

Licensing

Cisco Unified Communications Manager Licensing is managed by the Enterprise License Manager. Licenses are installed on Enterprise License Manager, which collects license usage information from the Unified Communications Manager and reports back license compliance or non-compliance. The Unified Communications Manager calculates license usage based upon the total number of users and devices on the system.

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Unified Communications Manager Licensing

All licensing for Unified Communications Manager is centralized and held on the Cisco Prime License Manager. Unified Communications Manager communicates with the Cisco Prime License Manager to express its licensing requirements. When users, phones, or other services are provisioned in the Unified Communications Manager, license requirements are added and the Unified Communications Manager sends the corresponding license requirements to the Cisco Prime License Manager. The Cisco Prime License Manager then compares the Unified Communications Manager license requirements with the available licenses installed and reports back license compliance or non-compliance. Unified Communications Manager licensing types are available as Cisco Unified Workspace Licensing (UWL) or Cisco User Connect Licensing (UCL).

UWL allows organizations to access a wide range of Cisco Collaboration applications and services in a cost-effective, simple package. It includes soft clients, application server software and licensing on a per user basis. Depending on your needs and device of choice, Cisco Unified Workspace Licensing is available in Professional Edition and Standard Edition.

UCL is a user-based license for individual Cisco Unified Communications products. It includes a soft client, application server software licensing, and basic unified communications applications. Depending on your needs and device of choice, UCL is available in Essential, Basic, Enhanced, or Enhanced Plus.

The following are the license types for the Unified Communications Manager:

Essential	Essential User Connect License - supports one device providing basic voice or analog
	device (phone or fax). (For example: analog phone, ATA 186, ATA 187, Cisco 3905,
	Cisco 6901)

Basic	Basic User Connect License - supports one device, including all Essential devices, plus basic (voice and video) call control features. (For example: Cisco 6911, Cisco 6921)	
Enhanced	Enhanced User Connect License - supports one device, including all Basic devices, plus advanced (voice and video) call control features including desktop, mobile clients. (For example: Cisco 3911, Cisco 3951, Cisco 6941, Cisco 6945, Cisco 6961, Cisco 79xx, Cisco 89xx, Cisco 99xx, Cisco E20, Cisco TelePresence EX60, Cisco TelePresence EX90, third party SIP)	
Enhanced Plus	Enhanced Plus User Connect License - supports up to two devices, and including Enhanced devices.	
CUWL Standard	CUWL Standard Unified Workspace Licensing (UWL) license for Unified CM - supports advanced (voice and video) call control features including desktop and mobile with maximum of ten devices per user.	
CUWL Professional	CUWL Professional Unified Workspace Licensing (UWL) license for Unified CM - includes CUWL Standard features and professional collaboration workspace application features with maximum of ten devices per user.	
TelePresence Room	TelePresence Room license - supports room based immersive and multipurpose Cisco TelePresence System endpoints and Spark Room. (For example: Cisco TelePresence System Series 3200, 3000, 1300; Cisco TelePresence MX Series; Cisco TelePresence TX Series; Cisco TelePresence System Profile Series)	

For more information, see the Cisco Prime License Manager User Guide.

License Usage Report

The License Usage Report provides the summary and detailed information on system license usage as it is reported to the Cisco Prime License Manager.

Usage details are available by license type, users, and unassigned devices. Usage information is updated once every six hours, and may be updated manually by clicking on Update Usage Details. Clicking Update Usage Details is a resource intensive process and may take a few minutes depending on the size of your system. There is a link provided to review the Unified Communications licensing information in **View all license type descriptions and device classifications**.

The **Status** message displays if there is an alarm or licensing alert (license non-compliance). See Alarms alerts and license status notification for further information on status messages. See License Compliance for further information on license compliance and non-compliance.

The **License Requirements by Type** table shows the current system license requirements. It shows current license usage (number of licenses required) by license type and summarizes the number of users and unassigned devices that are requiring licenses by license type. The Report links by license type are provided by (number of) Users or (number of) Unassigned devices and allow drill-down links. For the User report, the **user id** link provides details on user configuration per the user id. The *view details* link provides license requirements per user id. For the Unassigned Devices report, the Device Type and License Type that is required is displayed for each unassigned device.

License Usage Reports are also available summarized by **Users and Unassigned devices**. The Users row lists the total number of users configured on the system. View Usage Report for the users provides a report for all

users configured on the system and their corresponding license requirements. View Usage Report for the Unassigned Devices shows the total number of unassigned devices (devices with no associated user).



Note

Assigning a user ID to a device using Cisco Unified Communications Administration moves the device from "Unassigned Devices" to "Users" in the License Usage Report. However, adding a device to the list of controlled devices for an end user does not modify the "License Usage Report" results for the device.

The **Cisco Prime License Manager** section shows if the Unified Communications Manager is managed by an Cisco Prime License Manager. If it has been added to an Cisco Prime License Manager product inventory, it provides a link to the Cisco Prime License Manager server login page. The Unified Communications Manager must connect with the Cisco Prime License Manager at lease once every 24 hours. This connection and communications of license requirements from the Unified Communications Manager and Cisco Prime License Manager is called synchronization. The Cisco Prime License Manager status shows the Time and date stamp of the last successful synchronization between the Unified Communications Manager and Cisco Prime License Manager.

License Compliance

When first installed, the Unified Communications Manager is fully operational in demonstration mode for a grace period of 60 days, until it has successfully synchronized with the Cisco Prime License Manager and licenses are installed on Cisco Prime License Manager. After the Cisco Prime License Manager is registered, licenses are installed, and synchronization with the Unified Communications Manager takes place, the Cisco Prime License Manager communicates with the Unified Communications Manager product instance on a daily basis. The Unified Communications Manager reports the total license requirements by license type to the Cisco Prime License Manager. The Cisco Prime License Manager totals the license requirements for all connected product instances and compares the total license requirements to the total available installed licenses (the license requirements and installed license types are totaled for all product instances of the same product type.) The Cisco Prime License Manager then reports the status back to the product instance as:

- In compliance, or;
- Non-compliance

Non-compliance occurs in the following situations:

- There are an insufficient number of licenses, or;
- There has not been a successful synchronization with the Cisco Prime License Manager

Licenses in the non-compliant state for Unified Communications Manager are enforced after a 60-day grace period. At the conclusion of the grace period, Unified Communications Manager enforces non-compliance with the following service degradation:

- Devices and Users cannot be provisioned. Changing the configuration of a user that affects licensing (For example: the Enable IM and Presence and the Enable Mobility check boxes) is not allowed.
- Devices and Users cannot be de-provisioned. Any configuration changes that involve licensing (For example: disabling IM and Presence or Mobility) is allowed.

For information about licensing operations, see the Cisco Prime License Manager User Guide.

Licensing Troubleshooting

Unified Communications Manager licensing is managed by Cisco Prime License Manager, which handles licensing fulfillment, supports allocation and reconciliation of licenses across supported products. Cosc Prime Manager also provides enterprise-level reporting of usage and entitlement, which includes status messages. Alarms are generated by Unified Communications Manager.

Unified Communications Manager generates the following alarms for licensing.

Table 1: Alarms

Alarm	Description	Recommended Action
CiscoElmNotConnected	Cisco Prime License Manager Not Connected (WARNING ALARM)	
CiscoNoProvisionTimeout	The grace period for licensing has expired (WARNING ALARM)	Upload additional licenses. Verify that Cisco Prime License Manager is connected to the product.
CiscoSystemTimeChange	System time has changed (INFORMATIONAL_ALARM)	Determine why the system time changed.
CiscoGraceTimeLeft	Grace period countdown towards no provisioning allowed (INFORMATIONAL_ALARM)	Upload additional licenses. Verify that Cisco Prime License Manager is connected to the product.
CiscoSystemInOverage	System is in overage which means licensed resource limit has been exceeded on the system (WARNING_ALARM)	Upload additional licenses. Verify that Cisco Prime License Manager is connected to the product.
CiscoSystemSecurityMismatch	Certificate Mismatch between Cisco Unified Communications Manager and Cisco Prime License Manager (ERROR_ALARM)	Verify the Cisco Prime License Manager certificates. This could be a "man-in-the-middle" attack.

The following is a list of all status messages as they appear on the License Usage report window.

Table 2: Status Messages

Device	State	Alarm Message	Description
Unified Communications Manager	Demo mode	The system is operating on demo licenses that will expire in 60 days. Add this system to a Cisco Prime License Manager and install sufficient licenses to cover its usage before expiration in order to avoid losing the ability to provision users and devices.	

Device	State	Alarm Message	Description
Unified Commizators Manager	License overage	The system is operating with an insufficient number of licenses. Configure additional licenses in your Cisco Prime License Manager in order to restore the ability to provision users and devices.	License resource limits have been exceeded and the system is operating with insufficient licenses.
Unified Communications Manager	Cisco Prime License Manager not connected	The system has not synchronized successfully with Cisco Prime License Manager for 10 days. If successful synchronization does not occur within the next 50 days, you will no longer be able to provision users and devices.	Unified Communications Manager to Enterprise License Manager connectivity has been lost or a successful synchronization has not occurred.

For further license troubleshooting information, see the Cisco Prime License Manager User Guide.

Licensing Troubleshooting