



**Installing and Configuring  
the Standalone PTC®  
License Server**  
PTC Creo 3.0 F000

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**PTC Inc., 140 Kendrick Street, Needham, MA 02494 USA**

# 1

## Working with the Standalone PTC License Server

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This document includes information on installing and configuring the standalone PTC License Server, a third-party license management software for your PTC software. You must install PTC License Server before you install your PTC software, unless you have purchased uncounted node-locked licenses. Refer to your sales documents to determine your license types. For the license server requirements for your installation, see the **READ THIS FIRST**.

PTC uses FlexNet Publisher from Flexera Software, Inc. as its license server. The [FlexNet Publisher License Administration Guide](#) may be helpful as you install PTC License Server.

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## PTC Licensing and License Types

All PTC software must be licensed for use. Licensing authorizes the installed software to run. PTC supports the following licenses for different purposes:

- Commercial—Fixed, full licenses for business.
- Educational—Time-sensitive licenses for students and educational institutions. The objects created using educational software are not compatible with the commercial version of the software.
- Evaluation—Limited-use licenses for a trial period.

Depending on the PTC product, a license can be one of the following types:

- Node-locked license—Restricts the use of the software to a particular computer (independent workstation).
- Floating license—Serves the software to any computer connected over the network. There are two types of floating licenses:
  - Single server license—Configured for a single computer as the server.
  - Triad license—Configured for a set of three computers on the same network. The computers work together to manage a pool of floating licenses. This configuration provides redundant backup in case of a server outage. An identical license file is used for each Triad partner.

For more information on the additional license types, refer to the product documentation.

## License Server Manager

The license server manager handles the initial contact with your PTC software that uses FlexNet licensing. It passes the connection to the appropriate vendor daemon. A license server manager serves the following purposes:

- Starts and maintains vendor daemons for serving license rights from different software.
- Transfers specific software requests to the correct vendor daemon.

There are two versions of the license server manager for license administration:

- `lmadmin`—Uses a graphical user interface (GUI)
- `lmgrd`—Uses a command-line interface

PTC currently ships with its products a license server manager based on `lmadmin` with the `ptc_d` vendor daemon at version 11.11.1. It is a replacement to the `lmgrd`-based license server manager shipped with the earlier releases of

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PTC products. If you are using an `lmgrd`-based license server manager with `ptc_d` vendor daemon of version 10.8.x, it is recommended that you migrate to `lmadmin` although it is not necessary.

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 **Note**

On a 64-bit Windows operating system, if you are installing FlexNet Publisher with a `lmadmin`-based license server manager, a 32-bit version of the FlexNet Publisher is installed in the `C:\Program Files` folder.

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## Overview of `lmadmin` as a GUI Client

The `lmadmin` license server manager supports a Graphical User Interface (GUI) client with connection over HTTP. It provides a Web-based administrative interface. It is compatible with license files and vendor daemons created with FlexNet Publisher 10.8.x and later. Use `lmadmin` for the following functions:

- Perform server configurations and administration functions
- Start the license server manager without any configuration options
- Directly configure vendor daemon and the license server manager without editing the license files
- Import existing license files
- Support multiple vendor daemons with a single `lmadmin` process
- Display license rights status
- Display alerts and monitor status of various processes, such as license expiration or unavailable licenses

See the chapter `lmadmin` – GUI-based License Server Manager in the *FlexNet Publisher License Administration Guide* for more information.

## Differences between `lmgrd` and `lmadmin`

The `lmadmin` license server manager includes all the features of the `lmgrd` license server manager. The differences between the two license server managers follow:

<code>lmgrd</code>	<code>lmadmin</code>
Uses a command-line interface.	Supports a GUI client with connection over HTTP.
Configuration settings are retained for all the sessions.	Configuration settings are session-based.

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See the chapter Migrating from `lmgrd` to `lmadmin` in the *FlexNet Publisher License Administration Guide* for more information.

## Using PTC Installation Assistant for Licensing

You must generate or update existing licenses to use the latest software for 3.0. Licenses determine the applications that you are authorized to run on your computer. The Assistant helps you perform the following licensing-related tasks:

- Generate a new license file based on your product code
- Update and reuse an existing license file on your computer or at a remote server location
- Install a single or a triad license server

## Before You Proceed

Gather all the necessary information about the installation:

- Check the following documents for the latest installation settings:
  - The PTC Hardware Notes for platform support, system requirements, and graphics card information:[http://www.ptc.com/WCMS/files/160242/en/PTC\\_Creo\\_Future\\_Platform\\_Support\\_Summary.pdf](http://www.ptc.com/WCMS/files/160242/en/PTC_Creo_Future_Platform_Support_Summary.pdf)
  - The READ THIS FIRST document of your software for any changes to your computer settings
  - The FlexNet License Server Hardware Notes for license server installation requirements:[www.ptc.com/WCMS/files/121640/en/FlexNet\\_Licensing.pdf](http://www.ptc.com/WCMS/files/121640/en/FlexNet_Licensing.pdf)
- Make note of your product code that arrives via e-mail. If you have received a license file via e-mail, store it at a secure location on your disk.
- If you have already installed PTC License Server based on `lmgrd` and choose not to migrate to `lmadmin`, you must still update the license server with license codes compatible with 3.0.
- If you have already installed PTC License Server based on `lmgrd` and choose to migrate to `lmadmin`, complete these steps before the migration:
  1. Shut down any `lmgrd` service or processes running on the system.
  2. Save the `license.dat` file from your existing license server installation to a secure location.
  3. Uninstall completely the previous installation.

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See *Migrating from lmgrd to lmadm*, in the *FlexNet Publisher License Administration Guide* for more information.

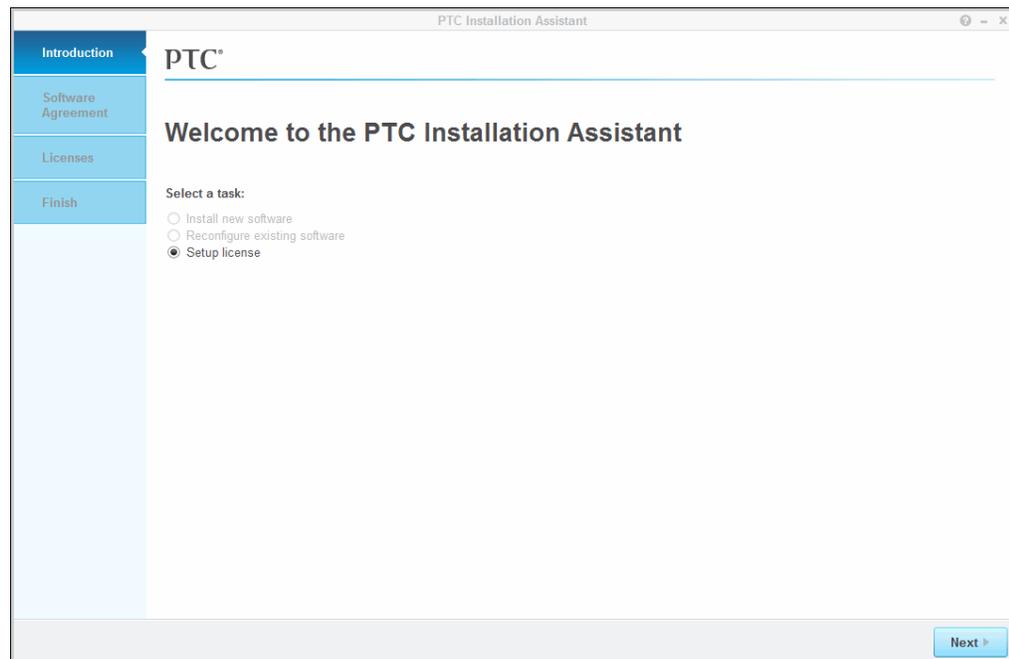
## About the Product Codes

A product code is a unique serial number corresponding to the license that you are requesting for your PTC software. An example of a product code is BH381111ED12345H4B5CXD. Product codes are nontransferable. Each product code can be used by only one individual on only one computer. Product codes are usually provided by PTC when your software order is confirmed. You can use the product codes to generate licenses using PTC Installation Assistant.

## Installing the Standalone PTC License Server

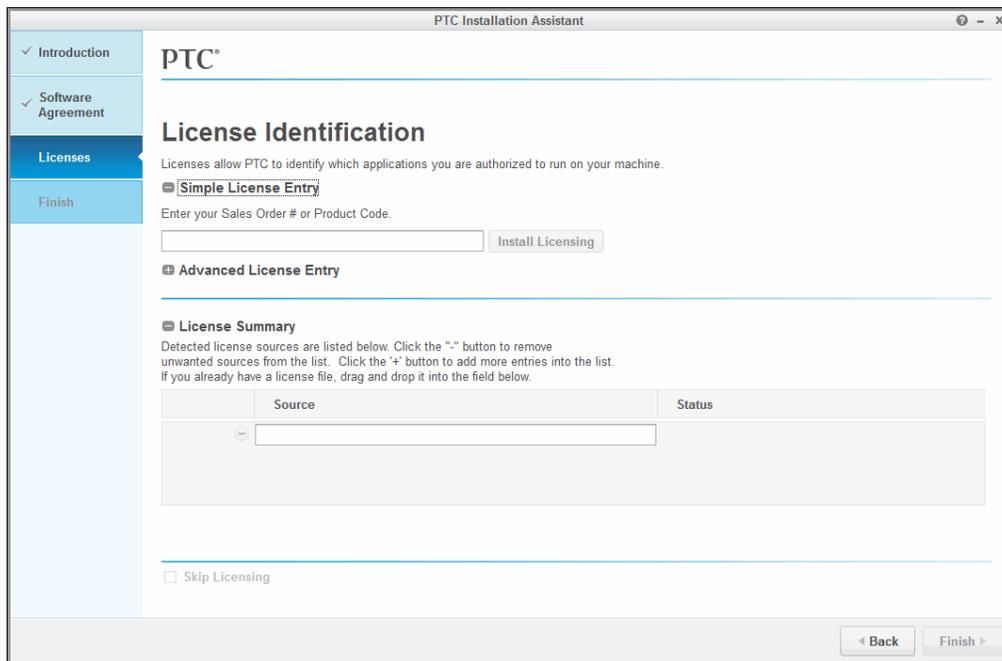
You can install the standalone PTC License Server using the following instructions:

1. On a computer connected to the Internet, go to the [PTC License Server Hardware Notes](#) page.
2. Follow the instructions on this page to download, unzip and run `setup.exe` to start the PTC Installation Assistant. Alternatively, run the self-extracting executable to start the Assistant. The Welcome screen appears.



3. Click **Setup license**.

4. Click **Next**. The **Software License Agreement** screen appears.
5. Accept the license agreement and click **Next**. The **License Identification** screen appears. Any license sources or any licenses found on the local computer appear in the **License Summary** area. See the license availability in the **Status** column.



## Using the Simple License Entry Options

Use the **Simple License Entry** area on the **License Identification** screen and perform the following steps:

1. Type your sales order number or product code in the corresponding text box.
2. Click **Install Licensing**. If the sales order number matches your software order, all the licenses corresponding to the sales order number are populated into a license file that is generated.
  - For node-locked licenses, a single set of node-locked license features are added to the license file and downloaded to the “All users”\application data\ptc\licensing\ folder.
  - For floating licenses, all the licenses are added to the license file and the PTC FlexNet Publisher license server is installed.

The complete path of the license file or the `port@hostname` value of the license server appears in the **Source** column of the **License Summary** area.

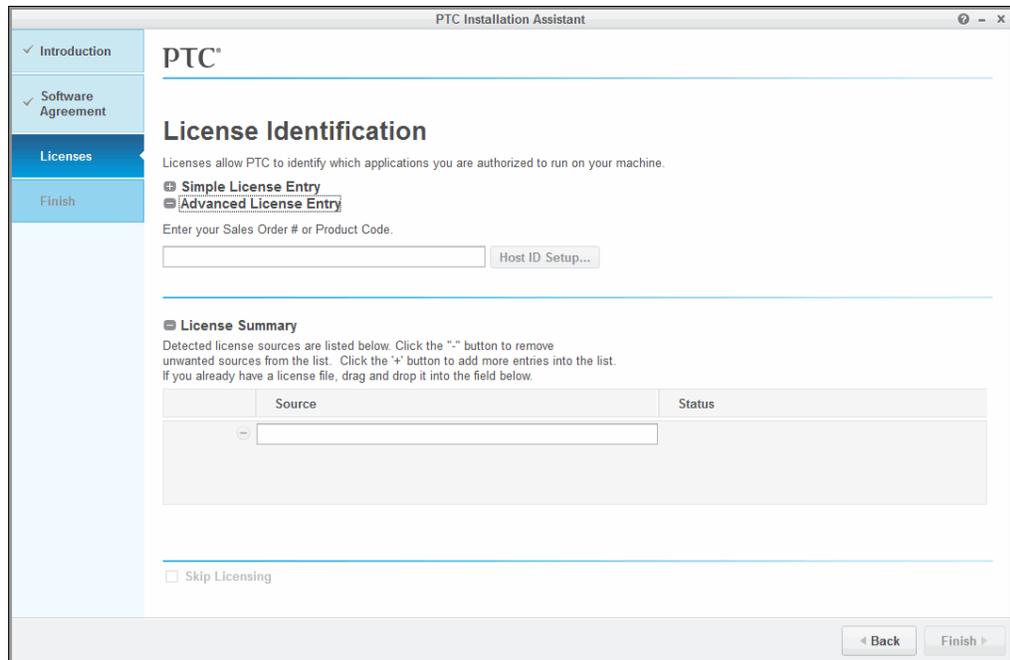
This area displays all the license files or servers available for use on your computer.

3. To complete the license setup, click **Finish** to close the Assistant.

## Using the Advanced License Entry Options

Use the **Advanced License Entry** area on the **License Identification** to edit the default license port and for the setup of a Triad license server as follows:

1. Click **+** next to **Advanced License Entry** to expand the area.



The screenshot shows the PTC Installation Assistant window. The left sidebar contains navigation options: Introduction, Software Agreement, Licenses (selected), and Finish. The main content area is titled "License Identification" and includes the following elements:

- PTC logo
- Section title: License Identification
- Text: Licenses allow PTC to identify which applications you are authorized to run on your machine.
- Two expandable options: Simple License Entry and Advanced License Entry (expanded).
- Text: Enter your Sales Order # or Product Code.
- Text input field and Host ID Setup... button.
- Section title: License Summary
- Text: Detected license sources are listed below. Click the "-" button to remove unwanted sources from the list. Click the "+" button to add more entries into the list. If you already have a license file, drag and drop it into the field below.
- Table with columns Source and Status. The Source column contains a text input field with a "-" button to its left.
- Checkbox: Skip Licensing
- Navigation buttons: Back and Finish.

2. Type your Sales Order Number or your product code in the corresponding text box.
3. Click **Host ID Setup** to open the **Host ID Setup** dialog box.

Host ID Setup

Sales Order # or Product Code  
bm,bnm

Choose from the Host ID below.

Machine ID	Port	Host
B8-AC-6F-2E-0F-A3 Broadcom NetXtre...	7788	RKADAM2D

Triad Server

Complete the additional information below.

Machine ID	Port	Host
	7788	
	7788	

Install Licensing

The sales order number or the product code from the previous step appears in the dialog box. The **Machine ID**, **Port**, and the **Host** columns for the local computer is shown.

- a. To change the default port for a single license, edit the number in the **Port** text box and click **Install Licensing**. Then skip to the last step in this section.
- b. For triad server installations, follow these steps:
  - i. Click **+** next to **Triad Server** to expand the area.
  - ii. Provide the host ID, port number, and the host name for the other two servers.
  - iii. Click **Install Licensing**. An authentication dialog box to connect to PTC.com may open if your user access has not already been validated. If so, provide your credentials and click **Log In**.

The license server is installed and appears in the **License Summary** area of the **License Identification** screen.

4. To complete the license setup, click **Finish** to close the Assistant.

## Specifying License Entry for Previously Generated License Files

Using the **License Summary** area, you can install licenses using the license files that you have already received. You can also save node-locked licenses for license entry for subsequent sessions.

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1. Drag and drop or type the path to the license file.
  2. Click outside the **License Summary** area to begin the installation of the license server for floating licenses. For the node-locked licenses, this step checks the host ID of the local computer.

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 **Note**

To save node-locked licenses for license entry in subsequent sessions, add them to the `PTC_D_LICENSE_FILE` variable.

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3. Click  or  in the **License Summary** area to add or remove license sources from the current session.

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 **Note**

Removing license sources does not delete or uninstall license files or the license server.

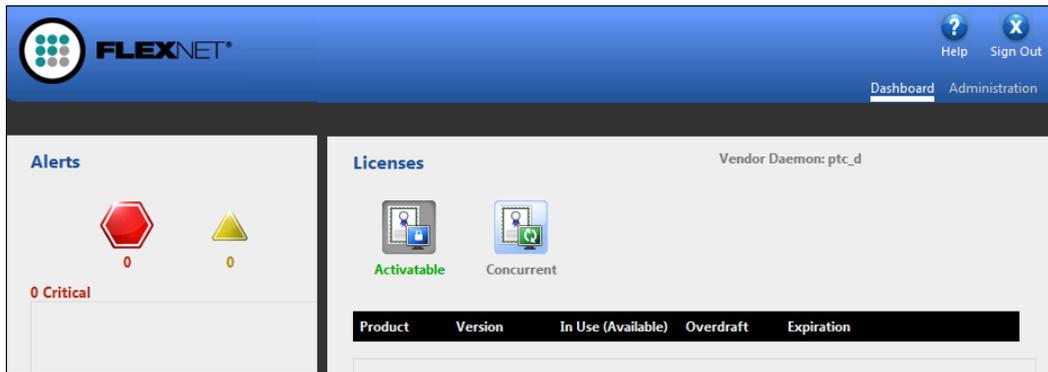
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4. To complete the license setup, click **Finish** to close the Assistant.

## Working with the Flexnet License Administrator Web Interface

The `lmadmin`-based license server uses the FLEXnet License Administrator Web interface. This interface replaces the `lmtools` utility used by the `lmgrd`-based license server. You can start the interface by clicking **Yes** at the end of the PTC License Server installation. Alternatively, from the Windows Start menu click **All Programs ► PTC ► PTC License Server ► PTC FLEXnet Admin License Server Web Interface** to open the interface. Using the FLEXnet License Administrator, you can check the server status, start and stop the server, or reconfigure the server.

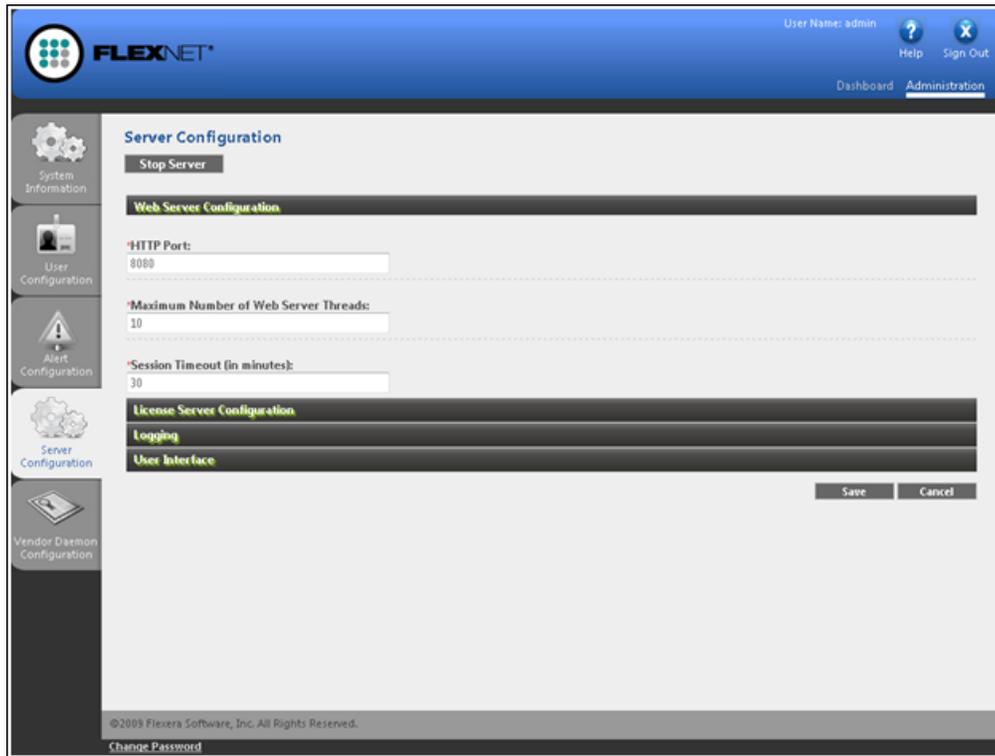
The FLEXnet License Administrator Web interface has two main pages: the **Dashboard** page and the **Administration** page. Click **Help** for information on the FLEXnet License Administrator interface elements.



- **Dashboard**—Displays any alerts and the current activity of the license server manager.
- **Administration**—Provides configuration tools for the license server management system. The default username/password combination is `admin/admin` for this password-protected page. You are prompted to change these credentials the first time you log in. Only the overview information for the **Server Configuration** and the **Vendor Daemon Configuration** tabs on the **Administration** page is included in this document. Click a tab to open the corresponding pages.

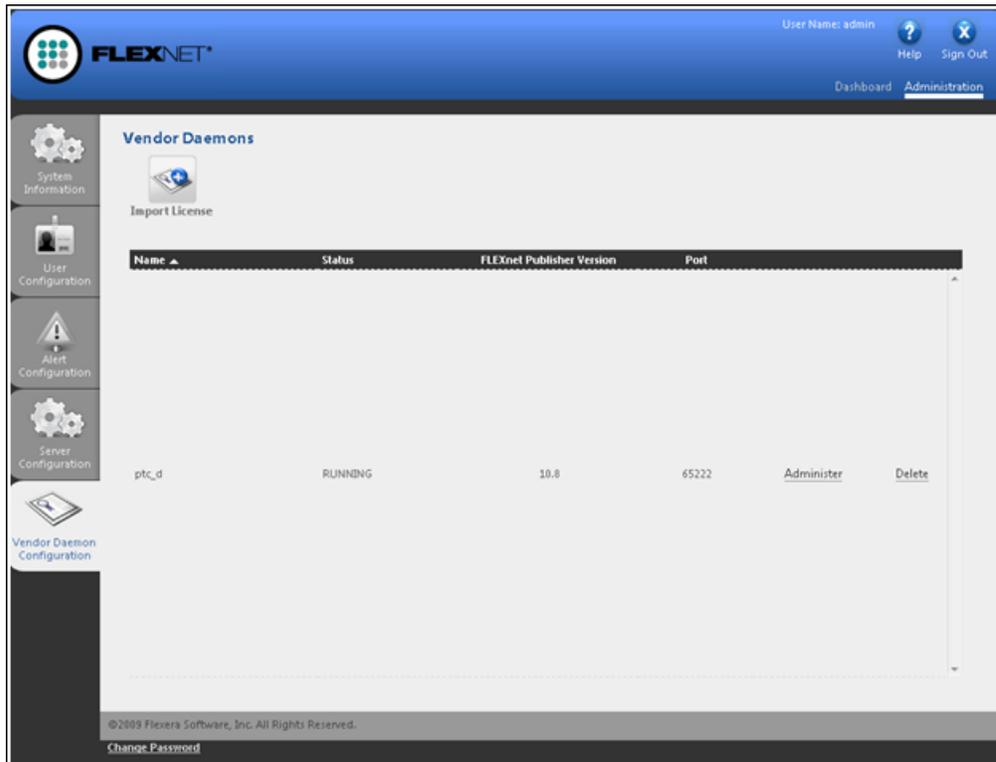
## Controlling the License Server Manager Settings

A server administrator can use the **Server Configuration** page to control the settings for the License Server Manager.



## Reconfiguring the Vendor Daemon

A server administrator can use the **Vendor Daemon Configuration** page to verify whether the server is running and to reconfigure the vendor daemon. If PTC License Server was successfully installed, **RUNNING** appears under the **Status** column.



## Port Usage for PTC License Server

PTC License Server runs on a designated server and requires a two-way TCP/IP communication between the client workstation and the server. The default port 7788 is used by the `lmgrd` and the `lmadmin` license server managers. The vendor daemon `ptc_d` dynamically selects an available port. You can designate a port value other than the default value for `lmgrd`, `lmadmin`, and `ptc_d` using the procedures given in the subsequent sections. After designating appropriate port values for these applications, you must register the values in the firewall. Otherwise, license transactions will not happen.

## Changing the Default Port on the Server

Different procedures for changing the default port on the designated server for `lmgrd` and the `lmadmin` follow. If you are running `lmgrd` as the license server manager, use the following procedure:

1. Navigate to the `<license_server_manager_loadpoint>\licensing` folder.
2. Open the `license.dat` file in a text editor.

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3. At the end of the line beginning with `SERVER`, change the port number 7788 to the desired open port.
  4. Save and close the file.
  5. Stop and restart the license server process using the `lmtools` utility.
  6. Edit the `Creo 3.0\app\bin\*.psf` and the `Creo 3.0\app\bin\*.bat` files to change the reference of `LM_LICENSE_FILE=` or `PTC_D_LICENSE_FILE =` to reflect the new `port@hostname` for the server.

If you are running `lmadmin` as the license server manager, use the following procedure to change the default port on the designated server:

1. Perform the previous steps 1 through 4.
2. Stop the `lmadmin_ptc` service.
3. Navigate to the `<license_server_manager_loadpoint>\conf` folder.
4. Open the `server.xml` file in a text editor.
5. In the line beginning with `licenseServer`, change the reference port 7788 to the desired port matching the `SERVER` line in the `license.dat` file.
6. Navigate to the `<license_server_manager_loadpoint>\bin` folder.
7. Restart the `lmadmin_ptc` service.
8. Edit the `Creo 3.0\app\bin\*.psf` and the `Creo 3.0\app\bin\*.bat` files to change the reference of `LM_LICENSE_FILE=` or `PTC_D_LICENSE_FILE =` to reflect the new `port@hostname` for the server.

## Setting a Nondefault Vendor Daemon Port

Different procedures for setting a nondefault vendor daemon port on the `lmgrd` and `lmadmin` follow. If you are running `lmgrd` as the license server manager, use the following procedure:

1. Navigate to the `<license_server_manager_loadpoint>\licensing` folder.
2. Open the `license.dat` file in a text editor.
3. Add the keyword `port=52727` (or any number > 2000) at the end of the line beginning with `DAEMON`. This designates the desired listening port for the `ptc_d` daemon.
4. Save and close the file.
5. Stop and restart the license server process using the `lmtools` utility.

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If you are running `lmadmin` as the license server manager, use the following procedure to set a nondefault vendor daemon port:

1. Perform steps 1 through 4 explained previously.
2. Stop the `lmadmin_ptc` service.
3. Navigate to the `<license_server_manager_loadpoint>\conf` folder.
4. Open the `server.xml` file in a text editor.
5. In the line beginning with `DAEMON`, change `port=0` to the desired port matching the `DAEMON` line in the `license.dat` file.
6. Restart the `lmadmin_ptc` service.

## Updating the Client Computers for the New License Server Port

If you have changed the license server manager port (`lmgrd` or `lmadmin`), you must update the client computers in order to obtain a license:

1. For each installed application, navigate to the `bin` folder in the load point. For example, if `is` is one of the installed applications, navigate to the `<creo_loadpoint>\Parametric\bin` folder.
2. Run `reconfigure.exe` to open the PTC Installation Assistant. The option **Reconfigure existing software** is selected by default.
3. Click **Next**. The **License Identification** screen appears.
4. Click  in the **License Summary** area to remove the old server reference.
5. Type the `port@hostname` value corresponding to the new server under the **Source** column. For example, the port and the host name can be `7788@myhostname`. Click  to add any new license sources.
6. Click **Next**.
7. Click **Install** and then click **Exit**.