



CHAPTER 15

Licensing

This chapter describes how licensing works in a Unified CVP deployment, including how Unified CVP components and ports are licensed. This chapter also presents some significant points about Unified ICM and Cisco IOS licensing.

The chapter contains the following topics:

- [Unified CVP Licensing, page 15-1](#)
- [Gateway Licensing, page 15-5](#)

Unified CVP Licensing

Unified CVP 4.0 licenses consist of Unified CVP Server Licenses, Unified CVP Port Licenses, Unified CVP Call Director Licenses, and Redundant Port Licenses. Server licenses must be ordered for every server (for example, Unified CVP server, VoiceXML server, or redundant server) that will host Unified CVP software, with the exception of the Reporting and Operations Server.

Each Unified CVP 4.0 Port license provides the use of the VoiceXML server and interactions between queuing and Unified ICM as well as subsequent call control for a single call. Redundant Unified CVP 4.0 port licenses are also available, purchased on a per-port basis, up to the maximum number of ports purchased.

In addition to Unified CVP 4.0 port licenses, Call Director licenses are available. Call Director licenses provide the ability to perform call control without the use of self-service and also provide for post-agent call control with contact center solutions other than Cisco Unified Contact Center Enterprise (Unified CCE).

Unified CVP Port Licenses

First you must determine the number and types of port licenses required. To do so, determine the busiest point in the busiest hour of the contact center. The important consideration here is not busy hour calls, but what calls are actually doing at the busiest moment in the day.

Take that moment as a snapshot, and determine the following information:

- How many calls are:
 - Waiting in queue
 - Performing simple self-service without ASR/TTS and without using the VoiceXML Server
 - Performing self-service activities that do use ASR/TTS or the VoiceXML Server

The total number of these calls corresponds directly to the number of regular (non- redundant) Unified CVP Port Licenses required.

**Note**

For Unified CVP Standalone deployments with Unified CCE, or when calls are transferred to agents using a method that takes the call away from the Unified CVP ingress gateway (such as *8 TNT, hookflash, or TBCT), do not include the number of calls talking to agents.

Unified CVP Call Director Licenses

Unified CVP Call Director Licenses are required when Unified CVP is used for IP switching with agents who are not on a Cisco Unified CCE system, such as agents on TDM ACD systems. In Unified CVP 4.0, Call Director is licensed per server, and the number of sessions is limited by the capacity available for the protocol being used on the server. SIP supports 850 sessions per server, while H.323 supports 500 sessions per server. The number of required Call Director sessions and servers corresponds to the number of simultaneous calls that are active in the Unified CVP Call Server and are connected to TDM agents.

The following guidelines apply to Unified CVP Call Director server licenses:

- Unified CVP Call Director licenses are not required for Unified CCE agents. Call Director Licenses are provided implicitly with Cisco Unified Contact Center Enterprise and do not have to be ordered separately.
- Unified CVP Call Director licenses are not required for ACD agents when the call has been transferred to those agents using a method that takes the call away from the Unified CVP ingress gateway (such as with SIP Refer, *8 TNT, hookflash, or TBCT).

Unified CVP Server Licenses

A Unified CVP Server license is required for every server on which Unified CVP software resides, with the exception of the Reporting and Operations Server.

[Table 15-1](#) summarizes the port capacity of a single server. The chapter on [Sizing, page 14-1](#), provides more information on server sizing. The number of required servers corresponds directly to the number of server licenses required.

Table 15-1 Port Capacities for a Single Server

Server Type	Port Capacity
SIP Call Server	850 ports
H.323 Call Server	500 ports
VoiceXML Server	750 ports
Co-resident SIP Call Server and VoiceXML Server	750 ports

A Server license is required for every system that provides call control, VoiceXML server, or queuing capabilities. Therefore, while Cisco Unified Contact Center Enterprise customers do not need Call Director licenses, they often do use the call control capabilities and will require a Unified CVP Server license for the systems that are providing the H.323 or SIP call control.

Reporting Server License

These licenses provide the reporting repository for Unified CVP data. Included with the license is a relational database for querying of data and examples (using Crystal Reports) to build reports. This product includes only the reporting repository and does not include the presentation server.

Two options are available with the report server, a standard version and a premium version. The standard version supports a dual processor server with a maximum of a 50 GB database for basic reporting. The premium version supports a 100 GB database on a four-way processor.

Redundant Licenses

Redundant licenses are purchased by port. You can order as many redundant ports as required, based on the desired level of redundancy, up to the number of primary ports purchased. Thus, if your redundancy model is N+N, you would order the same number of Unified CVP port licenses as standard port licenses ordered. If your redundancy model is N+1, you would order the number of redundant port licenses that you ordered for a single server. A server license must also be ordered for each additional redundant server ordered.

Ordering Examples

Example 1:

A Unified CCE customer with 1000 agents desires 400 ports for queuing, 300 ports of self-service, and 100% redundancy across two sites. The deployment uses SIP.

Solution:

Because queuing and self-service ports use the same license, this customer requires 700 Unified CVP 4.0 ports and 700 redundant ports, with 6 server licenses. (Each site requires one co-resident Call Server and VoiceXML server, plus two additional servers for CVP Call Director.)

Unified CVP components required:

- 6 Server Licenses
- 700 Port Licenses
- 700 Redundant Port Licenses
- Minimum of one Studio license
- Reporting Server License is optional

Note that no Call Director Server licenses are required for the 1000 agents because they are Unified CCE agents and already have the Call Director license.

Example 2:

A Unified ICM customer desires 300 ports of queuing, with 150 redundant ports for a TDM solution with call control for 1000 agents using H.323.

Solution:

This customer would require 300 ports of Unified CVP, 150 redundant ports, 2 Call Director Servers (each Call Director server is initially sized at 500 ports per a system) and 4 Unified CVP server licenses.

Unified CVP components required:

- 4 Server Licenses (one primary, one redundant, and 2 servers for Call Director)
- 300 Port Licenses
- 150 Redundant Port Licenses
- 2 Call Director Licenses
- Reporting Server License is optional

Example 3:

A customer desires a standalone (without Unified ICM or Unified CCE) self-service solution of 450 ports and 100% redundancy.

Solution:

This customer would require 450 ports of Unified CVP, 450 redundant ports, and 2 Unified CVP Server Licenses.

Unified CVP components required:

- 2 Server Licenses (one server for primary, one server for redundancy)
- 450 Port Licenses
- 450 Redundant Port Licenses
- Reporting Server License is optional (If Reporting is desired, an additional Server license is required for the Call Server used for Reporting.)

Studio Licenses

A Studio license provides the environment to build a self-service application that executes on the VoiceXML server. Studio licenses are required only for the developers who will be building the self-service applications, and they are installed on the developers' PCs. While customers normally have at least one studio license, a studio license is not required if you are not developing or maintaining your own applications. In addition, a server license is *not* required for the machines on which a studio is installed.

License Enforcement

All Unified CVP software is now “node locked,” which means that users must register their licenses and provide a server ID to receive a license. Ports are enforced on the Unified CVP VoiceXML Server, with Unified CVP Server licenses set to the maximum number of sessions allowed per server.



Note

A single port license is used when a VoiceXML session is established. Therefore, one port license is consumed, whether the call is being serviced by a self-service application or is being queued.

ASR/TTS Licensing

ASR and TTS licenses are not sold by Cisco; they must be acquired directly from the vendor. ASR and TTS port licenses are carefully enforced for all the vendors currently supported by Unified CVP. The license is checked out the moment a call needs to use it, and it is reserved until the call leaves the VoiceXML gateway.

**Note**

This behavior is different than for VoiceXML Server licenses.

Also, ASR and TTS licenses are independent: a call checks out an ASR license when it first needs to use ASR services, and a TTS license when it first needs to use TTS services.

If you plan to move calls from self-service to queuing functionality, you will most likely want to release the ASR and TTS licenses. However, Unified CVP makes no distinction between a call that is at the VoiceXML gateway for self-service purposes and one that is there to play queue music. It does not know that the call has progressed from self-service to queuing services. The same VoiceXML gateway session remains active across the transition, so any ASR and TTS licenses that were obtained in the first phase are not automatically released.

You can, however, force the licenses to be released by causing the call to be removed from the VoiceXML gateway and then redelivered there as a new VRU leg call. Removing it from the VoiceXML gateway releases the ASR and TTS licenses, and redelivering the call makes it immediately available to play queue prompts again, but this time without ASR and TTS licenses. You can accomplish this result by placing an explicit `SendToVRU` node or `TranslationRouteToVRU` node ahead of the `Queue` node.

Gateway Licensing

Gateway and Cisco IOS licensing are generally beyond the scope of this document. However, if you are using any of the Cisco Integrated Services Router (ISR) gateways (Cisco 2800, 3700, or 3800 Series Routers) as VoiceXML gateways, you also must purchase FL-VXML- 1 or FL-VXML-12 licenses.

