



License Installation

This section contains the following topics:

- [WAE Design Dedicated and Floating Licenses, on page 1](#)
- [Cisco Smart Licensing, on page 2](#)
- [Install a License from WAE Design, on page 2](#)
- [Borrow and Return a Floating License, on page 3](#)
- [Install a License from the CLI, on page 4](#)

WAE Design Dedicated and Floating Licenses

A license is required for all features except for sample plan files used in the WAE Design application. If you have questions about obtaining a license, contact your Cisco support representative or system administrator.

Dedicated Licenses	Checked Out Floating Licenses	Borrowed Floating
<ul style="list-style-type: none"> • Each license is unique to a specific device. • Always available (until expiration). • No network connectivity is required. • Must be downloaded to an accessible device. 	<p>The FlexNet Publisher license server must be set up (usually by a system administrator). For information on setting up this license server, see the "WAE Design Floating License Server" chapter.</p> <ul style="list-style-type: none"> • A single license is shared among users who have permission from the license server. • You must have connectivity to the license server. • There are a maximum number of licenses, and you cannot check out one if they are all in use. • You must either download the floating license to an accessible device, or know the hostname and MAC address of the license server. To connect to a different port, you need to know the license server's port number. • Regardless of the method used, you must install the license one time. Thereafter, it is automatically checked out from the server when starting the GUI or any CLI tool. When the GUI is closed or the tool stops, the license is checked in to the license server for use by others. 	<ul style="list-style-type: none"> • Users borrow licenses that are stored on the license server for a user-specified number of days. Other users cannot use the borrowed license. • You must install the license one time. Thereafter, it is available for borrowing. • After borrowing the license file once, it is available until you return it or until the number of days for which it is borrowed expires. If you do not return it, the license expires. • Connectivity to the license server is required to borrow a license, but is not required when using a borrowed license. You must also have connectivity if returning a borrowed license prior to its expiration date. • You cannot borrow a license if a dedicated license is already installed.

Cisco Smart Licensing

Cisco offers Smart Licensing, which enables you to monitor Cisco WAE software licenses and endpoint license consumption easily and efficiently through a simple registration and license consumption reporting process instead of having to install node-locked license files. Details of all Cisco products and licenses that you have purchased are maintained in a centralized database called the Cisco Smart Software Manager (CSSM). For more information, refer to the [Cisco Smart Licensing Overview](#) on Cisco.com. To enable Smart Licensing in WAE Design, you must install the WAE server with the Smart Licensing feature enabled. Follow the steps outlined in the "Cisco Smart Licensing" section in the *Cisco WAE Server Installation Guide*.

Install a License from WAE Design

To use the WAE Design GUI, you need either a dedicated license or a floating license. *Regardless of the license type or method of installation, you need only install it one time.* If it is a floating license, thereafter when you start WAE Design, the floating license is available to check out or borrow.

To verify a license and its features, choose **File > License > Check**.

Install a License

Before you begin:

- Confirm that you have the license on an accessible device.
- For floating licenses, the FlexNet Publisher license server must be set up (usually by a system administrator).

Step 1 From the WAE Design, choose **File > License > Install**.

Step 2 Do one of the following:

- a. If you are installing a dedicated license, choose **From license file**. Click **Browse** to navigate to the location or enter the name of the license file (.lic extension).
- b. If you are installing a floating license from the license server (that is, you do not have the license file), choose **Specify license server**. Enter both the hostname and the MAC address of the license server. The MAC address must be a 12-digit hexadecimal number without any colon (:) separators.

If the port is not specified, ports 27000-27009 are scanned to find the license server port and connect to it. Optionally, you can enter the license server's TCP port number using a range of 1024 to 65535. The default license server port is 27000.

- c. If you are installing a smart license, choose **Use smart license**. Enter the host on which WAE server is installed, port on which the WAE server listens for netconf messages, and WAE server login credentials (Username and Password).

Step 3 Click **OK** to confirm the license installation.

Note Once license is installed, restart the WAE Design client to pickup the installed license.

Borrow and Return a Floating License

If you have installed a floating license, you can borrow a license from the server for up to 30 days. The license is automatically returned to the license server at 11:59 p.m. on the last day (based on the local time on the floating license server).

You must have connectivity to the floating license server to borrow a license or to return it prior to the specified date. Connectivity is not required, however, during the period of time for which you are borrowing the license.

The number of remaining available days for the license is listed under **File > License > Borrow**. To determine the exact date on which the license will expire, choose **File > License > Check**.

[Borrow a Floating License, on page 4](#)

[Return a Floating License, on page 4](#)

Borrow a Floating License

To borrow a floating license:

-
- Step 1** In WAE Design, choose **File > License > Borrow**.
 - Step 2** Enter the number of days you want to borrow the license (integer from 1 to 30), and click **OK**.
-

Return a Floating License

To return a floating license:

-
- Step 1** In WAE Design, choose **File > License > Return**.
 - Step 2** Enter the number of days you want to borrow the license (integer from 1 to 30), and click **OK**.
-

Install a License from the CLI

You can use the CLI to install licenses for all products. For each license you are installing, run the `license_install` tool. When prompted, enter the number associated with the directory in which you want to install the license.

By default, when using `license_install -file`, the tool merges the features granted by the new license with those in an existing license.

[Install a Dedicated License, on page 4](#)

[Install a Floating License, on page 4](#)

[Verify a License, on page 5](#)

Install a Dedicated License

If you are installing a dedicated license, pass the name of the license file (.lic extension). By default, the tool merges the features granted by the new license with those in an existing license.

```
license_install -file <path>/<filename>.lic
```

When prompted, enter the number associated with the directory in which you want to install the license.

By default, when using `license_install -file`, the tool merges the features granted by the new license with those in an existing license.

Install a Floating License

If you are installing a floating license from the license server (that is, you do not have the license file), use both the `-server-host` and `-server-mac` options. The MAC address must be a 12-digit hexadecimal number without any colon (:) separators.

```
license_install -server-host <license_server_hostname> -server-mac  
<license_server_MAC_address>
```

If the `-server-port` option is not specified, ports 27000-27009 are scanned to find the license server port and connect to it. Optionally, you can enter the license server's TCP port number using a range of 1024 to 65535. The default license server port is 27000. Example:

```
license_install -server-host lic.cisco.com -server-mac 1a2b3c4d5e6f -server-port 27000
```

To borrow a license, use the `license_borrow` command and specify the number of days (integer from 1 to 30). Example:

```
license_borrow -num-days 23
```

To return a license, use the `license_return` command. There are no required or optional options.

Verify a License

Run the `license_check` tool. To see descriptions of the license features, use the `-detail` option (which defaults to true). Example:

```
license_check -detail
```

To determine the number of days before the license expires and the exact date on which the license expires, use the `license_check` command.

