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Collaboration Systems Release 10.6 Features Overview

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Introduction

As companies expand and become more globalized, or downsize their office real estate, employees are becoming more accustomed to working nontraditional hours in nontraditional settings.

This often translates to less cubicle time, with face-to-face opportunities for staff communication, and more challenges in maintaining a team environment while physically being in different places.

Increasingly, companies like Cisco are building suites of products that provide new tools and innovative methods for team members to communicate. This includes products that support the mobile nature of today's employees by expanding wireless and mobility access to the corporate communications network. The goal is to enable workers to reach the right person, at the right time, using the right communications method regardless of physical proximity.

Cisco's product focus has expanded to provide seamless communication across many types of devices including traditional IP desk phones, tablets, smart phones, and conference rooms. Cisco Collaboration Systems Release (CSR) 10.6 defines the latest in the integration of telephony, voice and video conferencing, and messaging solutions across multiple devices for enterprise IP customers. This design will allow an organization the ability to integrate voice, video, and web participants into a single unified user experience.

Figure 1 below shows a typical deployment that encompasses the most recent design recommendations.

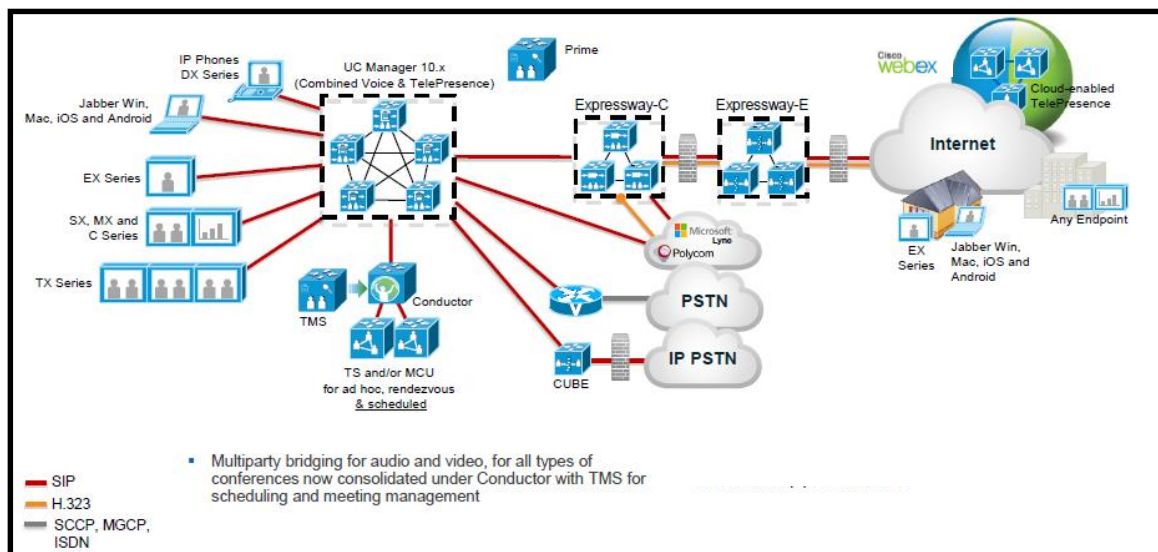


Figure 1

Over the past few years, there has been a tremendous amount of growth in the collaboration area, both in services and applications, and the way that users interact with them. The list below gives you an idea of the breadth and depth of this environment.

This white paper will provide an overview of CSR 10.6 with a focus on Cisco Unified Communications Manager (CUCM) supported features.

CSR 10.6 encompasses all four areas of the Unified Collaboration environment.

- **Infrastructure**
 - CUCM, Cisco Unified Communications Manager Express (CME), Cisco Business Edition, Telepresence VCS
 - Cisco Session Management Edition (SME)
 - Cisco Unity Connection
 - Cisco Instant Messaging & Presence (IM&P)

- **Conferencing**
 - Instant Conferences (Ad Hoc)
 - Permanent Conferences (MeetMe or Rendezvous)
 - Scheduled Conferences (Using TMS)
 - Cisco Collaboration Meeting Room (CMR)
 - Cisco CMR Hybrid (adds link to Cisco WebEx Meeting Center)
 - CMR Cloud Conferencing (no on-premise resources or infrastructure)
 - Telepresence Conductor
 - Telepresence Management Suite (TMS)
 - Conference Resources

- **Endpoints and clients**
 - IP Phones
 - Collaboration Desk Endpoints
 - Collaboration Room Endpoints
 - Immersive Telepresence
 - Software Clients
 - Integration Series

- **Management**
 - Cisco Prime Collaboration Deployment (Centralized deployment solution)
 - Cisco Prime Collaboration Provisioning (Centralized management solution)
 - Cisco Prime Collaboration Assurance (Centralized monitoring and diagnostics solution)
 - Cisco Prime License Manager (Centralized licensing solution)

As you can see, there are many pieces to this collaboration puzzle that need to be properly designed, implemented, and managed in order to provide a rich, easy to use experience to the end user.

The three main areas of focus for CSR 10.6 are:

- **Experience (both user and administrator)**
 - Continued improvements to the interfaces to provide a simpler, more intuitive user experience
- **Simplicity**
 - Single deployment model for On-Premise conferencing using Cisco Telepresence Conductor for conference scheduling and management
 - Increased Scalability
 - Deployment Acceleration
 - Improvements in the Prime Collaboration management applications
- **Ubiquity**
 - Ability to join a meeting from within or outside of the enterprise utilizing the users tool of choice
 - Collaboration Meeting Rooms (CMRs) that span on-premise, hybrid, and cloud deployments
 - Single Sign-On for remote users

CUCM is one of the main components of the CSR deployment, providing call control and resource management to the cluster. Where CSR 10.6 outlines the overall collaboration architecture and interaction, both within and between collaboration systems, CUCM 10.5(2) is the version of Unified Communications Manager that aligns with CSR 10.6 and deploys some of the specific features that will be discussed below.

CUCM 10.5(2) Major Features Overview

- **Instant Messenger & Presence (IM&P) Enhancements**
 - **Managed File Transfer (MFT)**—MFT allows an IM&P client such as Cisco Jabber to transfer files to other users or into ad hoc or persistent chat rooms. The files are stored in a repository on an external file server, and the transaction is logged to an external database. This may be required for regulatory requirements. The file repository is on a customer provided external server.
 - **Unexpected Disconnect**—If there is a temporary loss of communication between IM and Presence service and Cisco Jabber (you close your laptop without logging out for example), Stream Management ensures that any messages that are sent during the disconnect are not lost. A timeout period can be configured that governs how long the system will wait for a new connection before storing the unsent messages and sending at the next re-connect.
- **Single Sign-On (SSO)**—When this feature is enabled, it allows an end user to log into one application through a browser, and access other Unified Communications applications through the same browser without having to log in again. Supported applications include CUCM, IM&P Service, Cisco Unity Connection, WebEx Meeting Center, WebEx Connect and Messenger, and Cisco WebEx Meeting Server. Supported clients include WebEx (IOS, Android, Connect and Messenger), and Jabber (Windows, IOS, Android, and Mac).

- Touchless Installation for Virtual Machine—Previous releases of Cisco Unified Communications Manager cluster environment required you to install the publisher node first before you proceeded to install the subscriber nodes. You would install the subscriber nodes after adding them on the publisher node and repeat the procedure for each subscriber node.

With the touchless installation feature, the subscriber nodes are configured dynamically along with the publisher node during their installation.

- Music on Hold (MoH) Scalability—Previous releases of CUCM allowed for a maximum of 50 unique MoH sources. Beginning with Release 10.5(2) you can configure up to 500 MoH sources within a cluster.
- Control of Security Status—Previous releases of CUCM provided the call security icon according to the security levels that were configured for its servers and conference participants. This sometimes led to incorrect security status being displayed. Beginning with Release 10.5(2) you can configure SIP Cisco Telepresence MCU or Cisco Telepresence Conductor to control the display of the security icon during a conference.

Cisco Prime Collaboration

Cisco Prime Collaboration provides simplified, unified management across voice and video collaboration networks. It offers automated provisioning, real-time monitoring, and proactive troubleshooting, plus long-term trending and analytics—in one integrated product.

Cisco Prime Collaboration Advanced includes three separate modules: Provisioning, Assurance, and Analytics. Cisco Prime Collaboration Standard (which is included as part of CUWL or UC Licensing) includes a subset of the features available in the Provisioning and Assurance modules. The Analytics module and Cisco Prime Collaboration Contact Center Assurance are available as part of the Cisco Prime Collaboration Advanced offer only.

Some of the enhancements that Release 10.6 offers for Prime Collaboration are as follows:

- Enhanced views, dashboards, and faster response time
- Expressway C and E monitoring
- One-step activation of Top 20 system services
- New customer fields for AD import
- User move functions
- Quick create sites with dial plans

Conclusion

CSR 10.6 along with CUCM 10.5(2) continues to make changes to enhance the user and administrator experiences and interactions. In many cases, a change to one product may necessitate changes to other products. For example, where the deployment options for video conference control changed to place all control behind the Telepresence Conductor, Cisco Prime Collaboration management tools had to be updated to reflect this new deployment approach. As new endpoints are added, CUCM and Prime Collaboration both needed to be updated to reflect the new endpoints.

For more information on these and any new features, please check the Release Notes for the relevant release. As well, check the CUCM and Collaboration Solution Reference Network Design (SRND) guides which contain the “What’s New in This Chapter” sections to highlight changes for newest versions.

Learn More

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About the Author

Berni has worked in the IT industry for over 35 years, starting her career with software development and moved into networking in 1990. Berni is an independent consultant and has been a contract instructor with Global Knowledge since 1998. She has focused much of that time on the Cisco voice and video product lines. Other areas of expertise focus on Quality of Service implementations for converged networks.