



# Introduction

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Cisco CallManager is the software-based call-processing component of the Cisco IP Telephony solution, part of Cisco AVVID (Architecture for Voice, Video and Integrated Data). The Cisco Media Convergence Server serves as the 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's open telephony application programming interface (API).

## Key Features and Benefits

The Cisco CallManager system includes a suite of integrated voice applications that perform voice conferencing and manual attendant console functions. Because this suite of voice applications exists, there is no need 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. Cisco CallManager comes preinstalled on the Cisco Media Convergence Server.

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.

### **New for Cisco CallManager Release 3.0**

Cisco CallManager Release 3.0 significantly enhances the scalability, distributability, and availability of the enterprise IP telephony solution. Multiple Cisco CallManager servers are clustered and managed as a single entity.

Release 3.0 provides capability for up to 10,000 users on each cluster. By interlinking multiple clusters, the system capacity increases to tens of thousands of users for each multisite system. Clustering aggregates the power of multiple, distributed Cisco CallManagers, enhancing the scalability and accessibility of the servers to phones, gateways, and applications. Triple server redundancy improves overall system availability.

Further enhancements in Cisco CallManager Release 3.0 include toll restriction by user group, database configuration changes without system restart, and system serviceability enhancements. Alterations to the Cisco CallManager Administration user interface reduce the administrative burden when managing a large network of devices and users.

Users benefit from the new call pickup-group feature as well as from the support of the first of a new generation of Cisco IP phones, the Cisco IP Phone 7960.

Finally, software-only voice and multimedia applications such as the Cisco Low-End Interactive Voice Response system, Cisco IP Contact Center, Cisco Automated Attendant, and Cisco SoftPhone interact with the Cisco CallManager through telephony APIs. These applications extend the Cisco CallManager system's capability and expand the applications space within Cisco AVVID. The benefits include readily available, distributed, next-generation applications that can interact with e-business applications.