

## Cisco Unified Expert Advisor

Cisco® Unified Communications Solutions unify voice, video, data, and mobile applications on fixed and mobile networks, enabling easy collaboration every time, from any workspace.

### Product Overview

Cisco Unified Expert Advisor expands the scope of the contact center by allowing presence-enabled enterprise knowledge workers to handle incoming customer calls without the need for the rigid tools and business rules typically found in formal contact centers. You can deploy Cisco Unified Expert Advisor as an **add-on** to Cisco Contact Center solutions, or in a **standalone** mode without any formal contact center agents in the call flow.

### New Features

The following new features have been added in Expert Advisor Release 7.6:

- Experts can now use Microsoft Office Client (MOC) as a supported Instant Messaging client with Expert Advisor
- Calls can now be queued to a specific expert or group of experts
- Bulk configuration is supported for easier provisioning of multiple experts
- New Expert Advisor reporting templates are provided for Cisco Unified Intelligence Suite
- The new 69xx series of Cisco phones are supported

### Features and Benefits

Cisco Unified Expert Advisor improves first-call resolution and increases customer satisfaction by allowing subject matter experts anywhere in your enterprise to handle incoming customer calls. Experts receive precall data, allowing faster problem resolution. The solution is highly flexible and customizable, allowing your enterprise to implement the most appropriate architecture and business logic to meet your customer contact needs.

When deployed in standalone mode, Cisco Unified Expert Advisor provides robust, efficient customer interactions without the need for traditional contact center agents. Alternately, when deployed with Cisco Unified Contact Center Enterprise, the expert advisor software automatically selects the right expert, freeing the agent from this task. Agents can either transfer the caller to the expert or engage in a live, three-way conference with the caller and the expert. Real-time and historical reports give decision makers detailed insights and control over the expert advisor call flows.

Table 1 lists some features and benefits of Cisco Unified Expert Advisor. More details are available in the Expert Advisor product documentation and training material.

**Table 1.** Features and Benefits of Cisco Unified Expert Advisor

Feature	Benefit
<b>Intelligent Routing</b>	
<b>Presence-based routing</b>	Presence-based routing allows enterprise experts or knowledge workers to be part of customer interactions. The availability of experts is not tracked by a traditional automatic call distribution system but instead by an open, standards-based presence server.
<b>Broadcast-based routing</b>	Multiple experts can be simultaneously offered an incoming customer call, increasing the likelihood that a call will be answered immediately by the most appropriate expert.
<b>Competency-based skills routing</b>	You can assign experts competency levels within a particular skill or group of skills for selection based on most or least skilled criteria. This feature allows granularity in the selection of the most appropriate expert to handle an

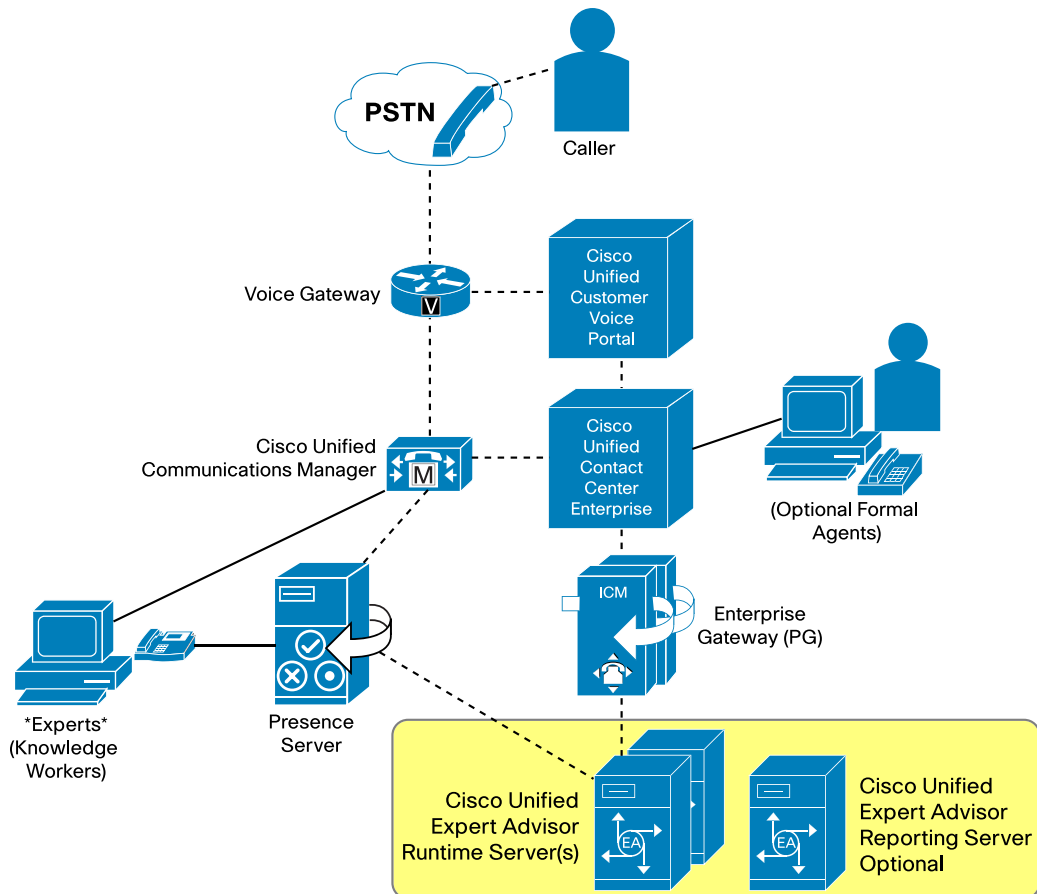
	incoming call.
<b>Spatial routing</b>	Spatial routing facilitates use of more than two dimensions of resource and contact attributes in the selection strategy. The system determines the closest match among these attributes to help ensure the most appropriate expert handles a call.
<b>Longest-available routing</b>	Longest-available routing allows for selection of experts based on the length of time they are available to answer incoming calls.
<b>User Management</b>	
<b>Automated presence user synchronization</b>	Modifications to the pool of experts (for example, additions, deletions, and changes) are automatically synchronized from the Cisco Unified Communications Manager and Unified Presence infrastructure, dramatically reducing operational administrative costs and overhead.
<b>Instant message call offers</b>	Experts are offered incoming calls (with associated caller data) through their Instant Messaging (IM) client, allowing them to use common enterprise productivity tools instead of having to be trained on a contact center agent desktop application.
<b>Auto-accept experts</b>	An option is available for experts to auto-accept calls to expedite incoming call handling.
<b>Caller Data</b>	
<b>Tabular format presentation</b>	Experts can be sent an IM of selective caller data in tabular format - such as call context entered in a self-service session (that is, prompt and collect), information obtained from external data sources or applications (that is, through database lookups), as well as basic call information such as the calling number. This feature removes redundant requests of information at the time an expert speaks with the caller, thereby reducing problem resolution time and improving customer satisfaction.
<b>Message tokens</b>	You can use the same set of data to form dynamic, token-based messages to the expert (for example, "Are you available to take a call from John Smith with account number 12345?")
<b>Reporting</b>	
<b>Real-time reporting</b>	Administrators and power users can view (in real time) experts' availability and occupancy within given assignment queues (or skill groups) for higher control and insight into business operations.
<b>Historical reporting</b>	You can use an open (public schema) database and included reports to view historical records of detailed experts' activities and call-handling behavior.
<b>Administration</b>	
<b>Web-based portal</b>	Every aspect of Cisco Unified Expert Advisor application configuration is performed through an intuitive operations, administration, maintenance, and provisioning (OAM&P) web-based portal.
<b>Serviceability</b>	
<b>Platform serviceability</b>	Cisco Unified Expert Advisor inherits the many serviceability features of the Cisco Unified Communications Operating System, including control of platform services, alarm and trace configuration, software upgrade and patching, and disaster recovery.
<b>Application serviceability</b>	The Cisco Unified Expert Advisor Serviceability Architecture supports a new, application-specific MIB as well as operating system and platform MIBs. The solution not only supports the standard Cisco Unified Communications Operating System command-line interface (CLI), but also provides an application-specific CLI for items such as agent state and historical database Structured Query Language (SQL) operations.
<b>Real-Time Monitoring Tool (RTMT)</b>	The Cisco Unified Expert Advisor RTMT provides critical service and performance monitoring (perfmon), trace and log collection and viewing, and alert management. The RTMT provides the primary interface for system administrators to monitor expert advisor servers, view alerts, and collect related log traces.
<b>Network management</b>	Cisco Unified Operations Manager fully supports the Cisco Unified Expert Advisor application. This easy-to-use tool provides comprehensive monitoring and diagnostics for the entire Cisco Unified Communications System, including the multiple applications and the underlying transport infrastructure.
<b>Security</b>	
<b>Signaling</b>	You can secure intraserver communications in an expert advisor cluster by using mutual authentication based on X.509 digital certificates.
<b>OAM&amp;P security</b>	All Cisco Unified Expert Advisor administrative webpages are served using Secure Sockets Layer (SSL), protecting password authentication as well as any configuration data displayed on the administrator's screen.
<b>Sensitive call-data protection</b>	Cisco Unified Expert Advisor has a concept of attributes, which hold any call-specific data. If certain attributes contain sensitive information such as personal-identification-number (PIN) codes or passwords, you can easily configure them so that they are never written to any log file, never stored in the historical reporting database, and never shown to experts.
<b>Intrusion prevention</b>	Cisco Unified Expert Advisor automatically installs a standalone Cisco Security Agent to protect against intrusions. This endpoint security solution combines zero-update attack protection, data-loss prevention, and signature-based antivirus in a single agent. This unique blend of capabilities defends expert advisor servers against sophisticated day-zero attacks.
<b>Firewall protection</b>	The Cisco Unified Expert Advisor system comes preinstalled with the iptables utility, which allows granular configuration of a host-based firewall. This firewall allows the server to allow external connections on only well-known ports from trusted clients

## Product Compatibility

- Cisco Unified Expert Advisor relies on the Cisco Unified Communications Manager for call control and management; Cisco Unified Presence for presence and state management; and Cisco Unified Intelligent Contact Management (ICM) for preselection, service creation, and external application integration.
- Cisco Unified Personal Communicator is the presence client of the solution. It publishes the expert's presence state (available, away, busy, in-a-meeting, etc.), and is the instant messaging client by which the system interacts with the expert in offering voice or video calls along with caller data. As of Expert Advisor release 7.6, Microsoft Office Client (MOC) is also supported as a presence/IM client with Cisco Unified Expert Advisor.
- Cisco Unified Expert Advisor typically takes advantage of the Cisco Unified Customer Voice Portal for queuing and self-service, but it also operates with any service control-based interactive-voice-response (IVR) system, such as Cisco Unified IP Interactive Voice Response and certain third-party systems.
- You can deploy Cisco Unified Expert Advisor in conjunction with Cisco Unified Contact Center Enterprise and Hosted offerings, but as described earlier you can also deploy the solution in a standalone mode without any formal contact center agents.

Figure 1 depicts the architecture for Cisco Unified Expert Advisor

**Figure 1.** Cisco Unified Expert Advisor Architectural Diagram



## Product Specifications

Table 2 gives specifications of Cisco Unified Expert Advisor.

**Table 2.** Specifications of Cisco Unified Expert Advisor

Parameter	Description
<b>Components</b>	Cisco Unified Expert Advisor is a software product that is deployed on a Runtime server, with an optional high-availability server and an optional reporting server.
<b>Hardware</b>	You can order Cisco Unified Expert Advisor with the software preinstalled on Cisco media convergence servers (MCSs), or you can deploy it on exact equivalent servers. For more information, refer to the section "System Requirements".
<b>Performance and scalability</b>	Refer to the Cisco Unified Contact Center Enterprise Design Guide for more detailed performance and scalability information at <a href="http://www.cisco.com/go/srnd">http://www.cisco.com/go/srnd</a> .
<b>Protocols and interfaces</b>	Cisco Unified Expert Advisor supports SIP, SIP for Instant Messaging and Presence Leveraging Extensions (SIMPLE), TLS, Java Message Service (JMS), Simple Network Management Protocol (SNMP), Open Database Connectivity (ODBC), and CLI.
<b>Reliability and availability</b>	Cisco Unified Expert Advisor achieves high availability by running redundant runtime servers on highly available MCS platforms. Informix database replication helps ensure that data across servers is always available.
<b>Language support</b>	The Cisco Unified Expert Advisor standard IM message sets (including Help), historical report templates, and User Quick Reference guide are localized to the following languages: English (U.S.), Arabic, Danish, Dutch, French (European), German, Italian, Russian, Spanish (Spain), Swedish, Portuguese (Brazil), Chinese (Simplified and Traditional), Korean, and Japanese.

## System Requirements

Table 3 gives hardware specifications for Cisco Unified Expert Advisor.

**Table 3.** Hardware Specifications

Component	Specifications
Runtime servers	The following models of the Cisco Media Convergence Server are supported: <ul style="list-style-type: none"> <li>• MCS7835H2-K9-EA1</li> <li>• MCS7845H2-K9-EA1</li> <li>• MCS7835I2-K9-EA1</li> <li>• MCS7845I2-K9-EA1</li> </ul>
Reporting server	The following models of the Cisco Media Convergence Server are supported: <ul style="list-style-type: none"> <li>• MCS7845H2-K9-EA1</li> <li>• MCS7845I2-K9-EA1</li> </ul>

For detailed information about system hardware and software requirements, please consult the Hardware and System Software Specification Guide at:

[http://cisco.com/en/US/products/sw/custcosw/ps1001/products\\_user\\_guide\\_list.html](http://cisco.com/en/US/products/sw/custcosw/ps1001/products_user_guide_list.html).

## Licensing

Cisco Unified Expert Advisor is licensed on a per-expert seat basis. One device license is required for each expert advisor runtime server within Cisco Unified Communications Manager.

For additional information, please consult the Customer Contact Solutions Ordering Guide at:

[http://www.cisco.com/web/partners/sell/technology/ipc/integrated-solutions/customer\\_contact\\_center.html](http://www.cisco.com/web/partners/sell/technology/ipc/integrated-solutions/customer_contact_center.html).

## Ordering Information

Refer to the Customer Contact Solutions Ordering Guide at:

[http://www.cisco.com/web/partners/sell/technology/ipc/integrated-solutions/customer\\_contact\\_center.html](http://www.cisco.com/web/partners/sell/technology/ipc/integrated-solutions/customer_contact_center.html) for detailed ordering information. To place an order, visit the Cisco Ordering Home Page and refer to Table 4.

Table 4. Ordering Information

Product Name	Part Number
Unified Expert Advisor 7.x	UNIFIED-EA-7.X

**Cisco Services**

Cisco Unified Communications Services allow you to accelerate cost savings and productivity gains associated with deploying a secure, resilient Cisco Unified Communications Solution. Delivered by Cisco and our certified partners, our portfolio of services is based on proven methodologies for unifying voice, video, data, and mobile applications on fixed and mobile networks. Our unique lifecycle approach to services enhances your technology experience to accelerate true business advantage.

**For More Information**

For more information about Cisco Unified Expert Advisor, visit <http://www.cisco.com/go/ea> or contact your local Cisco account representative.



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