

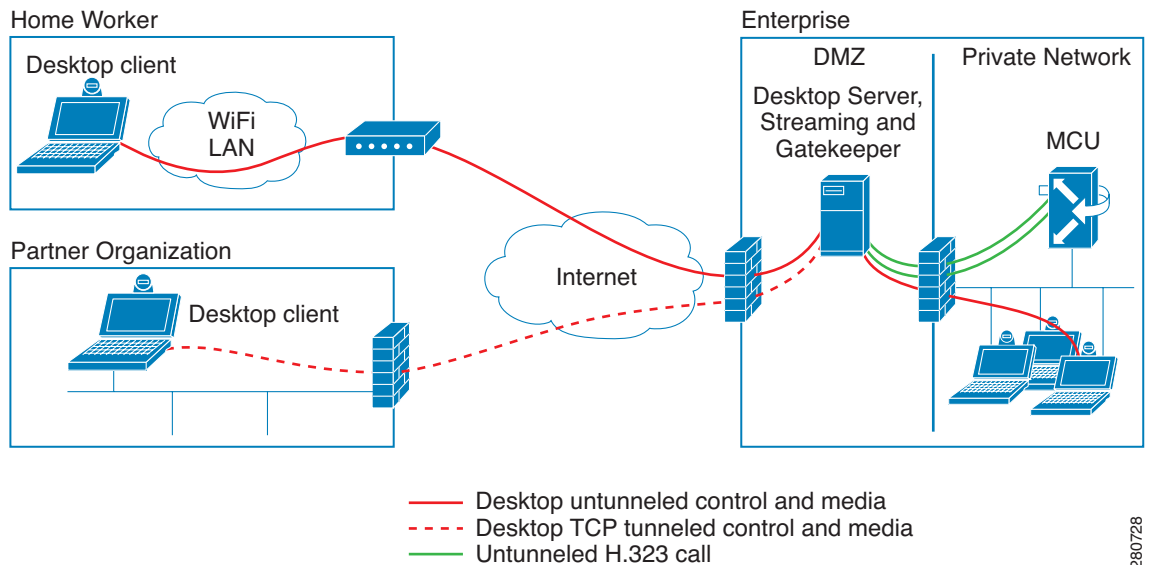


# CHAPTER 27

## Cisco Unified Videoconferencing Desktop Features

Cisco Unified Videoconferencing Desktop is a feature module of the Cisco Unified Videoconferencing Manager product which provides the ability to establish and participate in video conferences using personal computers with Webcams. The Desktop module of the Cisco Unified Videoconferencing Manager consists of a Desktop Server, a Desktop Client component, a Conference Server and a Desktop Recording Server as shown in [Figure 27-1](#).

**Figure 27-1 Basic Desktop Deployment**



[Table 27-1 on page 27-2](#) describes Desktop specifications.

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**Table 27-1 Desktop Specifications**

Specification	Description
Client Connectivity Modes	<ul style="list-style-type: none"> <li>• Live connection (audio, video, data, chat) for interactive participants</li> <li>• Data-only connection with moderation capabilities, optional call back</li> <li>• Streaming mode for non-interactive participants</li> </ul>
Recording and Playback (Optional)	<ul style="list-style-type: none"> <li>• Records audio, video, data and annotations</li> <li>• Auto-posted for easy web access</li> <li>• PIN protected for access security</li> <li>• Permit anyone to record or restrict users<sup>1</sup> by administrator</li> </ul>
Data Collaboration	<ul style="list-style-type: none"> <li>• H.239 based data collaboration built into the client</li> <li>• Room system-compatible data collaboration format (H.263+ XGA and H.264 up to 720p)</li> <li>• Data shared from a room system visible in all other rooms and on desktops</li> <li>• Data shared from a desktop visible on all other desktops and in rooms</li> <li>• Share the entire screen or specific applications</li> <li>• Text chat with emoticons for desktop users</li> </ul>
OS Language Supported for the Cisco Unified Videoconferencing Desktop Server	English
Outlook Add-in (optional)	Supports Microsoft Outlook 2003 and 2007

1. When working with Cisco Unified Videoconferencing Manager.

Table 27-2 describes Desktop features.

**Table 27-2 Desktop Features**

Feature	Description
Meeting Types	<ul style="list-style-type: none"> <li>• Unmoderated meetings—Anyone can control the meeting</li> <li>• Moderated meetings—Moderator PIN required to control the meeting</li> <li>• Personal virtual rooms</li> </ul>
Built-In NAT and Firewall Traversal	<ul style="list-style-type: none"> <li>• Traverses local and remote firewall to ensure connectivity</li> <li>• Automatically handles local and remote NAT private networks</li> <li>• Automatic detection of optimal media path: UDP, TCP or tunneled TCP</li> </ul>

**Table 27-2 Desktop Features (continued)**

<b>Feature</b>	<b>Description</b>
Built-In Streaming	<ul style="list-style-type: none"> <li>• Built-in streaming server supports ‘watch-only’ participants</li> <li>• Simultaneous streaming of audio, video and data</li> <li>• Unicast or multicast streaming for scalability</li> </ul>
Scheduling and Reservation	<ul style="list-style-type: none"> <li>• Outlook plug-in for easy meeting scheduling</li> <li>• Web-based meeting scheduling from any browser<sup>1</sup></li> <li>• Ports can be reserved assuring availability for critical meetings<sup>1</sup></li> <li>• Lotus Notes-based scheduling</li> </ul>
Security	<ul style="list-style-type: none"> <li>• SRTP encryption to ensure the privacy of media and signaling between Desktop Clients</li> <li>• Waiting room capability – Meeting will not start until moderator joins<sup>1</sup></li> <li>• Predefined virtual rooms – Optional mode where only predefined virtual rooms can be used for meetings<sup>1</sup></li> <li>• The Callback feature can be optionally disabled to avoid misuse</li> </ul>
Recording Meetings	<ul style="list-style-type: none"> <li>• Recording meetings</li> <li>• Editing recorded meeting attributes</li> <li>• Managing recordings (moderators only)</li> <li>• Watching recorded meetings</li> <li>• Auto-recording scheduled via Cisco Unified Videoconferencing Manager</li> </ul>
User Controls	<ul style="list-style-type: none"> <li>• Mute/unmute</li> <li>• Enable/disable video camera</li> <li>• Turn on/off local self view</li> <li>• Choose your video layout (active speaker or continuous presence)</li> <li>• Have the system call my voice or video number (callback)</li> <li>• View consolidated conference roster (desktops and rooms)</li> <li>• Request permission to speak when muted</li> </ul>

**Table 27-2 Desktop Features (continued)**

Feature	Description
Moderator Controls	<ul style="list-style-type: none"> <li>• Acquire moderator rights (may require moderator PIN)</li> <li>• Lock meeting</li> <li>• Terminate meeting</li> <li>• Invite any room system or phone (dial-out)</li> <li>• Global directory for easy inviting</li> <li>• Start/stop streaming</li> <li>• Start/stop recording</li> <li>• Mute, unmute and disconnect any participant</li> <li>• DTMF keypad</li> <li>• Grant permission to speak</li> <li>• Block video from a participant</li> </ul>
Layout Selection	<ul style="list-style-type: none"> <li>• Automatic</li> <li>• Mixed</li> <li>• Side-by-side video and presentation</li> <li>• Stacked</li> <li>• Full screen video or presentation</li> </ul>
Client Interface Languages	<ul style="list-style-type: none"> <li>• Chinese (Simplified)</li> <li>• Chinese (Traditional)</li> <li>• English (US)</li> <li>• French</li> <li>• German</li> <li>• Italian</li> <li>• Japanese</li> <li>• Korean</li> <li>• Portuguese</li> <li>• Russian</li> <li>• Spanish (international)</li> </ul>

1. When working with Cisco Unified Videoconferencing Manager.

Table 27-3 describes rates and codecs Desktop sends and receives depending on which video quality is set.

**Table 27-3 Rates and Codecs Supported by Desktop**

Type	Call Rate	Audio	Video (No Data)	Video with Sending Data	Data
Standard Definition	384K	G.722.1 at 24K	H.264 CIF at 360K	H.264 CIF at 168K	H.263+XGA or H.264 720p at 192K
High Definition	1M	G.722.1 at 24K	Send H.264 480p at 500K Receive H.264 720p at 1M	Send H.264 480P @ 256K Receive H.264 720P @ 768 K	H.263+ XGA or H.264 720P at 256K

Table 27-4 describes recommended client computer requirements.

**Table 27-4 Recommended Client Computer Requirements**

Specification	Description
For interactive conferencing	<p>For Standard Definition:</p> <ul style="list-style-type: none"> <li>Pentium 4 3.0GHz or faster or Centrino Mobile Processor 1.8 GHz or faster</li> <li>1GB RAM</li> </ul> <p>For High Definition:</p> <ul style="list-style-type: none"> <li>Dual Core 2.0 GHz or faster</li> <li>2GB RAM</li> </ul> <p>Operating System (OS):</p> <ul style="list-style-type: none"> <li>Windows XP Service Pack 2 or higher</li> <li>Windows Vista SP1</li> </ul> <p>Helper Application: Web Browser:</p> <ul style="list-style-type: none"> <li>Internet Explorer® 6, 7 or 8</li> </ul>
For watching webcast or a recorded meeting	<p>Operating System:</p> <ul style="list-style-type: none"> <li>Windows 2003</li> <li>Windows 2008</li> <li>Windows XP</li> <li>Mac OS X<sup>1</sup></li> </ul> <p>Web Browsers:</p> <ul style="list-style-type: none"> <li>Internet Explorer 6, 7 or 8</li> <li>Firefox 2 or 3</li> <li>Safari3.1<sup>2</sup></li> </ul>

1. You can install and use Cisco Unified Videoconferencing Desktop Conference Client on computers using the Microsoft Windows and Mac. For the Mac OS, Cisco Unified Videoconferencing Desktop supports limited functionality allowing users to watch webcasts and recordings but not to participate in live meetings.
2. Used for streaming on Mac OS X operating systems.

In a Desktop client, a CPU auto-detect mechanism is used to define whether this client is capable of performing interactive conferencing using a high definition or standard definition service, and at what rate the client can send and receive video.

The CPU estimation is based on the number of physical cores available on the client computer and is performed using this formula:

$$\text{EstimatedCPU} = \text{NumberPhysicalCore} \times \text{SpeedOfEachCore}$$

Desktop uses the EstimatedCPU value to define what frame rate to allow for each resolution. shows framerates that Desktop sends to clients.

**Table 27-5** *Framerates sent by Desktop*

CPU	CQCIF	QCIF	CIF	480p	HD
6Ghz	30	30	30	30	30
4Ghz	30	30	30	15	15
3Ghz	30	30	30	5	
2Ghz	30	30	15	5	
<2Ghz	30	30	15	1	