



## Configuring Right-To-Use Licenses

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## Finding Feature Information

Your software release may not support all of the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.

## Restrictions for Right-To-Use AP-Count Licenses

The following are the restrictions you must keep in mind when using license for the Cisco 5700 Series Wireless Controller:

- The license you have purchased is applicable only for the Cisco 5700 Series Wireless Controller. You cannot use the same license for the earlier version of the Cisco 5700 Series Wireless Controllers.
- The CLI commands that you run for the Cisco 5700 Series Wireless Controller are applicable only for these controllers. You cannot run these commands for the earlier version of the controllers.

# Information About Configuring RTU Licenses

## Right-To-Use AP-Count Licensing

Right-to-use licensing (RTU) allows you to order and activate a specific license type, and then to manage license usage on your controller.

You can order your controller with support for a specific number of adder access point count licenses, but the total number of licenses ordered should not exceed 1000. You can also order your adder access point count licenses after receiving the controller.

For example, if you have ordered 700 new adder licenses, you can add only those ordered adder licenses to the controller. The licenses can be added in increments of 1, but the total number of licenses added for the controller should not exceed 1000.

You can configure controller to manage the access point count licenses from the CLI and view the number of access points currently in use from both the CLI and GUI.

The following are two different types of access point licenses:

- 1 Permanent licenses for the access points
  - Adder access point count license—You can purchase the adder license to increase the controller capacity at a later time. You can transfer the adder access point count license from one controller to another.
- 2 Evaluation licenses for the access points
  - You can activate these licenses to evaluate more access points before purchasing the licenses.
  - The maximum number of access points that can be evaluated is 1000.
  - The evaluation period for using the access point licenses is 90 days.
  - You can activate and deactivate the evaluation licenses from the CLI.

## Right-to-Use AP-Count Evaluation Licenses

If you are considering upgrading to a license with a higher access point count, you can try an evaluation license before upgrading to a permanent version of the license. For example, if you are using a permanent license with a 50-access-point count and want to try an evaluation license with a 100-access-point count, you can try out the evaluation license for 90 days. For example, if you are using a permanent license with a 10 access-point count and want to try an evaluation license with a 15-access-point count, you can try out the evaluation license for 90 days.

When an evaluation license is activated, the permanent AP-count licenses are ignored. The maximum supported licenses of 1000 access points are available for 90 days. The maximum supported licenses of 25 access points are available for 90 days.

To prevent disruptions in operation, the controller does not change licenses when an evaluation license expires. A warning expiry message is displayed daily starting five days prior to the expiry date. After 90 days, the

evaluation license expires with a warning message. You must disable the evaluation license and then purchase the permanent license.

When the controller reboots after the evaluation license expiry, the license defaults to a permanent license.

## Right-To-Use Adder AP-Count Rehosting Licenses

Revoking a license from one device and installing it on another is called rehosting. You might want to rehost a license to change the purpose of a device. For example, if you want to move your Office Extend or indoor access points to a different controller, you could transfer the adder ap-count license from one controller to another.

To rehost a license, you must deactivate the adder ap-count license from one device and activate the same license on another device.

Evaluation licenses cannot be rehosted.

## How to Configure RTU Licenses

### Activating an AP-Count Evaluation License (CLI)

When an evaluation license is activated, the maximum supported ap-count licenses are made available. A maximum of 1000 access points can be evaluated for 90 days by enabling the evaluation ap-count licenses.

#### SUMMARY STEPS

1. `license right-to-use activate ap-count evaluation`
2. `show license right-to-use summary`

#### DETAILED STEPS

	Command or Action	Purpose
Step 1	<b>license right-to-use activate ap-count evaluation</b>  <b>Example:</b> <code>Controller# license right-to-use activate ap-count evaluation</code>	Enables the ap-count evaluation licenses on the controller. By default during activation, the EULA gets displayed. If the <b>acceptEULA</b> is passed, the EULA content is not displayed, and you can activate the evaluation license. This option is useful for automation and scripting.
Step 2	<b>show license right-to-use summary</b>  <b>Example:</b> <code>Controller# show license right-to-use summary</code>	Verifies that the evaluation license is activated on the controller.

## Activating an AP-Count Permanent License

You can deactivate an evaluation ap-count license and activate the permanent ap-count license on the controller.

After activating ap-count permanent or adder license, if the **show license right-to-use summary** command still shows evaluation ap-count licenses, then you must deactivate the previously used evaluation license that was not deactivated earlier. Deactivate the evaluation license to enable permanent or adder ap-count licenses.

### SUMMARY STEPS

1. **license right-to-use deactivate ap-count evaluation**
2. **show license right-to-use summary**

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>license right-to-use deactivate ap-count evaluation</b>  <b>Example:</b> Controller# <code>license right-to-use deactivate ap-count evaluation</code>	Deactivates particular evaluation license level and activates the permanent ap-count licenses on the controller.
<b>Step 2</b>	<b>show license right-to-use summary</b>  <b>Example:</b> Controller# <code>show license right-to-use summary</code>	Verifies the number of permanent ap-count licenses activated on the controller.

## Obtaining an Upgrade or Capacity Adder License

You can use the capacity adder licenses to increase the number of access points supported by the controller.

### SUMMARY STEPS

1. **license right-to-use activate ap-count *ap-number* slot 1**
2. **show license right-to-use summary**

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>license right-to-use activate ap-count <i>ap-number</i> slot 1</b>  <b>Example:</b> Controller# <code>license right-to-use activate ap-count 500 slot 1</code>	Obtains an upgrade or increases the license capacity by adding new adder licenses.

	Command or Action	Purpose
<b>Step 2</b>	<b>show license right-to-use summary</b>  <b>Example:</b> Controller# <code>show license right-to-use summary</code>	Verifies the number of permanent ap-count licenses activated on the controller.

## Transferring Licenses to a Replacement Controller after an RMA

The replacement controller comes with same permanent ap-count licences.

### SUMMARY STEPS

1. `license right-to-use deactivate ap-count count slot 1 acceptEULA`
2. `license right-to-use activate ap-count count slot 1 acceptEULA`
3. `show license right-to-use summary`

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>license right-to-use deactivate ap-count count slot 1 acceptEULA</b>  <b>Example:</b> Controller# <code>license right-to-use deactivate ap-count 55 slot 1 acceptEULA</code>	Deactivates the permanent ap-count licenses on earlier controller to be replaced.
<b>Step 2</b>	<b>license right-to-use activate ap-count count slot 1 acceptEULA</b>  <b>Example:</b> Controller# <code>license right-to-use activate ap-count 55 slot 1 acceptEULA</code>	Activates the same permanent ap-count licenses on the replacement controller.
<b>Step 3</b>	<b>show license right-to-use summary</b>  <b>Example:</b> Controller# <code>show license right-to-use summary</code>	Verifies the number of ap-count licenses points activated on the replacement controller.

## Configuring Right-To-Use Licenses (GUI)

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- Step 1** Choose **Administration** > **Software Activation** > **Licenses** to open the Licenses page.
- Step 2** In the License Activation area, choose **Activate** or **Deactivate** from the **License** drop box and enter the number of adder licenses you want to activate or deactivate in the License Adder of AP-Count (1 to 1000) text box.
- Step 3** Click **Apply** and **Save Configuration**.
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## Monitoring and Maintaining RTU Licenses

### Viewing Right-To-Use AP-Count Licenses (GUI)

You can view the details of access point licenses installed on the controller using the **Licenses** and **License Usage** pages from the controller GUI.

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- Step 1** Choose **Administration** > **Software Activation** > **Licenses**.

**Example:**

The **Licenses** page appears.

This page lists all of the access point licenses installed on the controller. You can view the following details for the license:

- License name
- License type (adder, permanent, or evaluation)
- Count (the maximum number of access points allowed for this license)
- Period left for the license

In addition, you can view the following details of the AP-Count licenses:

- Whether the ap-count license is enabled or not
- The maximum number of access points allowed for this license
- The number of access points currently using this license
- The remaining ap-count licenses

- Step 2** Choose **Administration** > **Software Activation** > **License Usage**.

**Example:**

The **License Usage** page appears.

In the **License Usage** page, you can view the consolidated list of all of the licenses based on their usage duration, use of the license, and the end-user license agreement (EULA) acceptance state.

**Step 3** Choose **Administration > Software Activation > Eula > Adder, Evaluation, or Permanent**.

**Example:**

The **Eula** page for the selected license appears.

You can read the terms and the conditions for the **Adder, Evaluation, or Permanent** license.

## Viewing Right-To-Use AP-Count Licenses (CLI)

You can view the detailed information of ap-count licenses installed on the controller using the **show license right-to-use** commands from the controller CLI.

### SUMMARY STEPS

1. **show license right-to-use detail**
2. **show license right-to-use detail** | *output modifiers*
3. **show license right-to-use eula**
4. **show license right-to-use**
5. **show license right-to-use usage**
6. **show license right-to-use** | *output modifiers*
7. **show license right-to-use summary**

### DETAILED STEPS

	Command or Action	Purpose
<b>Step 1</b>	<b>show license right-to-use detail</b>  <b>Example:</b> Controller# <b>show license right-to-use detail</b>	Displays details of all of the licenses installed on the stack 1.
<b>Step 2</b>	<b>show license right-to-use detail</b>   <i>output modifiers</i>  <b>Example:</b> Controller# <b>show license right-to-use detail</b>   <b>append &lt;url&gt;</b>  <b>Example:</b> Controller# <b>show license right-to-use detail</b>   <b>begin apcount</b>	Displays the details of licenses based on the filtered search using output modifiers such as append, begin, count, exclude, format, include, redirect, section, and tee.  Appends the redirected license information output to URL. The URLs supporting append operation are crash information, flash, FTP, HTTP, HTTPS, NVRAM, RCP, SCP, TFTP, UNIX, and USB flash0.  Displays the license information that begins with the lines which match the regular expression.

	Command or Action	Purpose
	<p><b>Example:</b>  Controller# <code>show license right-to-use detail   count ap</code></p> <p><b>Example:</b>  Controller# <code>show license right-to-use detail   exclude ap</code></p> <p><b>Example:</b>  Controller# <code>show license right-to-use detail   format &lt;spec file location&gt;</code></p> <p><b>Example:</b>  Controller# <code>show license right-to-use detail   include apcount</code></p> <p><b>Example:</b>  Controller# <code>show license right-to-use detail   redirect &lt;url&gt;</code></p> <p><b>Example:</b>  Controller# <code>show license right-to-use detail   section include apcount</code>  Controller# <code>show license right-to-use detail   section exclude apcount</code>  Controller# <code>show license right-to-use detail   section license</code></p> <p><b>Example:</b>  Controller# <code>show license right-to-use detail   tee &lt;url&gt;</code></p>	<p>Displays the number of lines that match the regular expression.</p> <p>Displays the details of license information that excludes lines which match the regular expression.</p> <p>Displays the details of license information based on the format specified in the spec file.</p> <p>Displays the lines that match the regular expression.</p> <p>Redirects the license information output to URL. The URLs that support the redirect operation are crash information, flash, FTP, HTTP, HTTPS, NVRAM, RCP, SCP, TFTP, UNIX, and USB flash0.</p> <p>Filters the section of the license information output based on the include, exclude, or other regular expression options specified.</p> <p>Copies the license information output to URL. The URLs that support the copy operation are crash information, flash, FTP, HTTP, HTTPS, NVRAM, RCP, SCP, TFTP, UNIX, and USB flash0.</p>
<b>Step 3</b>	<p><b>show license right-to-use eula</b></p> <p><b>Example:</b>  Controller# <code>show license right-to-use eula adder</code>  Controller# <code>show license right-to-use eula evaluation</code>  Controller# <code>show license right-to-use eula permanent</code></p>	Displays the EULA content for the adder, evaluation, and permanent AP-count licenses.
<b>Step 4</b>	<p><b>show license right-to-use</b></p> <p><b>Example:</b>  Controller# <code>show license right-to-use</code></p>	Displays the licenses that got activated with EULA.
<b>Step 5</b>	<p><b>show license right-to-use usage</b></p> <p><b>Example:</b>  Controller# <code>show license right-to-use usage</code></p>	Displays the usage details of all licenses.



	Command or Action	Purpose
<b>Step 6</b>	<b>show license right-to-use   <i>output modifiers</i></b>  <b>Example:</b> Controller# <b>show license right-to-use   append</b>	Displays the details of licenses based on the filtered search using output modifiers such as append, begin, count, exclude, format, include, redirect, section, and tee.
<b>Step 7</b>	<b>show license right-to-use summary</b>  <b>Example:</b> Controller# <b>show license right-to-use summary</b>	Displays the summary of licenses that are currently in use.

## Examples: RTU Licenses Configuration

This example shows how to activate an ap-count evaluation license:

```
Controller# license right-to-use activate ap-count evaluation
Controller# show license right-to-use summary
```

This example shows how to activate an ap-count permanent license:

```
Controller# license right-to-use deactivate ap-count evaluation
Controller# show license right-to-use summary
```

This example shows how to obtain an upgrade or adder license:

```
Controller# license right-to-use activate ap-count 700 slot 1
Controller# show license right-to-use summary
```

This example shows how to transfer licenses to a replacement controller after an RMA. Deactivate the licenses from the controller to be replaced and activate or add the same number of licenses in the replacement controller:

```
Controller# license right-to-use deactivate ap-count 250 slot 1
```

```
Controller# license right-to-use activate ap-count 250 slot 1
Controller# show license right-to-use summary
```

## Additional References for RTU Licensing

### Related Documents

Related Topic	Document Title
RTU commands	<i>System Management Command Reference (Cisco WLC 5700 Series)</i>

Related Topic	Document Title
RTU AP image preload feature	<i>System Management Configuration Guide (Cisco WLC 5700 Series)</i>

**Standards and RFCs**

Standard/RFC	Title
None	—

**MIBs**

MIB	MIBs Link
All supported MIBs for this release.	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a>

**Technical Assistance**

Description	Link
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	<a href="http://www.cisco.com/support">http://www.cisco.com/support</a>

## Feature History and Information for RTU Licensing

Release	Feature Information
Cisco IOS XE 3.2SE	This feature was introduced.