



# Introduction

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Cisco CallManager serves as the software-based call-processing component of the Cisco IP Telephony Solutions for the Enterprise, part of Cisco AVVID (Architecture for Voice, Video and Integrated Data). The Cisco IP Telephony Applications Server provides a high-availability server platform for Cisco CallManager call processing, services, and applications.

The Cisco CallManager system extends enterprise telephony features and functions to packet telephony network devices such as IP phones, media processing devices, Voice-over-IP (VoIP) gateways, and multimedia applications. Additional data, voice, and video services such as unified messaging, multimedia conferencing, collaborative contact centers, and interactive multimedia response systems interact through Cisco CallManager open telephony application programming interface (API).

Cisco CallManager provides signaling and call control services to Cisco integrated telephony applications as well as third-party applications. It performs the following primary functions:

- Call processing
- Signaling and device control
- Dial plan administration
- Phone feature administration
- Directory services

- Operations, administration, maintenance and provisioning (OAM&P)
- Programming interface to external voice-processing applications such as Cisco SoftPhone, Cisco IP Interactive Voice Recognition (IP IVR), Cisco Personal Assistant, and Cisco WebAttendant

## Key Features and Benefits

The Cisco CallManager system includes a suite of integrated voice applications that perform voice conferencing and manual attendant console functions. This suite of voice applications means that no need exists for special-purpose voice-processing hardware. Supplementary and enhanced services such as hold, transfer, forward, conference, multiple line appearances, automatic route selection, speed dial, last-number redial, and other features extend to IP phones and gateways. Because Cisco CallManager is a software application, enhancing its capabilities in production environments only requires upgrading software on the server platform, thereby avoiding expensive hardware upgrade costs.

Distribution of Cisco CallManager and all Cisco IP phones, gateways, and applications across an IP network provides a distributed, virtual telephony network. This architecture improves system availability and scalability. Call admission control ensures that voice quality of service (QoS) is maintained across constricted WAN link and automatically diverts calls to alternate public switched telephone network (PSTN) routes when WAN bandwidth is not available.

A web-browsable interface to the configuration database provides the capability for remote device and system configuration. This interface also provides access to HTML-based online help for users and administrators.

## Where to Find More Information

- *Cisco CallManager System Guide*
- *Cisco IP Telephony Network Design Guide*