

Cisco Unified Media Engine 2.4

This data sheet provides an overview of features and ordering information for Cisco® Unified Media Engine, which provides ready-to-use, sophisticated media processing capabilities for all applications built using the Cisco Unified Application Designer.

Cisco® Unified Communications is a comprehensive IP communications system of voice, video, data, and mobility products and applications. It enables more effective, more secure, more personal communications that directly affect both sales and profitability. It brings people together by enabling a new way of communicating—where your business moves with you, security is everywhere, and information is always available...whenever and wherever it is needed. Cisco Unified Communications is part of an integrated solution that includes network infrastructure, security, mobility, network management products, lifecycle services, flexible deployment and outsourced management options, end-user and partner financing packages, and third-party communications applications.

Product Overview

Part of the Cisco Unified Application Environment, the Cisco Unified Media Engine is a software-only media server that provides ready-to-use, sophisticated media processing capabilities for all applications built using the Cisco Unified Application Designer—functions such as interactive voice response (IVR), conferencing, transcoding, text-to-speech (TTS), speech recognition, and speaker verification. By using the Cisco Unified Media Engine to provide media processing capabilities, organizations can more rapidly and easily build feature-rich applications that converge voice, video, and data to streamline crucial business processes.

Key Features and Benefits

- **IVR**—The Cisco Unified Media Engine supports IVR functions such as playing prompts, recording audio, detecting and generating dual-tone multifrequency (DTMF) digits, and monitoring for silence and nonsilence conditions. Additionally, developers can take advantage of complex termination and barge conditions when building applications to construct highly sophisticated IVR systems.
- **Conferencing**—Developers can take advantage of the native audio mixing capabilities of the Cisco Unified Media Engine when building applications. The Cisco Unified Media Engine performs n-way summing and supports coach and pupil connections for applications that require a whisper or training function.
- **Transcoding**—The Cisco Unified Media Engine frees the developer from implementation concerns associated with transcoding and other media format-related concerns when building an application. The media engine automatically transcodes supported audio codecs when performing conferencing and other multistream operations.
- **TTS**—The Cisco Unified Media Engine offers a sophisticated onboard TTS engine and provides sophisticated voice-generation capabilities. Developers can tune the TTS dictionary by adding their own pronunciations for words that should be pronounced differently, and by using the Speech Synthesis Markup Language (SSML), developers can control the pronunciation of phrases in a fine-grained manner.

- **Speech recognition**—Developers can use speech recognition when building applications, for example, to recognize a spoken account code rather than requiring a user to enter the account code on a telephone keypad. The Cisco Unified Media Engine natively supports the Nuance speech platform and the Grammar XML (GRXML) standard.
- **Speaker verification**—Speaker verification can be used, for example, to authenticate a user based on voice rather than requiring the user to authenticate by using a telephone keypad to enter a numeric account code and PIN. This biometric voiceprint authentication capability greatly extends a developer's options when building applications. Voiceprint authentication frees users from having to remember PIN codes and provides the developer with a secure, fault-tolerant method for authenticating these users. The Cisco Unified Media Engine natively supports the Persay speech platform.

Product Specifications

Table 1 lists the specifications of the Cisco Unified Media Engine.

Table 1. Product Specifications

Item	Specification
Product compatibility	Compatible with Cisco Unified CallManager 3.3, 4.0, 5.0, and Cisco Unified Communications Manager 6.0; Cisco Unified Communications Manager Express 4.0 and 5.0; Cisco Unified Presence 1.0 and 6.0; Cisco Unified IP Phones; Cisco IP Communicator; Cisco Unified Application Designer 2.4; and Cisco Unified Application Server 2.4
Options	• Standard Edition allows unlimited licensed media resources per server (subject to the server's processing and memory capacity) • Small Environment Edition allows up to 16 of each media resource type (voice, Real-Time Transport Protocol (RTP), conferencing, etc.) per server

System Capacity

The Cisco Unified Media Engine can scale up to 400 concurrent connections per system, subject to the server's processing and memory capacity. It can be clustered using multiple systems for greater capacity and high availability.

Features

- **IVR**
 - Capability to play and record in VOX and WAV file formats
 - Capability to play multiple prompts in sequence
 - DTMF detection, both in band (including RFC 2833) and out of band
 - Complex termination conditions support
 - Multicast support for IVR
- **Conferencing**
 - Individual conference mute and kick
 - Conference recording: up to 64 concurrent conferences recorded per box
- **TTS using embedded NeoSpeech server**
- **Speech recognition using Nuance or SpeechWorks**
- **Speaker verification using Persay**
- **Support for low-bit-rate coders (G.723 and G.729a) and transcoding**

System Requirements

The Cisco Unified Media Engine is certified to run in production environments only on the compatible Cisco hardware systems listed in Table 3 in the Ordering Information section of this document. For development and test uses only, developers may install the Cisco Unified Media Engine on a Windows PC. Table 2 lists system requirements for the Cisco Unified Media Engine in this development environment configuration.

Table 2. System Requirements

Item	Requirement
Disk space	128 MB (together with Cisco Unified Application Server)
Hardware	Pentium 4 or faster processor
Memory	512 MB (together with Cisco Unified Application Server)
Software	Windows XP

Ordering Information

Developers who want to use the Cisco Unified Media Engine together with the Cisco Unified Application Designer and Cisco Unified Application Server to create new applications for the Cisco Unified Communications system of voice, video, and IP communications products can download the Cisco Unified Media Engine free for development and test use. To download this software, go to the [Download Page](#) of the Cisco Unified Application Environment developer website.

Customers who want to deploy the Cisco Unified Media Engine in production environments must purchase software licenses. To place an order, visit the [Cisco Ordering Home Page](#) and refer to Table 3. For more detailed ordering information and instructions, see the Ordering Guide for the Cisco Unified Application Environment, or send an email to cuae-sales@cisco.com.

Table 3. Ordering Information

Product Name	Part Number
Software License Descriptions	
SW/LIC/KEY Cisco Unified Media Engine 2.4 Standard Edition	UME2.4-K9-H2.0
SW/LIC/KEY Cisco Unified Media Engine 2.4 Small Environment Edition, 16 Resource Limit	UME2.4-K9-H2.0-SE
LIC/KEY Cisco Unified Media Engine 2.4 Media Resources	UME2.4-MR
Hardware System Descriptions	
HW 7845-H2 Server, Dual Core Xeon 5140 2.33GHz, 4 GB Memory, 4x72GB HD	MCS-7845-H2-IPC1
HW 7845-I2 Server, Dual Core Xeon 5140 2.33GHz, 4 GB Memory, 4x72GB HD	MCS-7845-I2-IPC1
HW 7835-H2 Server, Dual Core Xeon 5140 2.33GHz, 2 GB Memory, 2x72GB HD	MCS-7835-H2-IPC1
HW 7835-I2 Server, Dual Core Xeon 5140 2.33GHz, 2 GB Memory, 2x72GB HD	MCS-7835-I2-IPC1
HW 7825-H3 Server, Dual Core Xeon 3050 2.13GHz, 2 GB Memory, 2x160GB HD	MCS-7825-H3-IPC1
HW 7825-I3 Server, Dual Core Xeon 3050 2.13GHz, 2 GB Memory, 2x160GB HD	MCS-7825-I3-IPC1
HW 7816-H3 Server, Celeron D 352 3.2GHz, 2 GB Memory, 1x160GB HD	MCS-7816-H3-IPC1
HW 7816-I3 Server, Celeron D 352 3.2GHz, 2 GB Memory, 1x160GB HD	MCS-7816-I3-IPC1

For More Information

For more information about the Cisco Unified Media Engine, visit <http://www.cisco.com/go/mediaengine/> or contact your local Cisco account representative or cuae-sales@cisco.com.

Cisco Unified Communications Services and Support

Using the Cisco Lifecycle Services approach, Cisco and its partners offer a broad portfolio of end-to-end services to support the Cisco Unified Communications system. These services are based on proven methodologies for deploying, operating, and optimizing IP communications solutions. Initial planning and design services, for example, can help you meet aggressive deployment schedules and minimize network disruption during implementation. Operate services reduce the risk of communications downtime with expert technical support, and optimize services enhance solution performance for operational excellence. Cisco and its partners offer a system-level service and support approach that can help you create and maintain a resilient, converged network that meets your business needs.



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