ins

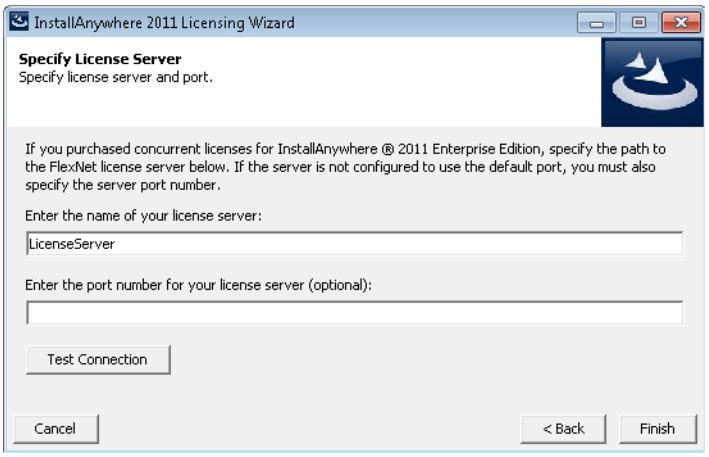
If your organization purchased concurrent licenses for InstallAnywhere, your organization must first set up the FlexNet Licensing Server. Once that has been done, you need to identify the FlexNet Licensing Server that you are using on the machine where you install InstallAnywhere.

Task: ***To identify the FlexNet Licensing Server for InstallAnywhere:***

1. Launch InstallAnywhere. Before the product starts, the licensing wizard opens.
2. Select the **Specify license information** option and then click the **Next** button.
3. On the **License Type** dialog, select the **Concurrent license** option.



4. On the **Specify License Server** dialog, enter the name or IP address of the licensing server. If the FlexNet Licensing Server that was configured in your environment uses a custom port number, enter the port number. In most cases, the port number is left blank. When you are done filling in the settings, click the **Test Connection** button to verify whether the development machine can check out and check in a license for InstallAnywhere.



5. Complete the remaining dialogs in the wizard.

The licensing wizard sets up the InstallAnywhere concurrent license on your machine.

Note • *If you want to be able to use your new concurrent license of InstallAnywhere on the same machine that is used to check out a concurrent license of InstallAnywhere 2008 Value Pack 1, download the following update and install it on your client machine:*

InstallAnywhere 2008 Value Pack 1 Concurrent License Update (http://saturn.installshield.com/product/ia/ia2008/concurrent/ia-2008-vp1-concurrent.zip)

Passing Command-Line Parameters to Build.exe to Specify FlexNet Licensing Server Information

If you try to use `build.exe` to build installations without configuring the licensing for either the full InstallAnywhere product or `build.exe`, `build.exe` runs in evaluation mode for a limited number of days, and it creates evaluation installations.

At any time when you launch `build.exe` from the command line, you can configure node-locked licensing information by passing the -registerNodeLocked parameter to `build.exe` as follows:

```
build.exe -registerNodeLocked LicenseFilePathAndName
```

LicenseFilePathAndName represents the path and file name of the license file (.lic).

Whenever you run a build with the same user account that was used to specify the node-locked license information, you can build installations. Specifying the license information is required only once—either through the licensing wizard for the full InstallAnywhere product, or through the command line for `build.exe`.

To determine the host ID of the machine, use the following command:

```
build.exe -generateHostID
```

To clear license information from your machine—for example, if you are moving the license to a different machine—use the following command:

```
build.exe -unregister
```