License Installation

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.

There are three methods of installing a license, and the method used depends on the type of license you are installing.

- Stand-alone WAE Design—Use either the WAE Design GUI or the CLI method. Both methods enable you to install dedicated and floating licenses. Floating licenses are only for use by WAE Design.

- WAE Collector and web applications—Use either the web UI or the CLI method.

- WAE Core—Use the CLI method.

Note All instructions and examples assume you used `/opt/cariden` as the default installation directory. If you did not, then substitute your installation directory for `/opt/cariden`.

License Location Restrictions

The CLI gives you the option to store the license file in one of three locations.

- `$HOME/.cariden/etc`
- `/opt/cariden/etc`
- `/opt/cariden/software/mate/<package>/etc`

Both the WAE Design GUI and the web UI put licenses only in `$HOME/.cariden/etc`.

- If installing dedicated licenses for both WAE Core and non-WAE Core, you must install the licenses in the same directory and merge both license files into a single license.

- If installing a dedicated license for WAE Core and a floating license for WAE Design on the same server, you must install the licenses in different directories.

- You cannot install both a WAE Design dedicated and a WAE Design floating license.

WAE Design Licenses

Dedicated Licenses	Checked Out Floating Licenses	Borrowed Floating
• Each license is unique to a specific device. • Always available (until expiration). • No network connectivity is required. • Must be downloaded to an accessible device.	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.	
	• A single license is shared amongst 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.	• 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.

Install License from WAE Design GUI

To use the WAE Design GUI, you need either a dedicated 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 will be available for checking out or borrowing.

To verify a license and its features, select the File->License Check menu.

Note If you have installed a license for use by the WAE Core modules, do not use the overwrite option when installing a WAE Design license.

If you are installing a dedicated license or if you are installing a floating license and you have it downloaded to an accessible device, follow these steps.

Step 1 From the WAE Design GUI, select the File->Install License menu.

Step 2 Select the "From license file" option.

Step 3   Browse to the location or enter the name of the license file (.lic extension), and click Open.

Step 4   Click OK to confirm the license installation. If there is already a license installed, you are prompted to either merge or replace the existing license. If you are uncertain whether you have a complete set of desired features in the new license, the best practice is to merge the licenses.

If you are installing a floating license from the license server (that is, you do not have the license file), follow these steps.

Best practice: If using Windows, it is recommended that you specify the port.

Step 1   Select the "Specify license file" option.

Step 2   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.

Step 3   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.

Step 4   Click OK to confirm the license installation.

Borrow and Return Floating Licenses

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 PM 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.

WAE Design GUI

The number of remaining available days for the license is listed directly in the File->License->Borrow menu. To determine the exact date on which the license will expire, use the File->License->Check menu.

To borrow a license, follow these steps.

Step 1   From the WAE Design GUI, select the File->License->Borrow menu.

Step 2   Enter the number of days you want to borrow the license (integer from 1 to 30), and click OK.

To return a borrowed license, follow these steps.

Step 1   From the WAE Design GUI, select the File->License->Borrow menu.

Step 2   Click OK in the confirmation message.

CLI

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

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.

Install License from CLI

You can use the CLI to install licenses for all products.

> **Note**   If you are installing both a WAE Core and a non-WAE Core license, you must use the default method that merges the licenses. You are given an option on where to put the license. Choose the same location for both licenses.

- For each license you are installing, run the `license_install` tool, passing it 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. If you are using only non-WAE Core licenses, you can overwrite the existing license using the `-existing-lic overwrite` option. Before executing this option, be certain that the new license contains all the necessary features because previous features will no longer be available. Do not use this overwrite option if installing licenses for both non-WAE Core and WAE Core.

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

  Example: `license_install -file acme/setup/MATEDEDICATED12345678910111213.lic -existing-lic overwrite`

- 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 verify a license and its features, run the `license_check` tool. To see descriptions of the license features, use the `-detail` option (which defaults to `true`).

  Example: `license_check -detail`

Install License from Web UI

Note   Do not use the web UI for WAE Core licenses or stand-alone WAE Design installations.

Step 1   Start the web server if it is not running.

```
service wae-web-server start
```

Step 2   Select System->Licenses.

Step 3   Click Upload Licenses.

Step 4   Click Select Licenses.

    a. Browse to the location or enter the name of the license file (.lic extension), and click Open.

    b. If there is already a license installed, the default is to overwrite the existing license. To merge the two licenses instead, select the merge option. If you are uncertain whether you have a complete set of desired features in the new license, best practice is to merge the licenses.

    c. Click Upload License.

Step 5   Verify the license installed correctly by locating it on the System->Licenses page.