MITEL

# COLLABORATION ADVANCED

CONFIGURATION AND MAINTENANCE MANUAL ISSUE 5.0 SP1 NOVEMBER 2013



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# **CHAPTER 1**

**OVERVIEW** 

# Introduction

Formerly known as Audio and Web Conferencing (AWC), Mitel<sup>®</sup> Collaboration Advanced (MCA) provides an integrated application to create audio and Web conferences using corporate directories and personal address books from Microsoft<sup>®</sup> Outlook<sup>®</sup> and Lotus Notes<sup>®</sup>. MCA is packaged on the Mitel Applications Suite (MAS) server, which is linked by an Ethernet connection to the IP network. A link on the MAS server provides access to a Web-based administrator interface for configuring MCA, scheduling conferences, viewing conference calls, and administering collaboration controls. You can access all interfaces through either HTTP or HTTPS.

Authorization and authentication allows only valid users to access services. To meet the highest security requirements, MCA uses Secure Sockets Layer (SSL) encryption for secured messages, server-side digital certificates, and Comprehensive Lightweight Application Security (CAST) 128-bit encryption for data transmission during Web conferences. MCA provides:

- **Instant, flexible calling**: Initiate an instantaneous call or to create a conference call from a two-party call. A conference call can also be pre-scheduled.
- Complete call control and management: Add and drop other call participants as well as mute, hold, or transfer the call directly from the desktop. A call detail record (CDR) provides a log of all calls. The CDR includes the dates and times of all calls call duration of all calls for billing purposes.
- **Cost-effective conferencing**: Delivers the most cost-effective group calling, with ultimate flexibility to customize solutions to best meet individual needs.
- Web-based collaboration tools: Facilitate online meetings, training, and presentations with features designed for sharing your desktop or individual applications. Enhance conferences to increase participation and understanding by using interactive markup tools, user polling, and video-conferencing. Use the file transfer utility to immediately share the outcome of online collaborative sessions by transmitting updated files and presentations to conference participants.
- Conference archiving: Create recordings of conference calls and collaborative sessions for playback later.

# New Features, Enhancements, and Changes to MCA 5.0 SP1

This MCA Configuration and Maintenance Manual was last published as MCA 5.0. This section provides information about the following new features included in the MCA 5.0 SP1 release.

#### MCA Launcher

This release provides a new Launcher feature on MCA for Windows clients. Prior to this release, the only methods to join a conference were via the MCA web page or via the UC Advanced Collaboration feature.

The behavior when launched from a web page has been improved. Once the device and browser being used have been verified to work with the MCA Client for Windows, the client application is launched directly.

In addition, the behavior when the application is launched directly, has been enhanced to allow not only local recording and playback, but also joining a new or recent conference. You will be able to join a conference by starting the client and entering a conference access code or link; you will also be able drag and drop a conference access code or link onto the application or select a recent conference from a dropdown list.

There are no changes to the Admin procedure for this feature. It only changes the client behavior when joining a conference (see MCA user help).

#### Remote Control enhancement

MCA 5.0 SP1 provides an enhancement to Remote Control called Transfer Control.

Transfer control is enabled after the leader has requested and gained control of a participant's computer. This new ability of the leader is to give a participant control of a second participant's computer. This feature can be useful in many environments such as Technical Support for handing over control of a computer to support personnel.

There are no changes to the Admin procedure for this feature. It only changes the client behavior (see MCA user help).

# Features, Enhancements, and Changes to MCA 5.0

#### **Client and Web Browser Support Enhancements**

The MCA Client and Web browser look and feel is being refreshed and enhanced for this release. MCA 5.0 allows users to participate in an MCA conference on a wide variety of devices and platforms. As a result, this release further enhances the support of web browsers on multiple

platforms: Chrome, Firefox, Internet Explorer, Safari as well as iOS and Android built-in browsers. Specific to this release, Internet Explorer 9 and 10, Windows 8, iOS 6.0 and Android 4.1 will be supported. See User Computer Requirements on page 9.

## Personal ID (Identification)

MCA 5.0 introduces Personal ID which is a unique numeric identifier for each user of the system. The Personal ID provides a way to identify and link audio and web participants. The Personal ID also allows for a level of control over who is allowed access to conferences. This feature especially impacts the Join Page and the process associated with joining a conference by phone.

Personal ID has two main purposes:

- Uniquely identifies participant's conference legs for the merging of audio and web legs.
- It provides finer control over who has access to conferences.

A new setting under System Options called **Prompt for Access Code First** (see Table on page 40). When selected the Access Code will be required before the Personal ID can be entered when accessing the Audio portion of the conference.

Personal IDs can be defined in one of three ways:

- Through the MCA user interface (under Settings)
- The system administrator can create, modify and delete Personal ID for system and Adding Guest User Accounts on page 57
- From the publicly accessible join page, guest users can have a Personal ID auto-generated for them.

**Note:** If a conference does not require Personal ID's and if a user is not a system or guest user, they can enter the conference by typing their name. In this case, a temporary Personal ID will be generated for that user. This temporary Personal ID will remain valid while the conference is active.

#### Leader impact:

The following options under Call features are available when setting up or editing a conference:

- Personal IDs are required to enter the conference:
  - If selected, participants must enter their personal ID to join a conference.
  - If not selected, participants can choose to enter their personal ID but it is not mandatory.
- Conference access requires approval:
  - If selected (the above option is also automatically selected), the leader will need to approve each user via the e-mail requesting approval or by using the View Participant Approvals menu item in the Collaboration Client. Alternatively, the leader can use the Approval tab in My Conferences to approve users. Once the registration is approved, an e-mail is automatically sent to the participant indicating Approval Granted.

- Restrict duplicate personal IDs on audio connections:
  - If selected, duplicate IDs are not allowed on audio connections.

#### Participant impact:

Depending on the option selected by the leader, participants may be forced to enter a Personal ID upon joining a conference. The email invitation will indicate if a Personal ID is required to attend the conference. Additionally, as stated under Leader impact, if Personal ID approval is required, the participants will receive an email once the leader has approved their attendance indicating Approval Granted.

#### **Google Apps Integration**

MCA 5.0 will support Google integration. In this release, we will provide the ability to invite members to a conference via Google and also have the invited guests easily enter the scheduled conference into their calendar.

## SIP and HD Video Support

#### SIP Video Call Support

A SIP (Session Initiation Protocol) Device such as the UC360, UC Advanced Desktop and Mobile clients as well as tested and supported 3rd party endpoints will be able to send and receive video stream after joining an active conference call on the MCA server. This functionality will be supported through a configured MCD PBX only. Prior to MCA 5.0, a SIP Device could only participate in the audio portion of the conference. SIP Video requires an Enhanced Video license.

Note: SIP device(s) can only receive a single video stream. MCA system determines the active video based on the precedence level of the participants in the following order:
 1) MCA client - leader

2) MCA client - participant (sharing host)

3) MCA client - participant (if more than one is broadcasting then the first that joined takes precedence)

4) SIP device - leader (if more than one SIP device joined as a leader and is broadcasting, then the one that joined first takes precedence)

5) SIP device - participant (if more than one SIP device joined as a participant and is broadcasting, then the one that joined first takes precedence).

#### Deployment with SIP Servers and End Points

MCA supports the SIP protocol. As a result, it is capable of operating with a number of third party SIP Servers and SIP end points such as SIP phones, Audio Conference Units and Video Conference Units.

Mitel maintains a SIP Centre of Excellence (SIP CoE); the CoE performs interoperability testing between third party devices and Mitel SIP devices. The CoE generates documents that cover

the results of the interoperability tests and how the devices should be configured for successful interoperation.

For the complete list of devices that can interoperate with please refer to Knowledge Base article called the SIP Technical Reference Guide 08-5159-00014. This Reference Guide can be found on Mitel On-Line under 'Support' and then under 'Mitel Knowledge Base'.

#### High Definition (HD) Video Support

MCA 5.0 introduces HD Video support by adding user control to effectively manage this new capability. In order to support HD Video, a profiling tool will be available to help determine the capabilities of the client endpoints in a conference. This tool will determine if the endpoint can support HD Video stream encoding and decoding. The existing Enhanced Video License will cover HD Video support. HD Video capable camera is also required.

## **Client Only Delivery**

The MCA 5.0 client applications are packaged as RPM files and are installed by the MCA software blade. MCA 5.0 Client Only Delivery mechanism allows these client RPMs to be upgraded or downgraded independent of the MCA software blade. This allows fixes to the MCA client applications to be delivered independent of the MCA server which eliminates the need to upgrade MAS blades for client updates. The Client Only Delivery mechanism allows much more flexibility in the delivery of client only enhancements and fixes.

See Manage Clients on page 54.

#### Audio-Through Client (2-way Client Audio)

MCA 5.0 introduces fully integrated and fully functional 2-way client audio also known as Audio-Through Client. There is no configuration required at the server level as this feature is always on and always available for use. However, the user has a new Audio button option part of the Meeting Center to start using the microphone/speaker connected to their PC.

#### 1-way Audio to Web Client

The ability from the Web Client to enable "listen-only" capability (1-way audio).

#### **Conference Enhancements**

Several conference feature enhancements were introduced in MCA 5.0, such as an audio conference lock and muted conference join announcement.

## Session Recording Enhancements

Additional administration mechanisms were added to better manage Session Recordings, such as auto-clean mechanism, disk utilization alert, deletion of recordings as well as the identification of recordings as permanent records.

## Audio Codec (change to G.729 Audio compression ports)

MCA 5.0 will provide the ability to adjust or disable the number of G.729 audio compression ports being used. Uncompressed audio will be used once the set value of G.729 ports have been reached.

#### MAS 5.0 Enhancements

MCA must be run on a Mitel Application Suite (MAS) server. MAS R5.0 supports the new features and enhancements included in MCA 5.0. For detailed information about MAS 5.0 new features, enhancements, and changes, refer to the MAS R5.0 documentation suite on the <u>Mitel</u> <u>eDocs Web site</u> (http://edocs.mitel.com/default.htm).

# **Specifications and Requirements**

Hardware, software, network, and communication platform specifications and requirements for MCA are defined in accordance with MAS server specifications. Because MCA must be installed on a MAS server (v5.0 or later), hardware requirements for the server are determined by MAS requirements.

MCA hardware requirements for single and multi-application configurations are the same. For detailed hardware requirements information, refer to the *Mitel Applications Suite Engineering Guidelines* on the Mitel eDocs Web site (http://edocs.mitel.com/default.htm).

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**Note:** Technical documentation on the Mitel eDocs Web site is for registered Mitel Online users and requires a valid user name and password.

To use MCA and the MCAC application, the user's computer must meet the requirements detailed in the following tables.

Component	Requirements
Mitel Collaboration Advanced	Dual Core, 1.6 GHz processor or higher
Client Computer Hardware	RAM: 2 GB minimum (4 GB or more recommended).
	Performance may decline if running other applications in conjunction with MCA. Performance may decline if broadcasting HD video.
Mitel Collaboration Advanced	One of the following operating systems:
Client Computer Operating System	<ul> <li>Windows XP Home Professional and Media Center with Service Pack 3 (SP3)</li> </ul>
	<ul> <li>Windows Vista<sup>™</sup> Home Basic, Home Premium, Business, Ultimate, and Enterprise with SP2</li> </ul>
	Windows 7 Home Premium, Professional, and Ultimate
	Windows 8 (Desktop mode only)
	Note that Microsoft .Net 4.0 is required.
Mitel Collaboration Advanced	One of the following:
Web Client	<ul> <li>Internet Explorer<sup>®</sup> 8.0, 9.0 and 10.0</li> </ul>
	Mozilla Firefox 20
	Google Chrome 26
	Apple Safari 5.0 or 6.0
	Tablet browsers: Safari 5.x and 6.x Android 4.2
Administrator Web Client	Internet Explorer <sup>®</sup> 8.0, 9.0 and 10.0

Table 1: User Computer Requirements

#### **VMware View**

The following MCA user interfaces can be presented by VMware View:

 UI presentation, including MCA Web Portal and streaming video (receive only) through the MCA Collaboration Client application running in the virtual desktop. All Web-based conferencing and collaboration features are fully supported. Collaboration Client application and screen sharing features are fully supported.



Note: See Virtual Appliance Deployment Guide at

http://edocs.mitel.com/TechDocs/Solutions-Guides/BP-Virtualization.pdf for description, requirements and configuration information specific to virtualization environment.

# Licenses

You can create as many user accounts on MCA as MAS will allow. However, the number of concurrent conference participants, for any conference type, is equal to one participant per one MCA port type (audio or Web) license. Therefore, you can set up many MCA user accounts, but for licensing purposes the product restricts the total number of concurrent conference participants. For additional licensing information and details about license upgrades, refer to the *Mitel Applications Suite Installation and Maintenance Manual* available on the <u>Mitel eDocs</u> Web site (http://edocs.mitel.com/default.htm).

Platform	Licenses	
Mitel Communications Director (MCD)	One SIP User License per MCA User License	
Mitel 5000	One Category C License per MCA User License	
	<ul> <li>One IP Enabler Unit License per MCA User License or One IP Enabler System License</li> </ul>	
	System OAI Events License	
	System OAI Third-party Call Control License	
Inter-Tel Axxess	System OAI Events License	
	<ul> <li>System OAI Third-party Call Control License</li> </ul>	

#### Table 2: Communications Platform License Requirements

# **Capacity and Performance**

The capacity and performance information for MCA provided in this section is based on single-application MAS server deployment.

If running multiple applications on the MAS server, the capacity and performance of MCA are affected, depending on the loading of server resources with the other applications running. In addition, capacities are also affected when MAS is run in a virtualized environment.

Refer to the *Mitel Applications Suite Engineering Guidelines* on the <u>Mitel eDocs Web site</u> for additional information about MCA capacity running in a multi-application or virtualized environment.

MCA can support up to 300 ports, depending on the configuration.

Maximum per system with MAS 5.0			
MAS 5.0	Audio	Web	Video
MCA	300	300	300

Maximum per conference with MAS 5.0			
MAS 5.0	Audio	Web	Video
MCA	200	300	100

**Note:** Three hundred audio ports are supported on a single MCA application on MAS. The system supports up to 300 audio ports at the same time, with up to 200 per single conference.



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**Note:** In addition to telephone devices calling into a conference, the Browser audio feature (1-way audio streaming) also uses 1 audio port/license on the system. The Windows audio feature (2-way audio streaming) uses 1 audio port/license on the system. See Viewing the Licenses on page 45 and License Usage on page 73.

The system will negotiate G.729 or G.711 calls based on the incoming call settings. Once the system reaches the G.729 port setting (combined in all conferences), the system will offer G.711 for all additional calls into the bridge up to the maximum per conference limit.

**Note:** New to MCA 5.0 is the G.729 audio compression port setting of 0-100. Prior to MCA 5.0, G.729 had a preset setting of 100 ports (non-configurable). The G729 port setting is found under system options Table 6, it has a range of 0-100, with default of 100 (where 0 indicates G.729 ports are disabled).

## Audio-Only Conference

The following capacities are supported for audio conferencing:

Total number of concurrent audio conference users: 300

• Maximum number of users per audio conference: 200

A maximum of 100 concurrent users with G.729 encoding can connect to all audio conference calls in progress (as per previously noted, the number of G.729 ports is configurable under system options Table 6 with a range of 0-100, with default of 100). Once the maximum number of G.729 ports have been reached, additional users with G.711 encoding can connect and join an audio conference up to the supported limits.



**Note:** MCA supports a maximum of 100 G.729 ports is a single application configuration and a maximum of 50 ports on MAS running multiple applications.

## Web-Only Conference



**Note:** Terminal server environments, such as Citrix<sup>®</sup> and Remote Desktop, do not support video.

Higher bandwidth requirements are necessary to support Web conferencing collaboration features. The MCA server does not prevent more than the supported limits, it only tracks what is licensed. The following capacities are supported for Web conferencing:

- Total number of concurrent Web conference users: 300
- Maximum number of users per Web conference: 300

#### **Determining Bandwidth**



**Note:** Bandwidth is a significant factor for performance during a Web conference or a Video Call and MCA server resources (CPU and memory) used are minimal.

The following is a scenario to help determine approximate usage type and measure the amount of bandwidth required. Video quality and frames per second (fps) are features that are configurable by the individual user according to their preference. Combine the collaboration bandwidth (Table 3) and video bandwidth (Table 4) for the number of users to estimate the total bandwidth required.

Running multiple Web conferences simultaneously with high quality video (30 fps) and Desktop Sharing on a network with high traffic could degrade overall performance. Mitel recommends that you set up a test conference based on the intended use to determine actual performance and monitor the attendee settings. This is the most accurate way to approximate the actual bandwidth required, which provides an estimate of required throughput needed by the host and participants.



**Note:** The recommended setting for video quality is 8 fps (default) or 15 fps. Settings above the recommended values will significantly increase the bandwidth required.

- Bandwidth consumption varies widely based on the features in use, the settings chosen for each feature, and the content of the Viewer (Desktop Sharing). Settings that impact bandwidth include:
  - Video: Video size, frame rate, video quality, raw image size and number of participants.
  - Application/Desktop Sharing: Size, scan rate, content, and color resolution.
  - File Sharing: File size and the number of participants a file is being shared.

#### **Bandwidth Requirements**

There are bandwidth limitations to consider when running the features of MCA. Table 3 shows the estimated bandwidth requirements for a typical Web collaboration meeting (see the examples for Determining Bandwidth above) and Table 4 shows the maximum and peak bandwidth requirements for a single video stream.

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**Note:** As an example, a user will consume approximately 37.5 KBps in bandwidth operating at 1024x768 and 50 KBps operating at 1280x1024. In other words, as per Table 3 at 1024x768 with 5 users: 5 times 37.5 = 188 KBps.

lisers	Bandwidth (KBps)		
00010	Viewer (1024x768)	Viewer (1280x1024) <sup>1</sup>	
2	75	100	
5	188	250	
10	375	500	
25	938	1250	

lable 3: Web Collaboration (Estimated) Bandwidth Requirem
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1. Typical meeting description running Microsoft® PowerPoint® presentation at a Viewpoint resolution of 1280x1024 (16-bit color resolution) with medium graphics changing slides every 6 seconds.

Table 4 shows the maximum and peak bandwidth capacity for a single video stream. One two-party video involves four streams; from each participant to the server and from the server to each participant. A 200-party conference with only the host broadcasting video involves 200 streams; one from the host to the server and 199 from the server to each participant's computer.

Raw Image Size	Image Quality Setting	Maximum Bandwidth (KBps)	Peak Bandwidth (KBps)
352 x 288	Good	96	
	Better	128	768
	Best	256	
	Good	128	
640 x 360	Better	256	10000
	Best	384	
640 x 480	Good	128	
	Better	256	10000
	Best	384	
800 x 450	Good	448	
	Better	896	14000
	Best	1792	
800 x 600	Good	512	
	Better	1024	14000
	Best	2048	
	Good	1024	
1280 x 720	Better	2048	14000
	Best	4096	
1280 x 1024	Good	1536	
	Better	3072	20000
	Best	6144	

Table 4: Video Bandwidth Guide (single stream)

## Audio and Web Conference

Audio and Web conference requirements are based on that of an audio-only and Web-only conference. That is, bandwidth is a significant factor for performance during a Web conference, and MCA server resources (CPU and memory) used are relatively minimal. Whereas, an audio conference requires more MCA server resources and has relatively minimal impact to bandwidth. Capacities of an audio and Web conference are the same as that defined previously in this section for the conference type.

# **Firewall and DNS Server Configuration**

MCA can operate on MAS configured either behind a firewall in LAN mode (server-only), see the figure below, or in Network Edge mode (server-gateway), see page 16, where the MAS server provides the firewall. Refer to the *Mitel Applications Suite Installation and Administration Guide* for information about MAS network deployments. The firewall or MAS Network Edge configuration must provide Network Address Translation (NAT) for external connections to MCA and for external clients and Web browsers to connect.

In addition, NAT connections (originated by the MAS server) to an external Domain Name System (DNS) server must be provided. Table 5 provides firewall port setting information when configuring MCA on MAS. Refer to the *Mitel Applications Suite Engineering Guidelines* for additional information about MAS configuration requirements.

Consider the following when configuring MCA.

- MCA must be behind a firewall or router that allows port mapping.
- · You must have two external IP addresses available for MCA.
- Have two domain names (or subdomains) available when using address translation.
  - External IP address 1 must be routed to Internal IP address 1.
  - External IP address 2, port 443 (default) must be routed to Internal IP address 1 port 4443 (default).



**Note:** Ports 443 and 4443 are the default values in MCA. These ports values are what you enter when configuring Web conference settings, see page 34.

In the following examples, the firewall does not rewrite the source address. The DNS is split. Everyone uses the external name. Inside the firewall, it resolves to the internal address. Outside the firewall, it resolves to the external address. To configure this, set the Web server name to the external name. The customer can upload a certificate/key pair to the User Provisioning Gateway (UPG).



Figure 1: MCA on MAS (LAN Mode)

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**Note:** If MAS is configured in LAN mode with a Mitel Multi-protocol Border Gateway (MBG) Web Proxy, refer to the MAS Installation and Maintenance Guide and Mitel Border Gateway Guide with Web Proxy 2.0 Guide, located on the <u>Mitel Web site</u> (http://edocs.mitel.com), for configuration information.



All MAS/MCA traffic routed via this external connection.



Table	5:	Firewall	Port	Settings
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Port Range	Direction	Purpose and Details
TCP 22 (SSH)	Server → Internet	Allows outbound packets and replies on TCP port 22 between MAS and the Internet. Used to enable server registration, software and license key downloads, alerts, and reporting.
TCP 80 (HTTP)	Server $\leftarrow$ Internet (IP address 1) and Server $\leftarrow$ LAN	Allows inbound packets and replies on TCP port 80. Used for MC A Web pages.
TCP 443 (HTTPS)	Server $\leftarrow$ Internet (IP address 1) and Server $\leftarrow$ LAN	Remote server management and Web pages of MCA when set for SSL mode. If MCA is not set to SSL mode, Mitel recommends that you close this port or limit it to specific hosts that have remote management capability.
TCP 4443	Server ← LAN	Allows outbound packets and replies from internal users and port 4443. Used between internal users for Web conferencing
	Server ← Internet (IP address 2)	Allows outbound packets and replies from external users on port 443 and redirects them to port 4443 on the server. Used between external users for Web conferencing.
	·	(Sheet 1 of 2)

Port Range	Direction	Purpose and Details
UDP 5060 UDP 6060	SIP phone ← → MCD Mitel 5000 and Inter-Tel Axxess	By default for UDP connections, the MCD listens on port 5060 and the Mitel 5000 and Inter-Tel Axxess listens on port 6060. MCA SIP phones are configured to use the same port. Refer to the communication platform documentation for configuring this port.
UDP 20000–20998 (SRTP)	SIP phone $\leftarrow \rightarrow MCD$	MCD SIP phone default port range.
		(Sheet 2 of 2)

# **Outlook Form Template**

MCA users can associate conferences with meetings scheduled in their Microsoft Outlook calendar using the Outlook form template (OFT). This template is located on the MAS server (https://<*server name*>/awc/Enterprise.oft) and can be installed on an e-mail Exchange server by an administrator, making it readily accessible for those users with MCA accounts. If the form is not on the Exchange server, MCA users can install and publish the form locally. Refer to the *Mitel Collaboration Advanced User online Help* for details.

For information on installing the OFT on an e-mail Exchange server, refer to the appropriate Microsoft documentation. It may be necessary to make this the default form before it can be seen in the user's Outlook calendar.

# **IAWC Migration**

This release of MCA allows you to maintain your existing Inter-Tel Audio and Web Conferencing (IAWC) data and upgrade to the latest version of MCA on MAS. If qualified, the existing IAWC server hardware can be reused and upgraded to run the latest MCA software. In this section, an overview of the IAWC to MCA migration process is provided.



**Note:** The IAWC server must be running the latest software version (v3.0.46) before the existing data can be migrated to MCA.

#### Manually Backup IAWC Data

Note: Install the IAWC migration software (v3.0.b45), available at <u>Mitel OnLine</u> (https://www.ebiz.mitel.com) in Software Downloads, prior to performing a backup to ensure IAWC data is migrated properly. For details, refer to the release notes included with the IAWC migration software.

Use the IAWC administrator interface to backup the legacy IAWC system data. For details on performing a backup, refer to the *Inter-Tel Audio and Web Conferencing Installation and Programming Manual* (part number 835.2726). From the Manual Server Backup page, you can select the data that you want to restore for the upgrade to MCA. The following options are available:

- **User/call database**: Selected by default. This data includes user information, such as accounts and scheduled conferences. The user/call database must be backed up or the IAWC migration restore will fail.
- **SSL Certificate**: Selected by default. If an SSL Certificate is included in the manual backup, the information is saved but not restored during the IAWC migration. For information about restoring SSL Certificates on MAS, refer to the *Mitel Applications Suite Installation and Maintenance Guide*.
- **Documents**: This data includes recordings and uploaded documents from active and expired conferences.
- **Configuration files**: This data includes system settings, such as Web conferencing settings, port reservations, and LDAP configuration.
- Custom branding: This data is not included in the IAWC backup file (see NOTE below).

**Note:** Custom logos, prompts, and music-on-hold recordings are *not* included when you back up the IAWC data. You must manually save these files to restore them after the migration to MCA is complete.

The IAWC manual backup will create a .tgz file on the IAWC server, and then allow you to select a location to save the data. Save the data to a location other than on the IAWC server, so it will be easy to retrieve and restore to MCA.

#### Changing to MCA Licenses

Licensing is different after migrating from IAWC to MCA. The HASP key is not used with MCA and the old license file is not restored during the data migration. The license for MAS is created

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on the Application Management Center (AMC) and should include MCA with the appropriate number of audio and Web ports. For details about MAS licensing, refer to the *Mitel Applications Suite Installation and Maintenance Guide*.

#### MAS Installation and Configuration

Refer to the Mitel Applications Suite (MAS) documentation for installing and configuring MAS with MCA. The MAS Installation and Configuration Manual and MAS Engineering Guidelines are available on the <u>Mitel Web site</u> (http://edocs.mitel.com).

After the IAWC data is saved and the MAS server is configured, you can restore the data to the upgraded MCA product, see Migrating IAWC Data on page 49.



# **CHAPTER 2**

CONFIGURATION

# Introduction

This chapter describes the initial set up and configuration of the communications system platform you are using with MCA. For detailed procedures and information about the communication platform, refer to the applicable system documentation.

Refer to the *Mitel Applications Suite Installation and Maintenance Guide* on the <u>Mitel eDocs</u> <u>Web site</u> (http://edocs.mitel.com/default.htm) for the following information:

- Installing MCA on MAS
- Upgrading MCA
- Backing up MCA data
- Restoring MCA data

## NOTICE

To migrate existing data from an Inter-Tel Audio and Web Conferencing (IAWC) server to Mitel Collaboration Advanced (MCA) on a MAS server, see IAWC Migration on page 18 and Migrating IAWC Data on page 49 for more information.

# **Configure the Mitel Communications Director (MCD)**

When the system platform you are using is the Mitel Communications Director (MCD), configure it first before you enter the SIP Server Configuration information in MCA. This allows the MCD to communicate and operate with the MCA product installed on the MAS server.

#### Configure the MCD as follows:

- Configure SIP Device Capabilities, below
- Configure Extended Hunt Groups on page 24
- Configure Class of Service (COS) on page 24
- Create IP Devices on page 25
- Create a Hunt Group on page 25

#### **Configure SIP Device Capabilities**

MCA is configured as a SIP extension on the MCD and allows the two to communicate. If the SIP Session Timer times-out before the system establishes a session with MCA, the session is torn down and the call does not complete. Configure the SIP device to prevent a scenario where attendees may be inadvertently dropped when an outgoing call is place during a conference.

Configure SIP Device Capabilities and set the following:

- Replace System based with Device based In-Call Features: Set to Yes.
- Session Timer: Set value to 0.
- · SDP Options/Allow Device To Use Multiple Active M-lines: Set to Yes

#### **Configure Extended Hunt Groups**

It is only necessary to configure Extended Hunt Groups when more than 65 MCA User Licenses are purchased. Configure the MCD for Extended Hunt Groups to allow you to program a hunt group with more than 64 members.



**Note:** When selecting Extended Hunt Groups, the Hunt Group capacity of the system changes from 176 hunt groups with a maximum of 64 members each, to 16 hunt groups with a maximum of 240 members each. Although you can program more, only one 240-member hunt group is recommended per system.

Configure License and Option Selection, and then set **Extended Hunt Group** to **Yes**.

## Configure Class of Service (COS)

Create a new COS for MCA SIP ports by modifying the default COS configuration. This COS is assigned to the hunt group you create for MCA, see Create a Hunt Group on page 25.

Configure Class of Service Options/Assignment for COS you will use for MCA ports, and then set **Suppress Simulated CCM after ISDN Progress** to **Yes**.

#### **Create IP Devices**

Create IP devices on the system for conferencing extensions on MCA.

Add a new device and configure the Multiline IP Set Configuration. Complete the following information for the multiline IP set range:

- Enter the number of records to add: The number of IP devices that you are creating. Typically, the value entered equals the number of MCA User Licenses purchased.
- Device Type: Select Generic SIP Phone from the list.
- **Number**: Type the starting extension number. If the extension numbers are consecutive (recommended) increment by 1.
- Interconnect Number: Type 1.

#### Create a Hunt Group

Program a hunt group for dialing into a conference using the IP devices you created.

Configure the Hunt Group Assignment. Complete the following information for the hunt group range:

- Enter the number of records to add: Type 1 (typical) for the number of hunt groups you are creating.
- Hunt Group: Type an extension number for the hunt group.
- **Class of Service Day**: Type the number of the COS you created earlier, see Configure Class of Service (COS) on page 24. Default is 1.
- Class of Service Night1: Type the number entered for Class of Service Day. Default is 1.
- Class of Service Night2: Type the number entered for Class of Service Day. Default is 1.
- Hunt Group Priority: Leave as the default value, which is 64.
- Hunt Group Type: Select Voice from the list.

Add a member to the Hunt Group Assignment, and then complete the following information for the hunt group member range:

- Enter the number of records to add: This is the number of IP devices that you added previously, see Create IP Devices on page 25.
- **Number**: Type the starting extension number. If the extension numbers are consecutive (recommended), increment by 1.

# **Configure the Mitel 5000 CP**

When the system platform you are using is the Mitel 5000 Communications Platform (CP), configure it first before you enter the Server Configuration information in MCA. Configure extensions in the Mitel 5000 Database Programming as 86xx ports, and then set the communication link to allow the system to communicate and operate with the MCA product installed on the MAS server. For additional Database Programming information, refer to the *Mitel 5000 CP Features and Programming Guide*, part number 580.8006.

Configure the Mitel 5000 as follows:

- Create IP Devices for 86xx Ports, below
- · Configure Phone Settings, below
- Create a Hunt Group, below
- Enable OAI Connection on page 27

#### Create IP Devices for 86xx Ports

Create IP devices (phones) on the Mitel 5000 to allow communication between the system and MCA. These IP devices are configured as 86xx conference ports.

Create IP devices and configure them as follows:

- Type the starting extension number, and then choose the number of devices to create. The number of devices you create is equal to the number of MCA ports licensed.
- For each extension, set the MAC address to FF:FF:FX:XX:XX, FF:FF:FF:FF:XX:XX, or FF:FF:FF:FX:XX where X represents the digits of the extension number.

## **Configure Phone Settings**

After the IP devices are created for the conferencing extensions, the settings for each device (phone) must be configured on the Mitel 5000. Create a call configuration for the MCA devices, and then configure the settings.

Create a new call configuration for the conference extensions (see Create IP Devices for 86xx Ports on page 26), and then set **DTMF Encoding Setting** to **RFC 2833**. For an installation in the United Kingdom (UK), set **Speech Encoding Setting** to **G 7.11 Mu-Law**.

Configure the phone settings (Flags) as follows for each of the conference extensions you created:

- Handsfree On/Off: set to No.
- · Ring Intercom Always On/Off: Set to Yes.
- Headset On/Off. Set to Yes
- Transfer to Connect Allowed. Set to Yes.

## Create a Hunt Group

After the IP devices are created and configured to communicate with MCA, you need to create a hunt group and add the IP phone extensions to it. The hunt group extension is the number you enter for the dial-in number in System Options (see page 38).

Create a hunt group, and then add members. The members of this hunt group are the extensions you created previously for the conference extensions; see Create IP Devices for 86xx Ports on page 26. Do the following:

- Create a hunt group extension number. Leave the Number of Extensions as 1 (default).
- Type a description for the extension, for example, MCA1. Descriptions can contain up to 20 characters and hunt group user names can contain up to 10 characters. Do *not* use slash (/), backslash (\), vertical slash (|), or tilde (~) characters in user names. Do *not* use Control characters in descriptions or user names.

#### **Enable OAI Connection**

The Mitel 5000 and MCA communicate using Open Architecture Interface (OAI). You must set the OAI connection in Database Programming to allow the systems to communicate. Under Sockets, set **System OAI Level 2** to **Yes**.

# **Configure the Inter-Tel Axxess System Platform**

If the system platform you are using is the Inter-Tel Axxess system (v11.0 or later), configure it first before entering the Server Configuration information in MCA. Configure extensions in the Inter-Tel Axxess Database Programming as IPRC ports, and then set the communication link to allow the system to communicate and operate with the MCA product installed on the MAS server. For additional Database Programming information, refer to the latest *Inter-Tel Axxess Installation and Maintenance Manual*, part number 580.8000.

Configure the Inter-Tel Axxess as follows:

- Add IPRC and Create IP Devices, below
- Configure IP Station Settings, below
- Create a Hunt Group on page 28
- Enable OAI Connection on page 29

#### Add IPRC and Create IP Devices

Add an Internet Protocol Resource Card (IPRC), and then create IP devices (phones) on the Inter-Tel Axxess to allow communication between the system and MCA. These IP phones are configured as the SIP conference ports.

After you add the IPRC, create IP phones associated with it. For each device you create, change the MAC address to FF:FF:FX:XX:XX where X:XX:XX represents the extension number.

#### **Configure IP Station Settings**

After the IP devices are created for the conferencing extensions, the settings for each device (IP phone) must be configured on the Inter-Tel Axxess system. Create a call configuration for the MCA IP devices, and then configure the IP device settings.

Create a new call configuration for the conference extensions (see Add IPRC and Create IP Devices on page 28), and then set **DTMF Encoding Setting** to **RFC 2833**.

Configure the phone settings (Flags) as follows for each of the conference extensions you created:

- Handsfree On/Off: set to No.
- Ring Intercom Always On/Off: Set to Yes.

#### Create a Hunt Group

After the IP devices are created and configured to communicate with MCA, you need to create a hunt group and add the IP phone extensions to it. The hunt group extension is the number you enter for the dial-in number in System Options (see page 38).

Create a hunt group, and then add members. The members of this hunt group are the extensions you created previously for the conference extensions; see Add IPRC and Create IP Devices on page 28. Do the following:

- Create a hunt group extension number. Leave the Number of Extensions as 1 (default).
- Type a description for the extension, for example, MCA1. Descriptions can contain up to 20 characters and hunt group user names can contain up to 10 characters. Do *not* use slash (/), backslash (\), vertical slash (|), or tilde (~) characters in user names. Do *not* use Control characters in descriptions or user names.

## **Enable OAI Connection**

The Mitel 5000 and MCA communicate using Open Architecture Interface (OAI). You must set the OAI connection in Database Programming to allow the systems to communicate. Under Sockets, set **System OAI Level 2** to **Yes**.


# **CHAPTER 3**

PROGRAMMING

# Introduction

This chapter describes the initial set up and configuration of Mitel Collaboration Advanced (MCA). After the communications platform is configured, the initial configuration of MCA and any future changes (for example, adding a user) are done through the Mitel Applications Suite (MAS) Server Manager – Mitel Collaboration Advanced Web interface. Only the Mitel Collaboration Advanced portion of the interface is described in this chapter. For information about the MAS Server Manager, refer to the *Mitel Applications Suite Installation and Maintenance Manual*.

## Admin Web Client Login and Initial Configuration

After you complete the setup of the communications system platform, configure Mitel Collaboration Advanced through the MAS Server Manager.

#### To log on and configure MCA settings:

- 1. Open a Web browser, and then type the URL or IP address where the MAS server is located. For example, https://<hostname> Or https://<xxx.xxx.xxx.xxx>.
- 2. Click Yes at the security prompt.
- **3.** Type admin (default) for **Username**, and then type the password that you created when Mitel Standard Linux (MSL) was installed on the MAS server.
- 4. Click Login to display the MAS Server Manager main page.
- 5. Select Mitel Collaboration Advanced in the navigation pane to open the MCA Management Console Welcome page.

After you are in the MCA administrator interface, you can access all the MCA administrator pages from the navigation pane.

	М	ITEL STANDARD LINUX	
admin@massrv5.maslab	mit	tel.com	
Configuration Start/Stop MCA Web Conferencing Settings	^	Mitel Collaboration	Advanced
Port Reservation Settings System Options LDAP Configuration			Welcome to the Mitel Collaboration Advanced Management Console. Use the links to the left to navigate to the individual screens.
Voice Prompts			5.0.0.23-1
Music On Hold Settings Licensing			
IAWC Migration	=		
Configure SIP Server			
Recording Retention Settings			

For initial set up, program the following sections before you configure the rest of MCA:

- Configuring Web Conferencing Settings on page 34
- Configuring System Options on page 36
- Configuring SIP Server on page 50

After completing these areas, set up the remainder of the MCA configuration in any order you choose.

The programming information provided in this chapter is presented in the same order (top to bottom) as displayed in the MCA Administrator interface navigation bar.

## Stopping and Starting the MCA Server

As an MCA administrator, you can stop and start all the MCA services without having to reboot the entire MAS server.



**Note:** Restart MCA only if you are experiencing a problem. Stopping MCA will end all conferences in progress.

#### To start and stop the MCA server:

- 1. From the MCA administrator page, click Start/Stop MCA on the navigation pane.
- 2. Do one of the following:
  - Click Start All. All MCA services are started.
  - Click Stop All. All MCA services are stopped.

A list of services and their status appears.

## Configuring Web Conferencing Settings

This section describes the Web conferencing settings configuration that is used to connect to a Web conference. See Firewall and DNS Server Configuration on page 15 for information about Web conferencing settings.

#### To configure Web Conferencing options:

1. From the MCA administrator page, click **Web Conferencing Settings** in the navigation pane.

#### Web Conferencing Settings

Internal Port	4443			
External Port	443			
Web Conferencing Name	<enter fgdn=""></enter>			
Domain Name	sveapps.net			
Save				
Internal port is the local port on the Web Conferencing Server that internal network users will use.				
External port is the port external users will connect to.				
Web Conferencing Name is the FQDN that all users (internal/external) will use to connect.				

**2.** Edit or view the following:

- Internal Port: The port to which internal (local network) attendees connect for Web conferencing. The local network must allow access to this port for internal users.
- External Port: The port to which external attendees connect when joining a Web conference. Port 443 (default) is recommended because it is a common port open on firewalls.
- Web Conferencing Name: The additional hostname designated for the Web conferencing server. The hostname must resolve to a public IP address that is externally accessible. The internal DNS must resolve the hostname to the local IP address of MCA. For more information, see the example in Figure on page 16.
- **Domain Name**: Configured on the MAS server; the Domain Name cannot be edited through the MCA interface. This is the URL or IP address for users to access the Web page of the MCA interface. The name must be accessible to everyone who will be invited to attend a Web conference, both inside and outside of your local network.
- 3. Click Save, and then click Ok at the prompt.

## **Configuring Port Reservation Settings**

This section describes the configuration of port reservations. The Port Reservations feature allows the MCA administrator to monitor and manage port usage for conferences.

The Port Reservations Report (see page 79) provides conference related information on MCA for the date and time range selected when Port Reservation Settings are configured.

#### To configure port reservation settings:

1. From the MCA administrator page, click Port Reservation Settings in the navigation pane.

Port Reservation Settings				
Enable Port Reservations				
Allow user to schedule conference if conflict occurs				
E-mail administrator on scheduling conflicts				
Save				

- 2. Select or deselect the following options:
  - Enable Port Reservations: When you select the Enable Port Reservations option, the MCA server tracks how many audio and Web conferencing ports are scheduled for use at any given date and time.

Note the following for the Enable Port Reservations option:

- · When you select Enable Port Reservations:
  - All prior scheduled conferences are set to 0 (zero) ports available. All currently scheduled conferences must be modified to reserve conference ports.
  - Mitel recommends that you select "Reservationless Calls Not Allowed" under Default User Settings (see page 66) to preserve ports on the server for one-time and recurring conferences.

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- The "To listen to this recording using your telephone" area on the Recording page is hidden and is not available to the user. This prevents ports from being used that may conflict with ports reserved for scheduled conferences.
- When you *do not* select Enable Port Reservations, the "Conference Size" field on the One-time, Recurring, and Reservationless Conference Web pages is hidden. The conference size is not relevant when the server does not track port resources.

**Note:** To preserve ports on the server for one-time and recurring conferences, Mitel recommends that you do the following when you select **Enable Port Reservations**:

- Make sure the **Allow user to schedule conference if conflict occurs** option is *not* selected (see page 36).
- Select **Reservationless Calls Not Allowed** for the Reservationless Calls option under Default User Settings (see page 66).
- Allow user to schedule conference if conflict occurs: If the "Enable Port Reservations" is selected, selecting the "Allow user to schedule conference if conflict occurs" option allows users to schedule a meeting even if the total number of attendees exceeds the number of licensed ports available. When the number of ports is exceeded, the user is prompted that not all attendees for the meeting may get in the conference if they choose to schedule it for that specific date and time. However, the user will still be allowed to schedule the conference.
- E-mail administrator on scheduling conflicts: If the "Allow user to schedule conference if conflict occurs" option is selected, selecting the "E-mail administrator on scheduling conflict" option provides the MCA administrator with an e-mail message any time a user chooses to schedule a conference after they are warned about potential port licensing conflicts.
- 3. Click Save, and then click Ok at the prompt.

## **Configuring System Options**

This section describes the settings for system options on MCA.

#### To configure system options:

- 1. From the MCA administrator page, click **System Options** in the navigation pane. The System Options page appears.
- 2. Configure the system options using the information provided in Table 6 on page 37.
- 3. Click Save, and then click Ok.

#### 

Configuration Start/Stop MCA	System Op	tions							
Web Conferencing Settings									
Port Reservation Settings								1	
LDAP Configuration		Dial-In Phone Number 1			]		Dial-In Phone Number 1 Label	main	
Voice Prompts Music On Hold Settings		Dial-In Phone Number 2					Dial-In Phone Number 2 Label	toll-free	
Licensing UI Wizard		Dial-In Phone Number 3			]		Dial-In Phone Number 3 Label	extensi	on
IAWC Migration									
Configure SIP Server		International Dialing Prefix	011				National Dialing Prefix	1	
Recording Retention Settings Manage Clients		Country Code	1				Webserver Admin E-mail		
Provisioning		Outgoing Prefix	8				Max Extension Length	5	
Add User			-						
Add Guest User		Enable DAS Rules					Active Speaker Indication	1	
List Users					1				-
Bulk Provision Users		Default Caller ID					Always use Default Caller ID		
Bulk Provision Res. Confs		Conoral Alarm E-mail			]		Conoral Alart E-mail		
Download Res. Confs		General Alarin L-mail					General Alert L-Inali		
Default User Settings		Port Usage Notification Threshold	9				Executive Ports	0	1
Broadcast E-mail			Ľ					·	
Billing Codes		Prompts Language	System D	Default - English	(United State	s) 🔻	Conference URLS	http://www.edu/action.com/action/a	: Ohttps:
Monitoring									
Active Calls		Document Timeout	24	hours 💌			User Login Timeout	8	hours
Proxy Extension Status		Custom Access Codes Allowed					Use HTTPS only		
License Usage									
Penorting		Platform	Mitel 330	0 🖵			Dial 1 to join outbound calls		
Call Activity Reports		G.729 Port Limit	100				Prompt For Access Code First		
VoIP Utilization Statistics									
Scheduled Conferences		Allow HD Video Resolutions							
System Alerts Log									
Install History Log		Email Admin informing	when the	50% 💌 of 57	.2 GB	<b>V</b>			
- ore reservations		MLA disk space utilized	reacnes						
Miscellaneous		Prompt to extend conference 5 y minutes prior to its end time							
Help		Enabling this will terminate each conference at its end time if not extended							
version		Enability t	ins will te	a minute each	conterent	ce at	its end time if not extended		
Server Manager					Save				

## Table 6: System Options Settings

Option	Description		
Dial-In Phone Number 1	Type the first telephone number assigned to MCA that users dial to join conferences. This is typically a Direct Inward Dialing (DID) telephone number, but it can be any number used to dial into a conference. This value is included in the "Dial-In numbers" section of the Meeting Details displayed by the Mitel Advanced Collaboration Clients and included in the default contents of the Conference invitation.		
Dial-In Phone Number 1 Label	Type the label associated with the first telephone number. This label is included in the "Dial-In numbers" section of the Meeting Details displayed by the Mitel Advanced Collaboration Clients.		
Dial-In Phone Number 2	Type the second telephone number assigned to MCA that users dial to join conferences. This is typically a toll-free telephone number, but it can be any number used to dial into a conference. This value is included in the "Dial-In numbers" section of the Meeting Details displayed by the Mitel Advanced Collaboration Clients and included in the default contents of the Conference invitation		
Dial-In Phone Number 2 Label	Type the label associated with the second telephone number. This label is included in the "Dial-In numbers" section of the Meeting Details displayed by the Mitel Advanced Collaboration Clients.		
	(Sheet 1 of 4)		

Option	Description
Dial-In Phone Number 3	Type the third telephone number assigned to MCA that users dial to join conferences. This is typically an extension or hunt group number, but it can be any number used to dial into a conference. This value is included in the "Dial-In numbers" section of the Meeting Details displayed by the Mitel Advanced Collaboration Clients and included in the default contents of the Conference invitation
Dial-In Phone Number 3 Label	Type the label associated with the third telephone number. This label is included in the "Dial-In numbers" section of the Meeting Details displayed by the Mitel Advanced Collaboration Clients.
International Dialing Prefix	Type the digits used before dialing international calls (for example, 011). This is based on the site where the MCA server is located.
National Dialing Prefix	Type the digit(s) required to make domestic toll calls.
Country Code	Type the country code of the location where MCA is located. The default is 1 (for United States).
Webserver Admin Email	Type the e-mail address of the system administrator. Web server alerts are sent to this address.
Outgoing Prefix	Type the number used by the communications platform (switch) to seize a CO trunk for outgoing calls. This prefix is pre-pended to the digits when the number dialed by a user is greater than the Max Extension Length. When Enable DAS Bules is set this setting is not applicable.
Max Extension Length	Type the maximum number of digits MCA should use to determine an extension. If the number dialed is more than the maximum length, MCA sees it is an external call and appends it to the Outgoing Prefix.
	when Enable DAS Rules is set this setting is not applicable.
Enable DAS Rules	Set this option if DAS rules apply to MCA; the DAS Rules option shows in the navigation pane. The normal default for this option is cleared, but set for an IAWC to MCA migration. See Configuring Dial Access String (DAS) Rules on page 47.
Active Speaker Indication	Set this option to allow the audio conference leader to view the current speaker in the conference. When set in System Options, the leader can set or clear this feature for each audio conference. The default for this option is set.
Default Caller ID	Type the caller ID that is provided by MCA to the Public Switched Telephone Network (PSTN) on outgoing calls.
Always use Default Caller ID	Set this option to always use the default caller ID option above for all outbound calls. Otherwise, the Caller ID of the first party in a call will be used (if available), or each party will see the other's Caller ID.
General Alarm Email	Type the e-mail address of the person who gets notified of general alarms (typically the system administrator).
General Alert Email	Type the e-mail address of the person who gets notified of general alerts (typically the system administrator).
Port Usage Notification Threshold	Type the number of concurrent ports being used on MCA, so that when this value is reached, an alert e-mail is sent to the e-mail address specified in the Alert Email box when the threshold is reached.
	(Sheet 2 of 4)

Option	Description
Executive Ports	Type the number of audio ports on the system you want to reserve for the exclusive use of conferences created by executive users. If the number of Executive Ports is non-zero, when someone joins a conference created by a non-executive user, the number of ports available is decreased by the number of Executive Ports. See Editing a User Profile on page 58 for information on how to configure a user to be an executive user.
	<b>Note:</b> Executive port settings are disregarded when Port Reservations is selected.
Prompts Language	Select from the list the language that is used for the audio voice prompts. Custom Language 1 and Custom Language 2 are used for selecting a language other than those provided in the prompts list. For additional information, see Configuring Voice Prompts on page 42.
Conference URLs	Select whether conference URLs will be protected (encrypted) by SSL (https) or not protected (http). If you select https, be sure that port 443 is open on any firewall placed between MCA and the Internet.
Document Timeout	Type the length of time that documents uploaded to the MCA will remain after a conference has expired. MCA periodically deletes documents that remain past this time-out period.
User Login Timeout	Type the period of time of user inactivity before a browser session with MCA is automatically terminated. Because a session may remain open during a conference, and because that session may be used for call control at some point well after that call has started, this should be set long enough so that users will not be logged out during a conference. It should be set short enough so that an open session does not constitute a potential security issue. The default is 8 hours.
Custom Access Codes Allowed	Select this option to enable custom access codes to be created when setting up conferences.
Minimum IVR Access Code Length	Cannot be changed from the default value of 7. Reserved for future use.
Use HTTPS Only	Select this option to force a secure connection for users that access the conference. This setting overrides the Conference URLs setting.
	<b>Note:</b> You must set Use HTTPS Only for MCA hyperlinks to work when MAS is configured in LAN mode (see Figure on page 16) with a Mitel Multi-protocol Border Gateway (MBG) Web Proxy. For more information about the MBG Web Proxy, refer to the MAS documentation located on the <u>Mitel Web site</u> (http://edocs.mitel.com).
Platform	Select the communication system being used with this installation of Mitel Collaboration Advanced.
Dial 1 to join outbound calls	When selected, a user added to the conference call is prompted by the system to press 1 to join the conference. The user must respond correctly within the specified time or the system drops the outgoing call attempt.
	(Sheet 3 of 4)

Table 6:	System Options	Settings	(continued)
	oyotom optiono	oottinigo	(continuou)

Option	Description		
G.729 Port Limit	Audio Compression port limit valid values are 0-100 (default is 100). Uncompressed audio ports will be used once the maximum has been reached. A value of 0 indicates G.729 audio compression ports are disabled.		
	<b>Note:</b> 2-way Client Audio feature introduced in MCA 5.0 will only use G.711 voice encoding ports (it will not use G.729 ports).		
Prompt for Access Code First	When selected the Access Code will be required before the Personal ID can be entered when accessing the Audio portion of the conference.		
Email Admin informing when the MCA disk space utilized reaches % of XX GB	This option allows the administrator to be notified by email when the MCA server disk space reaches xx% utilization. This option is checked (enabled) by default with a value of 80%. The administrator also has the option of disabling this option.		
	Note: The disk space allocated to the MCA conference recordings and documents is 40% of the total available disk space on the MAS/MCA server. The 40% of the entire disk space is determined when the page loads. For example on a system with 100GB disk space, the option will read "Email Admin informing when the MCA disk space utilized reaches% of the 40GB allotted to recordings and documents".		
Prompt to extend conference < <i>x</i> > minutes prior to its end time	When selected, the End of Conference Prompting (EOCP) minutes box becomes active. The value selected in this box determines the number of minutes prior to the end of a conference that the user receives a prompt the conference will terminate.		
Enable HD Resolutions	<b>OFF</b> by default. Clients will not be presented with the ability to select HD resolutions.		
	<b>ON</b> : This will enable HD resolutions for all clients in all conferences. Client PC profiling will still occur, however this must be enabled before any client can select HD resolution.		
	(Sheet 4 of 4)		

Table 6:	System	Options	Settings	(continued)
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# Configuring LDAP Authentication and Auto-Provisioning

When a user attempts to log on to MCA, a Lightweight Directory Access Protocol (LDAP) query authenticates the user logon credentials. Rather than querying its own internal database to verify if the user name and password are authorized, an LDAP query is launched against the corporate directory. If the response indicates the username/password combination is legitimate, the user can access MCA for scheduling and placing calls. In this scenario, the user's password is not stored on MCA and you do **not** need to administer the user database on MCA, except to change some enhanced service features for users.

MCA also uses the LDAP query process to set auto provisioning. If the LDAP query indicates the user name/password combination is legitimate, but the user name does not match any existing user name on MCA, a new account is automatically established for that user. The user is set up with the default level of authorization to use the system's special features and is able

to start using MCA immediately. These user defaults are set when MCA is initially configured (see Configuring the Default User Settings on page 66).

If a user requires authorizations that differ from the MCA defaults, you can use the administrator Web client to change that user's profile. See Editing a User Profile on page 58.

The following procedure is for configuring LDAP with Active Directory, which is the most common LDAP authentication.

#### NOTICE

To use LDAP authentication with Active Directory, you must have Active Directory set up prior to configuring MCA. Contact the site administrator to view the Active Directory configuration, and then verify the following.

- An Active Directory user exists that is used as the LDAP Admin ID. The user does not need any special rights or permissions.
- Users with name, password, and e-mail information exist as Active Directory users.
- You can ping the MCA server by hostname from the Active Directory server.

#### To configure LDAP authentication with Active Directory:

 From the MCA administrator page, click LDAP Configuration in the navigation pane. The LDAP Configuration page appears as does sample values for LDAP server parameters. The following LDAP Configuration page illustrates an example of user authentication with Active Directory.

LDAP Configuration					
Use LDAP		LDAP Server Name	server.domain.com		
LDAP Port No.	389	LDAP Search Base	CN=users,DC=ntwrk,DC		
LDAP Admin ID	CN=confbr,CN=users,D(	LDAP Admin ID Password	•••••		
LDAP UID Field	sAMAccountName	E-mail domain	domain.com		
Auto synchronize		Sync interval	5 Minutes		
Submit					

2. To use an LDAP server to store the user database, select Use LDAP.



When Use LDAP is set, Add User and Bulk Provision Users are *not* available in the MCA navigation pane.

If this option is cleared, the user database is stored on the MCA server and the settings on this page have no affect on authentication.

- 3. Type the server name where Active Directory resides in the LDAP Server Name box.
- 4. Leave LDAP Port No. at the default (389). However, you may need to change this setting to the global catalog port number (3268) for installations with a large Active Directory database or if there is a need to authenticate users from multiple/nested organizational units (OU) or containers (CN).
- Type the LDAP Search Base information in the box using the format: CN=<userdirectory>,DC=<domain>,DC=<com>.

- Entered text must be lower case except for DC, OU, CN, which must be upper case. Using upper case letters for anything else may cause the LDAP integration to fail.
- If not using the standard Users folder, use OU instead of CN for the folder names.
- If OUs are in sub-folders, list them in reverse order separated by commas.
- If authenticating users from multiple/nested OUs or CNs, LDAP Search Base must be a folder that is a parent of all OUs or CNs in which users exist. For example, specify the top domain level as LDAP Search Base: DC=<domain>,DC=<com>.
- Type the LDAP Admin ID information in the box using the format: CN=<active directory admin ID>,CN=<userdirectory>,DC=<domain>,DC=<com>.
  - Entered text must be lower case except for DC, OU, CN, which must be upper case. Using upper case letters for anything else may cause the LDAP integration to fail.
  - If not using the standard Users folder, use OU rather than CN for the folder names.
  - If OUs are in sub-folders, list them in reverse order separated by commas.
  - When entering the information, the first entry for CN must be the CN name of the user account that is the admin ID, not the username or the display name. The username, display name, and CN names are typically the same however, it is possible that they could be different.
- 7. Type the active directory admin's password in the LDAP Admin ID Password box.
- 8. Type **SAMAccountName** in the **LDAP UID** box.
- 9. Type the e-mail domain as < yourdomain.com> in the Email domain box.
- 10. Select Auto synchronize and leave Sync interval at 5 (minutes).
- 11. Click Submit, and then click Ok at the prompt.

#### To verify LDAP authentication is functioning:

 Log on using the username (*not* the e-mail address) of a user listed in the Active Directory, along with their Active Directory password. The MCA server checks the Active Directory for authentication and allows the user to log on.

#### NOTICE

The name and password are sent as plain text and present a possible security risk.

2. After the user has logged on, they are automatically added to a list of users that can be viewed and administered through the MCA admin Web client using Adding User Accounts on page 56.

## **Configuring Voice Prompts**

MCA includes the voice prompts that are played for audio conferences. The audio prompts are available in multiple languages and the default prompt language is determined by the Application Suite Language set on the MAS server. The Voice Prompt page allows you to upload custom voice prompts and substitute them for selected prompts or upload an entire set of custom language prompts, which are played instead of the existing prompts. The individual file names are listed and include a brief description of the voice prompt to help you identify the file

to change. For a complete list of audio prompts (United States English only), see Voice Prompts on page 93.

Voice Prompts		(?)
Prompts Language	English (United States)	Mode File 💌
Voice Prompt File	Prompt 0 (TURN_OFF_MUSIC)	Choose File No file chosen
	Revert This Prompt to Default	Upload

## **Recording Custom Prompts**

Recording prompts is not a feature of MCA and must be done externally, then saved in the proper format. Prompts are stored in 8 KHz, 8-bit or 16-bit, mono, mu-law, .wav format. In network environments where A-law encoding is used, the internal prompts are stored in mu-law format.

The file name of a custom prompt recording must match the existing file it is replacing. If a file name does not match, the file is ignored and the default prompt (and language) is used. For example, the "Welcome" prompt file name is 01.wav, therefore, the file replacing it must be named 01.wav.

**Note:** If the custom prompt you are recording contains a beep tone, you must include the tone when recording the prompt.

## **Uploading Custom Prompts**

When replacing multiple prompts you can save all of them to a .zip file that you can upload to MCA as a batch file. When selected, the batch mode process unzips the file, and then replaces the corresponding prompt files for the language selected. However, if any file is not named correctly, the same as the file it is replacing, it is ignored during the upload and the existing prompt is played. Mitel recommends that you verify the file names before uploading them to MCA. To view a list of the prompt names, see Voice Prompts on page 93.

Save the file locally, and then upload it to MCA as Custom Language 1 or Custom Language 2. To play these prompts for audio conferences they must be selected in System Options, see Prompts Language on page 39, after they are uploaded to MCA.

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**Note:** After uploading custom prompts, you must restart MCA before new prompts are played for a conference.

#### To upload a custom voice prompt file:

- 1. From the MCA administrator page, click Voice Prompts in the navigation pane.
- 2. Select a language from the Prompts Language list.
- 3. Select File for the Mode.
- 4. Select from the Voice Prompt File list the prompt that you want to change.

5. Click **Browse** to locate the file you want to use in place of the existing file.

**Note:** If necessary, click **Revert This Prompt to Default** to return to the default file for the selected prompt. This feature is only available for English language prompts and will not restore prompts for Custom Language 1 or Custom Language 2.

6. Click Upload, and then click Ok at the prompt.

To upload custom voice prompt batch files:

- 1. From the MCA administrator page, click Voice Prompts in the navigation pane.
- 2. Select from the Prompts Language list the language (files) that you are replacing.



**Note:** Typically, Custom Language 1 (or 2) is selected when replacing all prompts for another language.

- 3. Select Batch for the Mode.
- 4. Click Browse to locate the .zip file for the prompts you are uploading.
- 5. Click Upload, and then click Ok at the prompt.

## Configuring Music-on-Hold

The product ships with several .wav files for Music-On-Hold. You can determine whether music is heard when users are placed on hold, and if so, what music is played. Music-On-Hold files are stored as an 8 KHz, 8-bit, monophonic mu-law .wav file format. The following is an example of the Music-On-Hold parameter page.



#### To set or clear Music-On-Hold settings:

- 1. From the MCA administrator page, click **Music-On-Hold Settings** in the navigation pane.
- 2. Select the check box next to Enable Music-On-Hold to set or clear the option.
- 3. Select a file from the Music-On-Hold File Name list.
- **4.** Click **Save**, and then click **Ok** at the prompt. The system plays the file that you selected for the Music-On-Hold.

#### To Upload a new Music-On-Hold file:

- 1. Type the path name or click **Browse** to select a new .wav file.
- 2. Click **Upload**, and then click **Ok** at the prompt. Your file will be added to the end of the Music On Hold File Name list.
- **3.** Select the file from the **Music-On-Hold File Name** list, and then upload it to set it as the Music-On-Hold.

## Viewing the Licenses

Server port and user capacity is controlled by an application ID through the Applications Management Center (AMC) and registered on the MAS server. The Licensing page shows the number of licenses available.

MCA 4.0 and newer releases require Enhanced Video licenses to use the higher resolution video provided by the H.264 codec.

For information about adding licenses, refer to the *Mitel Applications Suite Installation and Maintenance Guide*.

#### To view the license certificate:

From the MCA administrator page, click **Licensing** in the navigation pane. The License Certificate page appears and displays the following (also see License Usage on page 73):

License Certificate		
Audio	10 ports	
Web/Video	10 ports	
Enhanced Video	0 ports	
Users	4000 users	

- Audio, Web/Video and Enhanced Video: The MCA server currently uses:
  - one Audio port for each audio connection to an Audio-Only or Audio-and-Web conference. This audio connection occurs from an audio call through one of the MCA's SIP Server extensions. Effective in v5.0, this audio connection can also occur from the Collaboration Client new Audio-broadcast feature.
  - one Web/Video port for each Collaboration Client or Web Client connection to a Web-Only or Audio-and-Web conference. Effective in v5.0, one Web/Video port for each video connection from a SIP device (new SIP-video feature). This video connection occurs from a video call through one of the MCA's SIP Server extensions.
  - one Enhanced Video port for each Web/Video port used when the number of Enhanced Video ports licensed is not 0.

Note: SIP Video and High Definition (HD) Video require enhanced video ports. When the number of Enhanced Video ports purchased is not 0, the number of Web/Video ports licensed and the number of Enhanced Video ports licensed are always the same.

 Max users licensed: The number of MCA user accounts allowed that can be configured on the system.



**Note:** The Licensing Usage page shows the current number of in-use ports/users. See License Usage on page 73.

# Customizing the User Interface

The User Interface Wizard allows you to customize the appearance of the Mitel Collaboration Advanced graphical user interface (GUI).





**Note:** Only users that do *not* have an MCA account will see a custom top banner logo, background, and Welcome page image.

#### To view the current settings:

From the MCA administrator page, click **UI Wizard** in the navigation pane, and then click **View Current** to show the current graphic for the selected area of the MCA user interface.

#### To change a graphic:

- 1. Click **Browse**. A window opens that allows you to navigate to the location of the new graphic file.
- Select the new file, and then click **Open**. The file path for the graphic appears in the User Interface Wizard page. Select additional files to change, if necessary.

3. Click Save, and then click Ok in the confirmation dialog box.

#### To restore default settings:

- 1. Click **Restore All Defaults** to select all settings to change back, or select the **Default** check box next to the individual areas of the user interface.
- 2. Click Save, and then click Ok in the confirmation dialog box.

## Configuring Dial Access String (DAS) Rules

The DAS Rules options are available in the MCA navigation pane only when you set Enable DAS Rules on the Systems Option page.

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**Note:** When DAS rules are applied, Outgoing Prefix and Max Extension Length are *not* applicable (see Configuring System Options on page 36).

**Note:** DAS rules are processed by the Perl Compatible Regular Expressions (PCRE) library distributed as libpcre. Details on the library are available from http://www.pcre.org/. MCA supports only the 'g' flag.

Consider the following when you configure the dialing plan:

- Check for special or specific dialing plans for your company. For example, if you have access codes to connect to branch offices, remote locations, or international offices.
- Check for blocked area codes (such as 800 or 900) and if so, what numbers that are blocked.
- Check that all call processing programming has been completed, including Automatic Route Selection (ARS), dial rules, and other related information.

MCA uses DAS rules to dial outside numbers and internal private branch exchange (PBX) extensions. You can configure the MCA server with rules to handle a wide range of call routing and dial plan requirements. These rules can handle international dialing, PBX extension calling, and sophisticated SIP call processing.

DAS rules are a set of up to 20 UNIX<sup>®</sup> regular expressions that are applied to dialed digits. The rules are applied in the order in which they are listed in the DAS Rules table. The output of each rule is the input to the next rule. The result is used as the dialed digits that are processed through conferencing server call processing.

Note: Performing the following procedure disconnects all active calls.

#### To configure dialing rule parameters:

1. From the MCA administrator page, click DAS Rules from the navigation pane.

DAS Rules		
DAS Rule 1	s/^\+(\d{3,6}\$)\/1@172.16.14.157/	
DAS Rule 2	AS Rule 2 s/^\+x(.*)\1@172.16.14.157/	
DAS Rule 3	S Rule 3 s/^\+1(.*)/81\1@172.16.14.157/	
DAS Rule 4 s/^\+(.*)/8011\1@172.16.14.157/		
DAS Rule 5		

2. Type the specific rules you want the conferencing server to follow when processing dialed digits or SIP addresses. An example is shown below:





Consider adding DAS rules to reflect your calling area. In the example below, 602 is used for an area code in Phoenix, Arizona.



First Half – what is being searched for (between "s/" and the second "/")

\*: beginning of string to search

**\+1**: phone numbers that start with a "1"

(602.\*): "grab" any phone number that starts with a "602" and "save it"

Second Half – the replacement (between second "/" and third "/")

8: most often 8 is used as the first number (the Mitel Communications Director (MCD) uses either 8 or 9 to get an outside line, the Mitel 5000 uses 8.)

1: this is the "(602.\*)" that was "saved" in the first half (the complete phone number)

@: literally, the "@" sign

(PRIMARYINTERNALIP): variable for the main IP address

In the example, any phone number starting with 1602 will have the leading "1" stripped off, replacing it with an "8", the number, @, and then the IP address. Table 7 provides additional descriptions for DAS rule syntax. Assuming the phone number to be dialed is 1-602-555-1212 and the IP address configured is 192.168.22.55 results in:

16025551212 becomes 86025551212@192.168.22.55

Character	Description	
\$	End of the string	
^	Beginning of the string	
. (period)	Any character	
*	0 (zero) or more items. For example, $a \star$ means 0 or more number of $a$ in the string.	
?	0 (zero) or one item.	
+	1 or more number items	
х	The number that follows is dialed as it appears.	
\d	Digits	
\1, \2, \3,	Equivalent to the corresponding set of parentheses matches	
()	Used to group matching characters in a string that can be referred to later	
[]	Used to define a range. Example: [0-9] matches any digit	
{n}	Exactly n occurrences of the previous item	
	Examples: a $\{4\}$ matches aaaa, and . $\{4\}$ matches any four characters	
{n,}	At least n occurrences of the previous item	
	Example: $a{4, }$ matches aaaa or aaaaa or aaaaaa, etc.	
{n,m}	At least $\mathbf{n}$ but not more than $\mathtt{m}$ occurrences of the previous item	
	Example: a{4,5} matches only aaaa or aaaaa	

Table 7: DAS Rule Syntax Descriptions

3. Click Save, and then click Ok when prompted.

# **Migrating IAWC Data**

This feature allows you to maintain your existing Inter-Tel Audio and Web Conferencing (IAWC) data and upgrade to the latest release of MCA. See IAWC Migration on page 18 for additional information about the migration process.

After MSL, MAS, and MCA are installed, login in to the MAS Server-Manager Web interface and navigate to the Mitel Collaboration Advanced administrator from the main pane.

#### To restore the IAWC data:

- 1. From the MCA administrator page, click **IAWC Migration** in the navigation pane. The IAWC Data Migration page appears.
- 2. Click Browse, and then navigate to the location where you saved the IAWC data.
- 3. Click Restore to start uploading the IAWC data to the MAS (MCA) server.



Do *not* click away from the IAWC Data Migration page while the saved data is being uploaded. If you navigate away before the upload completes, it will fail and you will have to start the upload again.

4. This page shows progress of the migration and it is automatically refreshed while the data is being restored. After the data is restored, a status message on the page will indicate if the migration was successful. If for any reason a portion of the data is not restored, it is indicted by a red X along with a brief description.

After you restore the IAWC data on MCA, the MCA server will restart automatically. Do the following:

- Configure Web Conferencing settings, see page 34.
- Verify System Options settings are correct, see page 36.
- Configure SIP server for the system connected to MCA, see page 50.
- If applicable, restore any custom logos (see page 46), prompts (see page 43), or music-on-hold files (see page 44).

## **Configuring SIP Server**

The signaling protocol used between the communications platform and MCA is SIP. MCA supports multiple Mitel communication platforms. The platform you select in System Options (see page 36) determines which SIP Server page appears when you select Configure SIP Server in the navigation pane.

## Configure SIP Server – MCD

Use these settings only when configuring MCA with a MCD system. Configure the MCD system first, and then configure the SIP server. See Configure the Mitel Communications Director (MCD) on page 24 for details.

After you configure the MCD system for MCA, configure SIP Server settings in MCA using the account information from the MCD system configuration.

To configure the SIP component for a Mitel 3300 (Mitel Communications Director):

- 1. From the MCA administrator page, click **System Options** in the navigation pane.
- 2. Select Mitel 3300 from the Platform list options.

Code Length	~
Platform Mitel 3300 -	
	فكمحصب

- 3. Click Save, and then click Ok at the prompt to restart MCA.
- 4. From the MCA administrator page, click **Configure SIP Server** in the navigation pane. The Mitel 3300 SIP Server Configuration page appears.

Mitel 3300 SIP Server Configuration		
Extension First	20651	
Extension Last	20658	
Extension PIN		
SIP Domain	pk-25.mca.mitel.com	
IP Address	11.22.33.13	
SIP Port 5060		
Registration Period	300	
Save		

- **5.** Enter the following information:
  - **Extension First**: Type the extension number of the first IP device in the hunt group used by the MCA server to register itself with the Mitel 3300.
  - **Extension Last**: Type the extension number of the last IP device in the hunt group used by the MCA server to register itself with the Mitel 3300.
  - Extension PIN: Type the User PIN for the MCA ports on the Mitel 3300. This field is NOT mandatory.
  - **SIP Domain**: This can be the domain name, fully qualified domain name (FQDN), or the IP address of the Mitel 3300 system used to register the MCA SIP ports. If you do not know the domain name or FQDN, type the Mitel 3300 system IP address.
  - IP Address: Type the IP address of the Mitel 3300 system. Alternatively, type the FQDN of the Mitel 3300 system.

Note that when typing the FQDN, only the first IP Address value returned by the DNS lookup will be used.

- **SIP Port**: Type the SIP port number of the Mitel 3300 system. The port number is typically 5060.
- Registration Period: Type the number of seconds for the registration period used by MCA when it registers itself with the Mitel 3300.
   Note that this value also controls the registration refresh rate, which is normally half of the Registration Period.
- 6. Click Save, and then click Ok at the prompt.
- **7.** Verify the results of the SIP registration process, go to Checking Proxy Extension Status on page 69.

## Configure SIP Server – Mitel 5000

Use the following settings only when configuring MCA with a Mitel 5000 system. Configure the Mitel 5000 system first, and then configure the SIP server settings using the information from the Mitel 5000 system configuration. See Configure the Mitel 5000 CP on page 26 for details.

#### To configure the SIP component for a Mitel 5000:

- 1. From the MCA administrator page, click **System Options** in the navigation pane.
- 2. Select Mitel 5000 from the Platform list options.

Code Length	
Platform	Mitel 5000 -
Between auto	nd rate was a low minute of the

- 3. Click Save, and then click Ok at the prompt to restart MCA.
- **4.** From the MCA administrator page, click **Configure SIP Server** in the navigation pane. The Mitel 5000 SIP Server Configuration page appears.

Mitel 5000 SIP Server Configuration	
Extension First	
Extension Last	
Node Number	
5000 IP Address	
OAI IP Address	
OAI Port	
OAI Password	
	Save

- 5. Type the following information:
  - Extension First: Type the extension number of the first IP device used by the MCA server to register itself with the Mitel 5000.
  - **Extension Last**: Type the extension number of the last IP device used by the MCA server to register itself with the Mitel 5000.
  - **Node Number**: Type the node number of the Mitel 5000 that is connected to MCA. If the Mitel 5000 is configured as a single node, type **1**, which is the default of the Mitel 5000.
  - **5000 IP Address**: Type the IP address of the Mitel 5000 system. *If the system is configured as a Mitel 5600*, type the IP address of the Base Server.
  - OAI IP Address: Type the IP address of the server that provides OAI and SIP for the Mitel 5000.
    - If the system uses a CT Gateway, type the IP address of the of the gateway.
    - If the system has a PS-1, type the IP address of the PS-1.
    - *If the system does not have a PS-1*, type the same IP address you entered for Mitel 5000.
  - **OAI Port**: Type the port number used on the Mitel 5000 for OAI. The default value is 4000.
  - **OAI Password**: Type the password used to connect to OAI.

- 6. Click Save, and then click Ok at the prompt.
- **7.** Verify the results of the SIP registration process, go to Checking Proxy Extension Status on page 69.

## Configure SIP Server – Inter-Tel Axxess

Use the following settings only when configuring MCA with an Inter-Tel Axxess system. Configure the Inter-Tel Axxess system first, and then configure the SIP server settings using the information from the Axxess system configuration. See Configure the Inter-Tel Axxess System Platform on page 28 for details.

An Inter-Tel Axxess system has one Call Processing (CP) node but can have multiple Internet Protocol Resource Cards (IPRCs). Up to 20 IPRCs can be configured on MCA, however, at least one IPRC must be programmed to communicate with the MCA server.

#### To configure the SIP component for Inter-Tel Axxess:

- 1. From the MCA administrator page, click System Options in the navigation pane.
- 2. Select Inter-Tel Axxess from the Platform list options.



- 3. Click Save, and then click Ok at the prompt to restart MCA.
- 4. From the MCA administrator page, click **Configure SIP Server** in the navigation pane. The Inter-Tel Axxess SIP Server Configuration page appears.

Inter-Tel Axxess SIP Server Configuration		
Node Number		
OAI IP Address		
OAI Port		
OAI Password		
	IPRC 1	
IP Address		
Extension First		
Extension Last		
New IPRC	Save	

- **5.** Type the following information:
  - **Node Number**: Type the node number of the Inter-Tel Axxess that is connected to MCA. If the Inter-Tel Axxess is configured as a single node, type **1**, which is the default.
  - OAI IP Address: Type the IP address of the Inter-Tel Axxess system.

- **OAI Port**: Type the port number used on the Inter-Tel Axxess for OAI. The default value is 4000.
- OAI Password: Type the password used to connect to OAI.
- 6. Type the following information for the IPRC you want to connect to MCA:
  - IP Address: Type the IP address of the Inter-Tel Axxess IPRC.
  - **Extension First**: Type the extension number of the first IP device used by the MCA server to register itself with the Inter-Tel Axxess.
  - **Extension Last**: Type the extension number of the last IP device used by the MCA server to register itself with the Inter-Tel Axxess.
- 7. Do one of the following:

If you are configuring another IPRC, click New IPRC, and then repeat step 6 to add the IPRC.

If you are finished configuring the IPRC, click Save, and then click Ok at the prompt.

**8.** Verify the results of the SIP registration process, go to Checking Proxy Extension Status on page 69.

# **Recording Retention Settings**

The Recording Retention Settings allows an administrator to set:

 auto-clean mechanism, in other words the length of time recordings should be saved before being deleted

To view the server Recording Retention Settings:

1. From the MCA main page, click **Recording Retention Settings** in the navigation pane.

#### **Recording Retention Settings**



To change the server Recording Retention Settings:

- Options to Delete Records After xx Days (the range is from 30-365 days, default value is 60 days).
- **3.** Options to Send email alert to the user xx Days before deletion (the range is from 1-30 days, default is 7 days)
- 4. Click Save.

## Manage Clients

MCA Client Management panel allows you to control the versions of the MCA client applications that are available to users.

To upgrade or downgrade an MCA client application version:

1. From the MCA main page, under Configuration, click Manage Clients.

admin@massrv5.maslab.n	nitel.com					Logout
Configuration Start/Stop MCA Web Conferencing Settings Port Reservation Settings System Options LDAP Configuration Voice Prompts	MCA Client Man This table shows the software available for	agement MCA client software ver users, specify the package	sions currently availa e to upload and then c	ble on this server. lick the "Upload Nev	To make a newer v v Client'' button below	ersion of MCA client
Licensing		Client Package	Current Version	Original Version		
UI Wizard IAWC Migration	E	MCA Windows Client	2.0.12.1	2.0.12.1	Restore Original	
Recording Retention			Upload New Clien	t Package		
Settings Manage Clients		New client package:		Browse	Upload New Client	

- 2. Click Browse to open the File Upload window.
- 3. Navigate to the new MCA client file (.rpm extension) to upload.
- 4. Click Upload New Client to place the new client version on MCA server, which will automatically make it available for the users.
- 5. Once the client package has been successfully uploaded and installed, a success message is displayed.
- **6.** When a new client package is uploaded, the following validation checks are performed on the package before the package is installed:
  - 1. Verify the package is a valid RPM file
  - 2. Verify the RPM has not been corrupted
  - 3. Verify the RPM is a valid MCA client RPM
  - 4. Verify the RPM version is not already installed



**Note:** If any of these validation steps fail, then the RPM is not installed and an error message containing the reason for the failure is displayed.

To restore an original client version:

- 1. From the MCA main page, click Manage Clients in the navigation pane.
- 2. Click Restore Original, button next to the client package to restore.
- Once the client package has been successfully restored to its original version, a success message is displayed.

# **User Setup and Account Management**

**Note:** Do *not* add new MCA users, delete existing MCA users, or manage accounts from the MCA administrator interface. Instead, you should configure users from the MAS administrator interface, Server Manager – Users and Services. If you create new users through the MCA administrator, they will appear as an Unassigned service associated with MCA. Refer to the MAS administrator online Help for managing user accounts.

Manage users through functions available under Provisioning on the menu bar. Navigation links are located on the left side of the page.

User accounts on MCA contain user-specific information needed to log on and use MCA. When a user is initially set up, most parameters are set to system defaults, but you can change specific settings for individual users, as described in this section.



**Note:** You can set up users either through the Provisioning Web page or through LDAP queries to a corporate directory. The following sections describe the process for setting up users locally in the MCA database. Using LDAP is described in Configuring LDAP Authentication and Auto-Provisioning on page 40.

## Adding User Accounts

As an administrator, you can create user accounts for Mitel Collaboration Advanced. See Note on page 56.

#### To add individual accounts:

1. From the MCA Administrator page, click **Add User** in the navigation pane.

#### Create User

Username	
Password	
Personal ID	
Registered Phone	
Create User	

- 2. Type the **Username** and **Password** for the new user. The user name must be in the format: name@host.com.
- 3. Type a Personal ID for this user (select a 3 to 5 digit identification number).
- 4. Type the **Registered Phone** number for this user. For non-extensions, type the full number, with area code -- it is formatted automatically.
- 5. Click Create User. A prompt appears to confirm that the new user is added to MCA.

# Adding Guest User Accounts

As an administrator, you can create guest user accounts for Mitel Collaboration Advanced.

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**Note:** Guest User Accounts must be created on MCA, they cannot be created via MAS administrator interface.

To add individual guest accounts:

1. From the MCA Administrator page, click Add Guest User in the navigation pane.

**Create Guest User** 

Display Name	
Email	
Personal ID	
Registered Phone	
Create User	

- 2. Type the **Display Name** and **Email** for the new guest user. The email must be in the format: name@host.com.
- 3. Type a Personal ID (select a 3 to 5 digit identification number).
- **4.** Type a **Registered Phone** number for this user. For non-extensions, type the full number, with area code -- it is formatted automatically.
- 5. Click Create User. A prompt appears to confirm that the new user is added to MCA.

## Deleting a user profile

#### To delete a user profile:

- 1. Select the user account that you want to delete, see Accessing a User Account on page 58.
- 2. Click Manage User Profile.
- 3. Click **Delete User** at the bottom of the user profile page, and then click **Ok** at the prompt.

## Managing User Accounts

As an administrator, you can view, modify, or delete the following MCA user account information:

- Editing a User Profile on page 58
- Viewing Scheduled Conferences on page 60
- Generating a Call Activity Report on page 60
- Scheduling a Reservationless Conference on page 61
- Adding a Delegate on page 62

## Accessing a User Account

To view, modify or delete account information, you must first select a user.

#### To select a user account:

From the MCA administrator page, select the user that you want to modify or delete. Do one of the following:

• Click Administer User in the navigation pane to open the User Lookup page.

Username:		
Search	Ignore guest users.	

- **a.** Type the user name in the box for the account that you want to modify. If you type a partial user name, it may return multiple results.
- **b.** Click **Search** to view search results, and then click the user name. The user options page opens for the specific user.

joe_user@mycompany.com
Manage User Profile
View Scheduled Conferences
View Call Activity Report
Schedule a Reservationless Conference
Add a Delegate

• Click **List Users** in the navigation pane, and then select the user name account that you want to access. The user options page opens for the specific user.



**Note:** Guest account users are found at the bottom of the user list following the system users.

## **Editing a User Profile**

In the user profile page, you can edit settings. When a user profile is deleted, MCA is no longer accessible for that user. This also deletes all associated conference access codes.

#### To edit a user profile:

1. Select the user account that you want to edit, see Accessing a User Account on page 58, and then click **Manage User Profile** to open the following page.

joe_user@mycompany.com					
New Password		Password is unchanged if left blank			
Personal ID	059838	Personal ID is unchanged if left blank			
Registered Phone	2145				
Dial out allowed		Deny multiple leaders			
Executive					
Reservationless Calls	Reservationless calls allowed, leader not required 💌				
Invitation Handler	Default Programs Google	Invitation Length Generic Long  Generic Short			

Save Changes	Delete User

- 2. Modify the following information:
  - **New Password**: Indicates the password used to log on to the conference bridge. Type information in this box only when you want to change the password for this user.
  - **Registered Phone**: Indicates the telephone number of the user that MCA will call when calling out to the User ID.
  - **Dial out allowed**: Indicates this user can dial out (CO call) to others using the system. The default is selected.
  - **Deny multiple leaders**: Indicates this user may not have multiple callers using the leader access code on conference calls. The default is cleared.
  - Executive: Conferences created by Executive users have access to audio ports reserved as executive ports. See Configuring System Options on page 36 to configure Executive Ports. The default is cleared.
  - Reservationless calls: Specifies the option selected for reservationless calls. Reservationless conferences may last as long as the value for Maximum Length of Reservationless and Recurring Conferences, which is set in Configuring the Default User Settings on page 66. Select from the following three options:
    - Reservationless calls allowed, leader not required: (Default) This user can make reservationless calls and a leader is not required to be present in the call for the call to start.
    - *Reservationless calls allowed, leader required*: This user can make reservationless calls, but a leader is required to be present in the call for the call to start.
    - Reservationless calls not allowed: This user cannot make reservationless calls.
  - **Email Type**: Specifies the e-mail type the user sends for invitations to a conference. Select either of the following e-mail types:
    - Generic Long: Use this setting for e-mail clients (for example, Microsoft<sup>®</sup> Outlook<sup>®</sup>) that allow for long form inserts (usually more than one line).
    - *Generic Short*: Use this setting for e-mail clients that only allow short form inserts (usually one line).
- 3. Click Save Changes, and then click Ok at the prompt.

#### Viewing Scheduled Conferences

You can view a list of the user's scheduled conferences, including date, time, and access codes. See Scheduled Conferences on page 77 for information on viewing all scheduled conferences.

#### To view scheduled conferences:

- 1. Select the user account that you want to view, see Accessing a User Account on page 58.
- 2. Click View Scheduled Conferences.
- 3. Select a date range for the scheduled conferences that you want to view.

#### Scheduled Conferences for joe\_user@mycompany.com

Start Date	Jan 💌 01 💌 2013 💌			
End Date	Feb 💌 06 💌 2013 💌			
View				

4. Click **View** to see a detailed list of conferences scheduled by the user for those dates, as shown in the example below.

Scheduled Conferences									
Owner	Subject	Leader Code	Start Time	End Time	Participant Code	Is Leader Required	Billing Code	Department Code	Are Multiple Leaders Allowed
joe_user@mycompany.com	Weekly Conference	0168731	Fri Sep 26 13:30:00 2008	Fri Sep 26 14:30:00 2008	0178704	N	XYZ	Management	Y
joe_user@mycompany.com	Q and A	0188677	Mon Oct 6 09:00:00 2008	Mon Oct 6 10:00:00 2008	0198650	N	ABC	Management	Y
joe_user@mycompany.com	All about Nothing	0108623	Sun Oct 26 10:00:00 2098	Sun Oct 26 11:00:00 2008	0118596	N		Management	Y

## Generating a Call Activity Report

See Call Activity Report on page 75 for information on viewing call activity reports for all calls.

#### To generate a call activity report:

- 1. Select the user account that you want to view, see Accessing a User Account on page 58, and then click **View Call Activity Report**.
- 2. For the date range, do one of the following:
  - Select a value from the **Date Range** list.
  - Click a shortcut option: Select Today, Select This Week, or Select This Month.
  - Select a date range using the Start Date/Time and End Date/Time lists.

Call Activity Report						
Date Range						
Shortcuts	Select Today Select This Week Select This Month					
Start Date / Time	October 💌 21 💌 2008 💌 📰 5 💌 00 💌 AM 💌					
End Date / Time	October 💌 21 💌 2008 💌 📰 11 💌 59 💌 PM 💌					
Project Code	Department Code					
User	joe_user@mycompany.com					
Sort By						
Report Format: 💿 Web Report 🛛 CSV Report						

- **3.** (*Optional*) If project or department codes are required when a user creates a conference, you can type a specific **Project Code** or **Department Code** to filter the data based on the parameters entered.
- 4. Select from the Sort By list to determine how you want the report to appear.
- 5. Select one of the following report formats:
  - Web Report: Generates a report in a new Web browser window.
  - **CSV Report**: Generates a comma-separated values file that you can save to your computer. You can use these reports in other programs such as Microsoft Excel.
- 6. Click View to see the report. An example Web report is shown below.

Name:Project Meeting	Date: 10/21/2008	Scheduled Start: 8:00 AM	Scheduled End: 8:30 AM	Owner: joe_user@mycomp any.com
Access Code: 0129737	Department: Manag	ement	Project: 300-821-2	
Audio Conference Details				
Phone #			Start Time	Duration
(In) 91459@168.12.8.201			7:53 AM	00:38
(In) 91663@168.12.8.201			7:54 AM	00:37
(In) 97110@168.12.8.201			7:58 AM	00:34
(In) 5551222122@168.12.8.201			8:11 AM	00:20
Total Legs: 4		Actual S	tart: 7:53 AM	Sum Duration: 02:12
Web Conference Details				
User Name			Start Time	Duration
Steve			7:58 AM	00:34
Total Participants: 1		Actual S	tart: 7:58 AM	Sum Duration: 00:34

#### Scheduling a Reservationless Conference

You can create reservationless conferences for users. This allows users to hold conferences at anytime, without having to schedule them in advance or use the MCA Web client.

If Custom Access Codes is enabled on the System Options page, you can define three to five digit access codes for both the leader and participants. If Custom Access Codes is not enabled on the System Options page, you have the option of pre-defining a user's participant access code only (the leader's code is generated automatically). This user code, given to participants

dialing into the conference, must match the **Minimum IVR Access Code Length** as defined in the System Options parameters (see page 36).

To set up a reservationless conference:

- 1. Select the user account that you want to set up conferences, see Accessing a User Account on page 58.
- 2. Click Schedule a Reservationless Conference.

Schedule new conference for user joe_user@mycompany.com				
Pre-defined access code (to be given out to participants)				
If access code is left blank, Mitel system will use a random access code				
Create interactive Web Conference?				
Create				

**3.** If Custom Access Codes are enabled on the System Options page, you can define three to five digit custom access codes for both the leader and participants. These access codes cannot begin with zero. If Custom Access Codes have not been enabled on the System Options page, type a seven-digit participant access code (starting with 01) in the box. If the box is left blank, the system uses a random access code.

If the participant access code you requested is already in use on MCA, a prompt informs you that the access code is not available. Try a different code. In all cases, MCA automatically generates a leader code that is unique.

- 4. Select the **Create interactive Web Conference** option if the conference also includes a Web conference.
- 5. If Port Reservations is selected, type a value in the **Conference Size** box. For details about port reservation, see Configuring Port Reservation Settings on page 35.
- 6. Click Create. Make a note of the participant and leader access codes for this user.

## Adding a Delegate

A "delegate" is a user who can view and create conferences and change another user's call schedule. Delegates are often administrative assistants, but they can be any user with an MCA account.

#### To assign a delegate:

- 1. Select the user account that you want to assign a delegate, see Accessing a User Account on page 58.
- 2. Click Add a Delegate to open the following page.

Add a delegate for user: joe_user@mycompany.com				
Delegate Name				
	Assign			

**3.** Type the delegate's user name, and then click **Assign**. The user name must be in the format: name@host.com.

## **Listing User Accounts**

You can view a list of users with accounts on MCA to see the current setting, and then click a user name to access and manage their profile.

#### To list user accounts:

1. From the MCA administrator page, click **List Users** in the navigation pane. The list of user page appears with all of the currently configured users (defined within the database), as shown in the example below.

User List					
				System Users	
	User Name	Display Name	ID	Phone Number $\begin{bmatrix} D & H \\ 0 & L \\ c \end{bmatrix} \stackrel{K}{\underset{e}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Reservationless}{\overset{Res}{\overset{Rs}{s}{\overset{Rs}{s}}{\overset{Rs}{\overset{Rs}{\overset{Rs}{\overset{Rs}{\overset{Rs}{\overset{Rs}{\overset{Rs}{\overset{Rs}{\overset{Rs}{\overset{Rs}{s}}{\overset{Rs}{\overset{Rs}{\overset{Rs}{s}}{\overset{Rs}{\overset{Rs}{\overset{Rs}{s}}{\overset{Rs}{\overset{Rs}{\overset{Rs}{\overset{Rs}{s}}{\overset{Rs}{s}}}}}}}}}}$	
	joe_user@mycompany.com			20016 Y N N Reservationless calls allowed, leader not require	ired
Lanna .	and the local designed and the second			20017 Y N N Reservationless calls allowed, leader not require	ired

2. Click on a user name to open the profile page for that user.

## **Bulk Provisioning User Accounts**

Note: The Bulk Provision Users option does not appear in the navigation pane when Use LDAP is set, see Configuring LDAP Authentication and Auto-Provisioning on page 40.

The bulk-provision feature is used to create multiple user accounts in a single step. Also, when users are created in this manner, a reservationless conference can be created for each user as well. The account and optional reservationless conference information is read from an ASCII text, comma-separated values (.csv) file that you prepare in advance. Each user is represented by one line in the file. Refer to the notes provided on the page about the format of the bulk provision file for instructions to assemble the file.

#### To bulk provision/modify user accounts:

1. From the MCA administrator page, click **Bulk Provision Users** in the navigation pane to open the following page.

Bulk Provision Users	•			
Bulk Provisioning File	Choose File No file chosen			
Are passwords encrypted?	© Yes ◎ No			
	Process File			
F	ormat of Bulk Provision File			
Action,User Email Address,Password ,Optional registered phone num Conference Flag, Optional Conference Size, Optional Password, Option	per ,Optional Personal ID, Optional Display Name, Optional Access Code, Optional Is-Web- al E-mail Password Flag, Optional Publish Flag			
NOTE: There should not be any spaces between the commas and the a	arguments			
Actions can be add,add_guest, change, or delete. Password not required if action is delete.				
Examples:				
add,joe.user@acme.com,password,+1-617-555-1234				
add,alan.user@acme.com,password				
add,james.user@acme.com,password,1001,,Jim				
add_guest,james.guest@other.com,password,1007,777,Jim				
change,mary.user@acme.fr,new_password ,+33140302010 ,0123456				
delete,bob.user@acme.com				
NOTE: Phone number must have either a leading +1 if within North An	nerican numbering plan, or +countrycode if outside North American numbering plan.			
If an Access Code is specified: Conference Size is used only if Port Reservations are enabled. A default Conference Size of 2 will be used if port reservations are enabled and no conference size is specified on the line.				
See Notes on Bulk Provisioning Reservationless Conferences for more examples with the optional "ometers 'Is-V" Conference Flag', 'Conference Size',				

- 2. Click Browse to locate the . CSV file with the user information you created previously.
- Indicate whether or not you want to encrypt passwords, and then click Process File. The status of the creation of each user (and their optional reservationless conferences) is displayed.

## **Bulk Provisioning Reservationless Conferences**

As an administrator, you can set up reservationless conferences for system users. If you program reservationless conferences, users do not need to use the MCA Web client to set up their own conferences.

If Custom Access Codes have been enabled on the System Options page, MCA enables you to define an access code for both the leader and the participants. If Custom Access Codes have not been enabled on the System Options page, the bulk provisioning process for MCA allows you to select a user's participant access code. In this case, if you specify the participant access code, the corresponding leader access code is automatically generated. Or, you can let MCA set both the participant access code and the leader access code.

In either case, the process is performed using a text file, in .csv format. Each line starts with a registered username and (if selected) a desired participant access code. If Custom Access codes have been enabled, each line starts with the registered username, the participant access code, and then the leader access code. This file needs to be prepared in advance using standard computer application editing tools or a spreadsheet that is saved in .csv format (for example, Microsoft Excel). Refer to the notes provided on the page about the format for additional instructions to assemble the file.

#### To bulk provision reservationless conferences:

1. From the MCA administrator page, click **Bulk Provision Res. Confs** in the navigation pane to open the following page.

Bulk Provision Reservationless Conferences				
	Bulk Provisioning File Choose File No file chosen			
	Process File			
	Format of Bulk Provision File			

- 2. Select the file you want to process by entering the path and file name or click **Browse** to navigate to the file.
- 3. Click Process File. The status of the reservationless conferences appears.
- 4. After you select the file and upload it to MCA, perform the procedure Downloading Reservationless Conferences on page 65 to retrieve the resulting leader/participant access code pairs.
- **Note:** If Custom Access Codes have been enabled, the access codes for both the leader and participants are provided. If Custom Access Codes have not been enabled, the access code provided here is the "participant" access code. MCA automatically creates the "leader" access code. To inform users of their pre assigned leader and participant access codes, you need to retrieve the complete list of all users' participant and leader access codes. See Downloading Reservationless Conferences on page 65.

# **Downloading Reservationless Conferences**

If Custom Access Codes have been enabled, you can retrieve a list of the access codes created for both leaders and participants. If Custom Access Codes have not been enabled, you can manually create access codes for participants, and then retrieve a list of them along with the corresponding (system generated) leader access code from MCA.

#### To download reservationless access code sets for all users:

1. From the MCA administrator page, click **Download Res. Confs** in the navigation pane to open the following page.

Download Users' Reservationless Conferences					
Please provide a file path on your local machine (file name will have .txt appended automatically)					
File Name					
	Save				

- 2. Type in a path and file name (to save on your computer) for the file that contains the users' reservationless access code sets.
- 3. Click **Save**. The resulting .txt file is a CSV-formatted file containing information about all the reservationless conferences on the system, including reservationless conferences created by users.

# Configuring the Default User Settings

When initially provisioned, all users are given the same set of user settings and permissions. This configuration is called the Default User Settings. You can set the defaults for all users on MCA.

#### To view or edit the default user settings:

1. From the MCA administrator page, click **Default User Settings** in the navigation pane.

#### **Default User Settings**

2

Dial Out Allowed		Deny Multiple Leaders				
	Reservationless Calls	Reservationless calls allowed, leader not required 💌				
Maximum Le and	ngth of Reservationless Recurring Conferences	26 weeks				
Invitation Handler	Default Programs Google	Invitation Length	Generic Long Generic Short			
	Save Changes	Restore Original Defaults				
Restore All Users to Defaults						

- 2. Set the following options:
  - **Dial Out Allowed**: Indicates this user can dial out to others using MCA (CO call). The default setting is selected.
  - **Deny Multiple Leaders**: Indicates this user may not have multiple callers as the conference leader. When selected, only the first person that enters the leader access code is the conference leader. Subsequent users that enter the leader access code will join the conference as a participant. The default setting is cleared.
  - Reservationless Calls: Select one of the following three options:
    - *Reservationless calls allowed, leader not required*: (default) The user can make reservationless calls and a leader is not required to be present on the call for the call to start.
    - *Reservationless calls allowed, leader required*: The user can make reservationless calls, but a leader is required to be present on the call for the call to start.
    - Reservationless calls not allowed: The user cannot make reservationless calls.

**Note:** To preserve ports on the server for one-time and recurring conferences, Mitel recommends that you do the following when you select **Enable Port Reservations** (see page 35):

- Select Reservationless Calls Not Allowed for the Reservationless Calls option.
- Make sure the **Allow user to schedule conference if conflict occurs** option is *not* selected under Port Reservations (see page 35).
- Maximum Length of Reservationless and Recurring Conferences: Indicates this is the number of weeks in which these conference types can occur. The default setting is 26 weeks.
- **Email Type**: Select either of the following e-mail types:
- *Generic Long*: Use this setting for e-mail clients (for example, Microsoft Outlook) that allow for long form inserts (usually more than one line).
- *Generic Short*: Use this setting for e-mail clients that only allow short form inserts (usually one line).
- 3. Do one of the following, if necessary:
  - To restore the original defaults at any time, click **Restore Original Defaults**, and then click **Ok** at the prompt.



**Note:** If the defaults are changed, users who are set up in the system prior to this change are not affected.

- To restore all users to the new system defaults, click Restore All Users to Defaults. Any individual settings that differ from the defaults will need to be reapplied as described in Editing a User Profile on page 58.
- 4. Click Save Changes, and then click Ok at the prompt.

## Sending a Broadcast E-mail

The Broadcast E-mail feature sends an e-mail message to all the users on MCA at the same time.

### To broadcast e-mail:

1. From the MCA administrator page, click **Broadcast E-mail** in the navigation pane.

Broadcast E-mail					
Subject					
Message	×				
Send E-mail					

- 2. Enter text in the Subject and Message boxes.
- 3. Click Send E-mail to broadcast the e-mail to registered MCA users.

## **Configuring Billing Codes**

The Billing Code feature allows you to create billing codes and set the feature as required for a user to schedule a meeting. The Billing Codes page has two areas, Department Code and Project Code, which allows you to add or delete billing codes of either type. A list appears for the existing billing code types. The following options are available in each area and when selected, apply system wide for all users.

• **Required**: When selected for Department Code or Project Code, the user must choose a billing code from the list when scheduling a conference. If cleared and billing codes exist, the user is given the option to select a billing code when scheduling a conference.

• Allow "None" Option: When selected for Department Code or Project Code, None appears in the billing code list as a selectable option.

### To add a billing code:

- 1. From the MCA Administrator page, click **Billing Codes** in the navigation pane.
- 2. Type a new department or project code in the box, and then click Add.

Billing Codes
Department Code
🗆 Required 🛛 🗖 Allow 'None' Option
Delete
<enter code="" new=""> Add</enter>
Project Code
Project Code
Project Code Required Allow 'None' Option Delete

### To delete a billing code:

- 1. From the MCA administrator page, click **Billing Codes** in the navigation pane.
- 2. Select the department or project code(s) to delete, and then click **Delete**.
- 3. Click **Ok** at the prompt to confirm.

# **Server and User Activity Monitoring**

Application and server management is provided through functions available under the Monitoring menu button. As an administrator, you can monitor MCA and user activities.

## **Viewing Active Calls**

You can view information about conferences that are in progress on MCA. The call information page is updated according to the refresh rate that is selected at the top of the page. The default refresh rate is every 30 seconds.

### To view active conference calls:

1. From the MCA administrator page, click **Active Calls** in the navigation pane. The page in the following example shows a conference call in progress and participants.

john.doe@company.com ID: 19187885564030 Leader Code: 0129919					
Fri Jan 9 2009 from 10:09:54 until 16:09:54 Subject: Conference on Jan 09, 2009, 10:09 AM America/Phoenix	End Call	Collect call quality data			
Participants	Up For				
john.doe@company.com(Leader)	00:03:22	Drop Leg			
9871007@172.16.14.157	00:01:06	Drop Leg			

- 2. While monitoring active conferences, you can perform the following operations:
  - End Call: Ends the conference without any warning or notice to conference participants.
  - Drop Leg: Drops this participant from the conference without any warning or notice to the participant.
  - Collect call quality data: Collects call quality data for support purposes. The call must
    active for at least one minute or no data is collected.

Click **Collect call quality data** link for the conference that you want to collect call quality information. At the prompt, click **Save**, and then choose a location and save the file.

## **Checking Proxy Extension Status**

The Proxy Extension Status page provides connection status of the MCA registration process. The information on this page is updated according to the refresh rate that is selected at the top of the page. The default refresh rate is every 30 seconds.

### To view the proxy extension status:

From the MCA administrator page, click **Proxy Extension Status** in the navigation pane to view the page.

MCA registers itself with the Mitel Communications Director (MCD) and Mitel 5000 as a single device based on the settings in Configuring SIP Server on page 50. The Proxy Extension Status page displays the results of this registration process. Because this registration process happens

often (about every 30 minutes), only the last attempt is displayed. An explanation of the Proxy Extension Status page results for each system is provided in this section.

The following is an example for the Mitel 3300 (MCD).

```
Apr 2 15:55:35.756948 Sending to UDP CH socket (10.0.0.198:5060):
REGISTER sip:icp3300.linktivity.lab SIP/2.0
Via: SIP/2.0/UDP 10.0.0.74:5064
Call-ID: 843296448@awc2
CSeq: 1 REGISTER
From: <sip:7002@icp3300.linktivity.lab>;tag=764313295
To: <sip:7002@icp3300.linktivity.lab>
Contact: <sip:10.0.0.74:5064>;methods="INVITE, SUBSCRIBE, BYE, CANCEL, ACK"
Expires: 3600
User-Agent: Mitel-AWC/3.5
Content-Length: 0
Apr 2 15:55:35.777764 Received UDP message from socket 7 (UDP CH 10.0.0.198:5060):
  p/2.0 100
Via: SIP/2.0/UDP 10.0.0.74:5064 ;received=10.0.0.198:5060
Call-ID: 843296447@awc2
CSeq: 1 REGISTER
From: <sip:7001@icp3300.linktivity.lab>;tag=764313294
To: <sip:7001@icp3300.linktivity.lab>;tag=0 3939248944-60431496
Content-Length: 0
Apr 2 15:55:35.786984 Received UDP message from socket 7 (UDP CH 10.0.0.198:5060):
  P/2.0 100
Via: SIP/2.0/UDP 10.0.0.74:5064 ;received=10.0.0.198:5060
Call-ID: 843296448@awc2
CSeq: 1 REGISTER
From: <sip:7002@icp3300.linktivity.lab>;tag=764313295
To: <sip:7002@icp3300.linktivity.lab>;tag=0 3939258944-60431497
Content-Length: 0
Apr 2 15:55:35.790258 Received UDP message from socket 7 (UDP CH 10.0.0.198:5060):
Via: SIP/2.0/UDP 10.0.0.74:5064 ;received=10.0.0.198:5060
Call-ID: 843296447@awc2
CSeq: 1 REGISTER
From: <sip:7001@icp3300.linktivity.lab>;tag=764313294
To: <sip:7001@icp3300.linktivity.lab>;tag=0_3939248944-60431496
Contact: sip:10.0.0.74:5064
User-Agent: Mitel-3300-ICP 8.0.9.18
Allow: INVITE, BYE, CANCEL, ACK, INFO, PRACK, OPTIONS, SUBSCRIBE, NOTIFY, REFER, REGISTER, UPDATE
Date: Wed, 02 Apr 2008 15:55:42 GMT
Content-Length: 0
Apr 2 15:55:35.795739 Received UDP message from socket 7 (UDP CH 10.0.0.198:5060):
Via: SIP/2.0/UDP 10.0.0.74:5064 ;received=10.0.0.198:5060
Call-ID: 843296448@awc2
CSeq: 1 REGISTER
                              Section 1 although a 16
```

The following defines the Proxy Extension Status page results for the Mitel 3300 example.

 MCA sends a REGISTER message to icp3300 indicating that it would like to register itself as a particular phone, in this case7002@linktivity.lab:

```
Apr 2 15:55:35.756948 Sending to UDP_CH socket (10.0.0.198:5060):
REGISTER sip:icp3300.linktivity.lab SIP/2.0
Via: SIP/2.0/UDP 10.0.0.74:5064
```

```
Call-ID: 843296448@awc2
CSeq: 1 REGISTER
From: <sip:7002@icp3300.linktivity.lab>;tag=764313295
To: <sip:7002@icp3300.linktivity.lab>
Contact: <sip:10.0.0.74:5064>;methods="INVITE, SUBSCRIBE, BYE, CANCEL, ACK"
Expires: 3600
User-Agent: Mitel-AWC/3.5
Content-Length: 0
The Mitel 3300 receives this message and lets MCA know that it is now trying to authenticate
the user:
Apr 2 15:55:35.777764 Received UDP message from socket 7 (UDP CH
10.0.198:5060):
SIP/2.0 100 Trying
Via: SIP/2.0/UDP 10.0.0.74:5064 ;received=10.0.0.198:5060
Call-ID: 843296447@awc2
CSeq: 1 REGISTER
From: <sip:7001@icp3300.linktivity.lab>;tag=764313294
To: <sip:7001@icp3300.linktivity.lab>;tag=0_3939248944-60431496
Content-Length: 0
The Mitel 3300 sends back a message letting MCA know that the registration was successful
("200 OK"):
Apr 2 15:55:35.790258 Received UDP message from socket 7 (UDP_CH
10.0.198:5060):
SIP/2.0 200 OK
Via: SIP/2.0/UDP 10.0.0.74:5064 ;received=10.0.0.198:5060
Call-ID: 843296447@awc2
CSeq: 1 REGISTER
From: <sip:7001@icp3300.linktivity.lab>;tag=764313294
To: <sip:7001@icp3300.linktivity.lab>;tag=0_3939248944-60431496
Contact: sip:10.0.0.74:5064
User-Agent: Mitel-3300-ICP 8.0.9.18
Allow:
INVITE, BYE, CANCEL, ACK, INFO, PRACK, OPTIONS, SUBSCRIBE, NOTIFY, REFER, REGISTER
, UPDATE
Date: Wed, 02 Apr 2008 15:55:42 GMT
Content-Length: 0
```

The following is an example for the Mitel 5000 and Inter-Tel Axxess systems.

```
Proxy 0
i=0 N=1531@mitel.com U=1531 H=mitel.com I=0 E=836 R=1
i=1 N=1532@mitel.com U=1532 H=mitel.com I=0 E=836 R=1
i=2 N=1533@mitel.com U=1533 H=mitel.com I=0 E=836 R=1
i=3 N=1534@mitel.com U=1535 H=mitel.com I=0 E=836 R=1
i=4 N=1535@mitel.com U=1536 H=mitel.com I=0 E=836 R=1
i=6 N=1537@mitel.com U=1537 H=mitel.com I=0 E=836 R=1
i=7 N=1538@mitel.com U=1538 H=mitel.com I=0 E=836 R=1
i=8 N=1539@mitel.com U=1539 H=mitel.com I=0 E=836 R=1
```

The columns display the following information:

- i: The proxy entry number (starts at 0 and increases).
- N: The extension entry number.
- U: The username (in most cases this will be the extension number).
- **H**: The domain name.
- I: The in-use flag (1 for in use, 0 for not used).
- E: The expiration time (when e equals 0, the server will re-register).
- **R**: The registration status (when it is 1, the server has properly registered. 0 or -1 indicates the server has not properly registered).

### Manage Recordings

To Manage Recordings:

From the MCA main page, under Monitoring, click **Manage Recordings** from the navigation pane. The page shows a listing of Recordings.

### **Manage Recordings**

	Delete			Set Pe	ermanent	
Owner	Description	Туре	Date	Size	Days until deletion	Т

From here, you can perform the following operations:

Delete: Manually delete a selected file.

**Mark them as permanent**: In this case the recording will never be auto deleted. The only way to delete recordings marked as permanent is for the administrator to select a record and manually delete it from the admin portal. Once a recording is marked as permanent, it cannot be changed back to a time limit expiration.

Backup: This option will provide the admin an option to save files to an external drive.

## License Usage

Server port and user capacity is controlled by an application ID through the Applications Management Center (AMC) and registered on the MAS server. License Usage shows the number of licenses available and the licenses used. See Viewing the Licenses on page 45. For information about adding licenses, refer to the *Mitel Applications Suite Installation and Maintenance Guide*.

From the MCA administrator page, click **License Usage** in the navigation pane. The License Usage page appears and displays the following:

- Options to modify the "Refresh rate", which can be set to every 30, 60, or 90 seconds.
- MAX column: The maximum number of ports/users licensed for each license type.
- IN USE column: The number of licensed ports/users for each license type currently in use.

Refresh every 30 seconds	Refrest	n every 60 seconds	Refresh ev	Refresh every 90 seconds		
		МАХ	IN USE			
Audio	Audio Web/Video Enhanced Video Users		0 ports			
Web/Video			0 ports			
Enhanced			0 ports			
Users			159 users			

## Accessing SIP Logs

The SIP Logs viewer page is available for access to SIP log information. This viewer allows you to access logs directly on the MCA server, and then save them to your remote computer in .zip file format. Use a text file reader (for example, Notepad) to view the files.



The SIP Logs option appears in the navigation pane only when the Mitel 5000 or Inter-Tel Axxess is selected as the platform in System Options. These log files are provided for Technical Support use and are not explained in detail in this document.

### To access SIP Server logs:

1. From the MCA administrator page, click **SIP Logs** on the navigation pane. The SIP Logs viewer page appears.

Current Filter: @y='OPER' or @y='ERR' or @y='SERR' 💌	Show Advanced
Connect - IOException - Unable to create and connect socket  Connect - IOException - Unable to create and connect socket  Connect - IOException - Unable to create and connect socket  Connect - IOException - Unable to create and connect socket  Connect - IOException - Unable to create and connect socket	
Log files available on server	
Connect - IOException - Unable to create and connect socket  Connect - IOException - Unable to create and connect socket  Connect - IOException - Unable to create and connect socket	
Choose a log file from the web server Marg0005.log • 10/07/2008 10:42:23 America/Phoen Process K	***
Click to Zip Log files and Download the Zip file to your local machine	

- 2. Do the following:
  - To view a log file, select a file from the list, and then click Process. (Files are listed from most current to least current.) You can click Next Log >> or << Previous Log to view additional log files.
  - *To view a log file from your computer*, click **Browse**, navigate to the log file location, and then double-click the file. Click **Process**.



**Note:** Using this option may require you to change IE security settings when trying to view a file locally through the Web interface.

• To zip the log files and download them, click **Zip Logs**. Then, click the blue **Download Zip File** link and save the file to your local computer. The default file name is <code>Zip-Logs.zip</code>. Trace logs are also included with the zipped files.

# **Server Reporting**

Reports are available on MCA that allow you to view call activity, VoIP utilization, scheduled conferences, system alerts, and install history.

**Note:** The time information in reports is based on the local time zone where the MCA server is located, *not* the location of the computer where the reports are generated.

# **Call Activity Report**

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You can view daily usage statistics to track MCA usage and system conferencing information. See Generating a Call Activity Report on page 60 for information about viewing user-specific call activity reports.

### To view activity reports:

1. From the MCA administrator page, click **Call Activity Reports** in the navigation pane. The Call Activity Report page opens.

Call Activity Report						
Date Range						
Shortcuts	Select Today Select This Week Select This Month					
Start Date / Time	January 🔽 1 🔽 2008 🕊 📖 12 🗸 00 💌 AM 💌					
End Date / Time	January 💌 1 💌 2008 💌 📰 11 💌 59 💌 PM 💌					
Project Code	Department Code					
User	asmith@mycompany.com auser@mycompany.com jdough@mycompany.com joe_user@mycompany.com zemann@mycompany.com					
Sort By	Sort By Conference Date					
Report Format: 💿 Web Report 🔿 CSV Report						
View						

- 2. Do one of the following to determine a date range for the report you want to create:
  - Select a value from the **Date Range** list.
    - Today: Today's date.
    - Yesterday: Yesterday's date.
    - This Week: Sunday of the current week through today's date.
    - Last Week: Sunday of last week through the Saturday of last week.
    - This Month: First day of the month through today's date.
    - Last Month: First day of last month through the last day of last month.

- **This Quarter**: First day of this quarter (1/1, 4/1, 7/1, or 10/1) through today's date.
- Last Quarter: First day of last quarter (1/1, 4/1, 7/1, or 10/1) through the last day of last quarter.
- Click a shortcut option: **Select Today**, **Select This Week**, or **Select This Month**. (The shortcut button selected appears in the Date Range box.)
- Select a date range using the Start Date/Time and End Date/Time lists.
- **3.** (*Optional*) To view only system usage associated with a project or department code, type the code in the box.
- 4. Select a user or users from the list to include in the report.
- 5. Select an item from the **Sort By** list to determine the organization of the report.
- 6. Select a format, either a Web Report (default) or a CSV Report, and then click View.
  - If you select Web Report for the format, the results appear on the page.
  - If you select CSV Report for the format, click Save at the prompt to save the file to a location or click Open to display the results in your default text editor (for example, Microsoft Excel).

## **VoIP Utilization Statistics**

The VoIP Utilization Statistics page displays the VoIP port usage on MCA for the date and time range selected. A bar chart displays the active number of ports and the port usage in the time increments selected for the date range. This is useful for monitoring capacity utilization of MCA over time.

### To check VoIP utilization statistics:

1. From the MCA administrator page, click **VoIP Utilization Statistics** in the navigation pane.

**VoIP Utilization Statistics** 

Start Date	Feb 🕶 06 🕶 2013 💌		
End Date	Feb • 06 • 2013 •		
Histogram Interval	15 minutes 💌		
View			

- 2. Select a start and end date/time range from the list.
- **3.** Select an interval rate, and then click **View**. An example of the VoIP Utilization Statistics graph is shown below.



# Scheduled Conferences

The Scheduled Conferences report list conference details for the time range specified.

To view a list of scheduled conferences:

1. From the MCA administrator page, click **Scheduled Conferences** in the navigation pane.

Scheduled Conferences for joe\_user@mycompany.com

Start Date	Jan 💌 01 💌 2013 💌				
End Date	Feb • 06 • 2013 •				
View					

2. Select a date range, and then click **View** to see the results. For each scheduled conference, all call-specific information is listed, as shown in the example below.

Scheduled Conferences								3
Owner	Subject	Leader Code	Start Time	End Time	Participant Code	Is Leader Required	Billing Code	Depa Code
joe_user@mycompany.com	Demo	0149325	Mon Oct 27 00:00:00 2008	Thu Apr 30 00:00:00 2009	0159732	Y		
joe_user@mycompany.com	Admin Provisioned	0129298	Mon Oct 27 15:28:32 2008	Fri May 1 15:28:32 2009	0173300	N		
lee_der@mycompany.com	Project Team Meeting	0189'435	Fri Oct 31 11:00:00 2008	Fri Oct 31 12:00:00 2008	0199408	N	ABC Proj	1474
me_auser@mycompany.com	Reservationless	0139352	Mon Oct 27 00:00:00 2008	Wed Apr 1 00:00:00 2009	0157516	N		
me_auser@mycompany.com	Ever Ready Conference	0149543	Mon Oct 27 00:00:00	Thu Apr 30 00:00:00	0159028		159298	Proc

# System Alerts Log

You can view a history of the e-mail notifications that MCA has issued for a particular date period. This history includes alarms and general notifications that are sent out by MCA as a result of events on the system.

### To view the system alerts log:

1. From the MCA administrator page, click **System Alerts Log** in the navigation pane.

System Alerts Log

Start Date	Feb 💌 06 💌 2013 💌			
End Date	Feb 🔹 06 💌 2013 💌			
View				

2. Select a date range, and then click **View** to see the results. An example of a system alerts log is shown below.

System Alerts Log							
Date	MSGID	Rcpt Class	Rcpts	Subject	Message		
Wed Oct 22 21:52:33 MST 2008	ADM-1002	General Alert	admin@mycompany.com	Mitel info	System parameters set by admin		
Wed Oct 22 22:42:57 MST 2008	ADM-1008	General Alert	admin@mycompany.com	Mitel info	DAS rules were set by admin Restarting ths Wed Oct 22 22:42:57 MST 2008		
Sat Oct 25 20:19:42 MST 2008	TPS-7005	Trunk Alarm	admin@mycompany.com	Mitel server alarm	NO ports available at Sat Oct 25 20:19:42 M 2008		
Sat Oct 25 20:20:23 MST 2008	TPS-3001	Trunk Alert	admin@mycompany.com	Mitel server alert	Phone trunk server restart at Sat Oct 25 20:20:23 MST 2008		
Sat Oct 25 20:21:07 MST 2008	TNS-3001	General Alert	admin@mycompany.com	Mitel server alert	Outgoing call server restart at Sat Oct 25 20:21:07 MST 2008		
Sat Oct 25 20:21:08 MST 2008	TPS-7005	Trunk Alarm	admin@mycompany.com	Mitel server alarm	NO ports available at Sat Oct 25 20:21:08 M 2008		

# Install History Log

You can view a history of MCA software installs that have been completed during the selected period.

### To view the installation history log:

1. From the MCA administrator page, click **Install History Log** in the navigation pane.

### **Install History Log**

Start Date	Feb 🔻 06 💌 2013 💌	
End Date	Feb • 06 • 2013 •	
Package Type	All	
View		

- 2. Select the date range for the report to generate.
- 3. Select a Package Type from the list or view all package types (default).
- 4. Click View to display the installation history log, as shown in the example below.



# Port Reservations Report

When the Port Reservations feature is selected, (see Configuring Port Reservation Settings on page 35), the Port Reservations Report lists conference related information on MCA for the date and time range selected.

### To view Port Reservations:

1. From the MCA administrator page, click **Port Reservations** in the navigation pane.

#### **Port Reservations Report**

There are no conferences scheduled on the dates you chose. Please try again.				
Start Date	Jan 💌 1 💌 2009 💌			
End Date	Feb • 6 • 2013 •			
Username (optional)				
View				

- 2. Select a date range for the report.
- 3. (Optional) Type a Username to narrow the report results.
- 4. Click View to see the report.

	Port Reservations Report						
Date	Conference Name	User Name	Size	Start Time	End Time	Duration	Leader Code
Wed 1-07- 2009	Conference on Jan 07, 2009, 10:03 AM America/Phoenix	john.doe@company.com	7	10:03 AM	4:03 PM	6 hours	0109973

You can select the user name in the report to send them an e-mail.

# To install MCAC for all users (as the administrator)

If you are running in a networked environment, you can (as the administrator of the computers) install MCAC for all users. This is usually done in a Terminal server or Citrix environment.

If you wish to do this, download the executable file from http://<MCA server FQDN>/wd/MCAClient-admin.exe and follow the instructions.

**Note:** You must have Administrator privileges to install MCAC for all users. The software must be placed in a location that all users can access. If a user on the system already has the MCAC installed on their machine locally, that version takes precedence over the administrator-installed version.



# **CHAPTER 4**

TROUBLESHOOTING

# Introduction

This chapter describes possible issues you may encounter and common solutions to the issues.

# **Conferencing Error Messages for Alarm/Alert Conditions**

Table 8 provides the error messages for alarm and alert conditions that may arise when using MCA. These messages are sent to General Alarm or General Alert e-mail addresses configured in System Options. See "Configuring System Options" on page 36. They are also displayed in the System Alerts Log.

Message	Subject	Description
No trunks available (trunkalert)	"Enterprise alarm" Message = "no phone trunks are operational"	No VOIP ports available to make or receive calls.
ivr restart (alert)	"Enterprise alert" Message = "Incoming call server restart at HH:MM:SS MM/DD/YYYY"	A restart of the Incoming call server occurred at the specified time.
mcu restart (alert	"Enterprise alert" Message = "Conference server restart at HH:MM:SS MM/DD/YYYY"	A restart of the mcu server occurred at the specified time.
upg restart (alert)	"Enterprise alert" Message = "http server restart at HH:MM:SS MM/DD/YYYY"	A restart of the Web server occurred at the specified time.
database restart (alert)	"Enterprise alert" Message = "database restart at HH:MM:SS MM/DD/YYYY"	The Database service was restarted at the specified time.
mux restart (alert)	"Enterprise alert" Message = "Sip multiplexor restart at HH:MM:SS MM/DD/YYYY"	The muxer application was restarted at the specified time.
tns restart (alert)	"Enterprise alert" Message = "Outgoing Call Server restart at HH:MM:SS MM/DD/YYYY"	A restart of the Outgoing Call Server at the specified time.
tp240driver restart (alert)	"Enterprise alert" Message = "phone trunk driver restart at HH:MM:SS MM/DD/YYYY"	The main call server was restarted at the specified time.
Fewer than n ports are still available (trunkalert)	"Enterprise alert" Message = "only %d ports are currently unused at %s",\$nlines, HH:MM:SS MM/DD/YYYY"	This is a number of ports available threshold alert.
Some trunk line went down (trunkalert	"Enterprise alert" Message = "trunk lines %d went down HH:MM:SS MM/DD/YYYY"	Specified trunk ID went out of service.
		(Sheet 1 of 2)

#### Table 8: Conferencing Error Messages for Alarm/Alert Conditions

Message	Subject	Description
Some trunk line(s) came up (trunkalert)	"Enterprise info" Messages = "trunk lines \$linecode (\$resultCode) came up HH:MM:SS MM/DD/YYYY"	Trunk(s) ID are now in service at the specified time.
		(Sheet 2 of 2)

Table 8: Conferencing Error Messages for Alarm/Alert Conditions (continued)

# **Troubleshooting Tables**

The troubleshooting tables located on the following pages provide a description of some basic problems or errors, a corresponding probable cause, and the corrective action you should take.

Table 9:	E-mail Invitation	Characters
		•

Problem or Error	Probable Cause	Corrective Action
Some characters in the e-mail invitation do not display correctly for all languages.	The user has Outlook 2003 or settings are not configured in Outlook 2007 and 2010 to convert the characters correctly.	Change the international settings in Outlook for the UTF-8 mailto protocol. Refer to the <i>Mitel</i> <i>Collaboration Advanced User Help</i> for details.

Table 10:	Usina t	he OFT	with	Windows	7
	Osing t		WILII	111100113	

Problem or Error	Probable Cause	Corrective Action
The Mitel Conferencing tab in Outlook does not retain the server URL and user password.	Windows 7 includes enhancements to security that require Administrator privileges to write to the folder where the OFT information is saved.	Unless the user has the necessary privileges, they will need to type the server URL and user password every time they want to access MCA conferencing through their Outlook calendar.

Table 11:	Log On	Problems
-----------	--------	----------

Problem or Error	Probable Cause	Corrective Action
When trying to log on by typing the user name and password the screen returns to the log on page.	Internet Explorer cookies are case sensitive. When the user logs on, the cookie is not set up with the same case and the user is denied access.	Make sure the cookie and username/password use the same case.
The user logs on successfully but is returned to the log on page when attempting to perform any action within MCA.	The URL does not match the URL in the Internet Explorer cookies. It is likely that the URL used to connect to MCA is only a partial of the required URL.	Make sure the cookie uses the entire URL.

Problem or Error	Probable Cause	Corrective Action
Users will not see expected text on some popup windows. For example, "Documents" tab shows the word "Browse" using IE or Firefox but shows "Choose File" and "No file chosen" using Chrome.	The display language of some popup windows and buttons is determined by the version of operating system installed as well as the web browser being used (IE or Firefox vs Chrome). For example, Spanish version of Windows is required for specified buttons/popups to be displayed in Spanish.	Use the correct language version of Windows to see those prompts diplayed in the selected MCA language.

Table 12:	Text on	popup	windows	not as	expected
-----------	---------	-------	---------	--------	----------

Table 13:	Unable to Connect to Web Conference	
		_

Problem or Error	Probable Cause	Corrective Action
A "Connection to Server not complete" message is displayed when attempting to join a Web conference.	After performing an upgrade for the MCA blade, Web conferencing may not fully restart.	Log on the MCA Administrator Portal, and save the Web Conferencing Settings. A reboot is recommended after completing any application blade update.
Cannot join a Web conference using the hyper link provided in the e-mail invitation when outside of the corporate network.	The recommended port 443, default setting is 4443. This port setting depends on the configuration of the firewall (see page 15 for firewall configuration details).	Check the Web conference external port setting, see "Configuring Web Conferencing Settings" on page 34. If the network firewall is not using the recommended port, then the external port setting should be adjusted accordingly to the port value selected by the network administrator.

Problem or Error	Probable Cause	Corrective Action
The Mitel Collaboration Advanced Client (MCAC)	When the MCAC detects an existing version, it instructs Microsoft Windows Installer to remove the existing version first. If this operation fails, the MCAC upgrade fails.	The Installer or Registry could be corrupt or is missing files.
does <i>not</i> upgrade, or the upgrade is slow to complete.		Uninstall the existing Mitel Collaboration Advanced Client manually before you upgrade the client.
		1. Log into Windows as the user who is trying to install the MCAC.
		<ol> <li>Verify that the existing MCAC will not uninstall using Add/Remove Programs.</li> </ol>
		3. Install the Windows Installer Clean Up Utility, available for download from Microsoft.com.
		4. Run the utility; select and remove the Mitel Collaboration Advanced Client.
		If the MCAC does not uninstall, search through the registry key sections (see Note below) and remove the keys that are related to the MCAC. You will see MCAC 1.0 information in the frame on the right-hand side when you have found the correct keys.

Table 14:	Mitel Collaboration	<b>Advanced Client</b>	<b>Does Not</b>	Upgrade

Z

**Note:** The following Registry Sections contain keys pertaining to the Mitel Collaboration Advanced Client:

- HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Unin stall
- HKEY\_CURRENT\_USER\Software\Microsoft\Installer\Products

To remove the CC 2.0 program settings (preferences) from the registry, remove the following key:

HKEY\_CURRENT\_USER\Software\Inter-Tel\DesktopClient32

Problem or Error	Probable Cause	Corrective Action
The user has an existing tab for an appointment form (such as "Web	The installation makes the form available, but the install does not force a new tab to appear in Outlook.	The corrective action will help only if the previous Outlook form is part of a different software application.
Conferencing") and they run the Outlook Form install. A new form is not installed for Collaboration.		If the existing default Outlook form belongs to the previous version of MCA, the default form must be removed before the new form can be installed.
		Follow these steps:
		open the Outlook Calendar Appointment
		> "Tools" Menu
		> "Forms" Option
		> "Choose Form" Option
		> Look in "Calendar"
		> Select "Collaborate"
		When you choose "Collaborate," it replaces your "Web Conferencing" appointment form/tab.

Problem or Error	Probable Cause	Corrective Action
The conference leader receives an error message when trying to add a participant's outside phone number (not extension) using the Web interface.	The conference leader attempted to add an outside phone number and did not use the correct dialing format.	The conference leader must type the complete phone number that includes country code and area code, if applicable, with an outside number when adding a participant to the conference using the Web interface.
An operator error message is audible in the conference: "It is not necessary to dial a 1 when dialing this number." The audio may be different, depending on the service provider.	Dial Access String (DAS) rules have not been set up correctly.	Add additional DAS rules to allow for the +1 to be stripped out from the local number. For example, 602 and 480 are two of the area codes for Phoenix, Arizona. For these area codes, add the following DAS Rules:
		DAS Rules
	DAS Rule 1 s/^\+1(602.*)/9\1@<	primary internal IP address>/
	DAS Rule 2 s/^\+1(480.*)/9\1@<	primary internal IP address>/
		starting with 1602 or 1480 will have the leading "1" stripped off, replacing it with a "9," the number, @, and then the IP address. For example, assuming that the phone number to be dialed is 1-602-555-1212 and the IP address configured in TCP/IP Settings is 192.168.22.55: 16025551212 becomes 96025551212@192.168.22.55 For more information, see
		"Configuring Dial Access String (DAS) Rules" on page 47.
Calls dialed from MCA fail.	DAS rules contain errors.	Check DAS rules for typing errors (missing dots, slashed, etc.). For more information, see "Configuring Dial Access String (DAS) Rules" on page 47.
An attempt to create a three-way call with two users and a conference fails. The two users are briefly connected to one another, but then that call drops as well. Other users on the conference hear garbled voice while the failure is occuring.	SIP default settings are incorrect.	Use the default SIP settings. For more information, see "Configure SIP Device Capabilities" on page 24.
		(Sheet 1 of 2)

Table 1	6:	Dialing	Issues
---------	----	---------	--------

Problem or Error	Probable Cause	Corrective Action
One-way audio is experienced when the MCA server makes an outbound call using the Mitel 5000 PBX.	The Speech Encoding settings are incorrect.	The Speech Encoding Setting must be set to G.711 Mu-Law for UK installations.
		(Sheet 2 of 2)

Table 16: Dialing Issues

Table 17:	Flicker o	on Android	Xoom	Tablets
-----------	-----------	------------	------	---------

Problem or Error	Probable Cause	Corrective Action
When in a conference on an Android Xoom tablet, the sharing viewer flickers constantly if the shared area contains a blinking cursor.	The cause of this issue is unknown.	There is no solution for this issue.

# **Technical Support**

Technical support is provided through the Technical Support Department (see the Notice page in the front of this manual). Emergency assistance is also available.

# **Technical Support Department**

If problems persist when installing or servicing the conferencing server, certified technicians who are on site and have the proper troubleshooting tools available can contact the Technical Support Department for assistance.

## **Emergency Assistance**

After office hours and on weekends, call 1-888-777-EASY (3279) and leave a message with the voice mail service. A Technical Support Product Specialist will return your call as soon as possible, which is usually within an hour. Please remember that this is an emergency number for *critical system problems only*.

Sales questions, equipment orders, etc., can be handled only during normal business hours.

## **Troubleshooting Guidelines**

To save time, perform troubleshooting procedures in the following order:

- 1. Make sure the server running the MCA application is functional.
- 2. Isolate the problem and refer to the appropriate troubleshooting section.
- **3.** If the problem continues to occur, reboot MCA. See "Stopping and Starting the MCA Server" on page 34 for instructions on how to reboot MCA from the administrator Web interface. If the problem persists, refer to the Notice page in the front of this manual for technical support contact information.



# **APPENDIX A**

**VOICE PROMPTS** 

# Introduction

The following table lists the English (United States) voice prompts available in the Mitel Collaboration Advanced (MCA) product. See "Configuring Voice Prompts" on page 42 for information about adding or changing voice prompt files and the additional languages that are available with the MCA product. The prompt numbers and names listed are the same for all available languages. The following table lists the English (United States) voice prompts.

#	Prompt Name	Script
0	TURN_OFF_MUSIC	To turn off the music, press one.
1	WELCOME	Welcome to the conference center.
2	ENTER_PIN	Enter an access code, and then press #. To cancel, press *.
3	CANCELLED_RETRY	Cancelled. Please try again.
4	FIRST_BADPIN	That access code isn't recognized — please try again.
5	NEXT_BAD_PIN	That access code isn't recognized.
6	REENTER_PIN	To enter another code, press *.
7	REENTER_END	To enter another code, press *, or to end this call, press #.
8	REENTER_ASSIST	To enter another code, press *, or for assistance, press zero.
9	SAY_NAME	At the tone, say your name and then press #. <beep></beep>
10	NO_LEADER	The leader hasn't activated this call yet. Please stay on the line.
11	GOODBYE	Thank you for calling the conference center. Goodbye.
12	CONNECTING	One moment while your call is connected.
13	TOO_EARLY	That conference hasn't started yet.
14	TOO_LATE	That conference has already ended.
15	CALL_NOT_AVAIL	That conference isn't available now.
16	NO_OPER	I'm sorry, the operator isn't available now.
17	FIRSTCALLER	You're the first person in this conference. Please stay on the line.
18	CAN'T_COMPLETE	Sorry, we're unable to complete your call.
19	CALLER_UNAVAIL	That person isn't available right now.
		(Sheet 1 of 6)

#	Prompt Name	Script
20	ZERO	Zero
21	ONE	One
22	TWO	Тwo
23	THREE	Three
24	FOUR	Four
25	FIVE	Five
26	SIX	Six
27	SEVEN	Seven
28	EIGHT	Eight
29	NINE	Nine
30	ONE_MOMENT	One moment, please.
31	NO_PORTS	All circuits are busy. Please try again in a few minutes.
32	DBL_POUND	At any time, you may press the # key twice for a list of options.
33	RECORDING_END	The recording has ended. To start again, press one. Otherwise, you may hang up.
34	PAUSED	Paused. To resume, press two.
35	RECORDINGS	Recordings
36	DIALOUT_CONFIRM	You've been invited to a conference call. To join, press one. To decline, press two.
37	DECLINED	Invitation declined. Goodbye.
40	LIST_NAMES	For a list of names, press three.
41	PLACE_CALL	To place a call, press two.
42	NO_NAMES	Names are not available.
43	RETURN_CONF	To return to the conference, press *.
44	INVALID_OPTION	Sorry, that's not a recognized option.
45	OPTION_NA	Sorry, that option isn't available.
	L	(Sheet 2 of 6)

Table 18:	English (United Stat	es) Voice Prompts	(continued)
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Table 18:	English (	United States)	Voice	Prompts	(continued)
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#	Prompt Name	Script
46	RETURNING	Returning to conference.
47	2ND_LEG_2WAY	Do you want to keep this call? To keep the call and return to the conference, press one. To drop the call and return, press two.
48	BUSY	That number is busy.
49	CALL_2WAY	To return to the conference, press *. To try another number, press one.
50	CANT_JOIN	I'm sorry. The call leader hasn't given approval for you to join this conference. Goodbye.
51	HUNG_UP	The person you called is no longer on the line.
52	INCOMPLETE_CALL	Sorry, we couldn't complete your call.
53	JOINING	Now joining
54	NAME_2WAY	I'm not sure if you recorded a name. To keep this recording, press one. To try again, press two.
55	NEXT_NO_NAME	Sorry, I still didn't hear you say a name. You can't join the conference until you record your name. To try again, press one.
56	NO_ANSWER	There's no answer at that number.
57	MAGIC_KEY	Ready to place a call. To return to the conference at any time, press the * key twice.
58	NO_NAME	Sorry, I didn't hear you say a name.
59	RECORD_CANCELLED	Recording cancelled.
60	ROLLCALL	To cancel the list at any time, press *.
61	ROLLCALL_2WAY	To return to the conference, press *. To repeat the list, press one.
62	CANCELLED	Cancelled.
63	ENTER_NUMBER	Enter a phone number. When you have finished, press #.
64	DIAL_ANOTHER	Cancelled. You may dial another number now, or to return to the conference, press *.
65	INVALID_PHONE	Sorry, we're unable to call that number. You may dial another number now, or to return to the conference, press *.
66	INVALID_PHONE2	Sorry, that phone number isn't valid.
67	COUNT1	There are
68	COUNT2	people in this call.
		(Sheet 3 of 6)

#	Prompt Name	Script
69	TEN	Ten
70	ELEVEN	Eleven
71	TWELVE	Twelve
72	THIRTEEN	Thirteen
73	FOURTEEN	Fourteen
74	FIFTEEN	Fifteen
75	SIXTEEN	Sixteen
76	SEVENTEEN	Seventeen
77	EIGHTEEN	Eighteen
78	NINETEEN	Nineteen
79	TWENTY	Twenty
80	THIRTY	Thirty
81	FORTY	Forty
82	FIFTY	Fifty
83	SIXTY	Sixty
84	SEVENTY	Seventy
85	EIGHTY	Eighty
86	NINETY	Ninety
87	HUNDRED	Hundred
88	OPTIONS	Options.
89	DROPPED	The call has been dropped.
90	ONE_CALLER	There is one person in this call.
91	MUTE	To mute your line, press one.
92	UNMUTE	To unmute your line, press one.
93	NUMCALLERS	To hear the number of callers, press three.
	L	(Sheet 4 of 6)

Table 18:	English (Uni	ted States) Voice	Prompts	(continued)
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#	Prompt Name	Script
94	CHECK_RETURN	To return to the conference, press * now. Otherwise select from the following options
95	NAMES	Names.
96	DIALOUT_NO_PORTS	All circuits are busy. Please try your call again in a few minutes.
97	RECORD	This call is being recorded.
98	REC_STOP	The recording has been stopped.
99	TRY LATER	Please try your call again in a few minutes.
100	JOIN_TONE	<rising beep="" tone=""></rising>
101	LEAVE_TONE	<descending beep="" tone=""></descending>
102	MUTE_TONE	<double beep="" tone=""></double>
103	UNMUTE_TONE	<triple beep="" tone=""></triple>
104	DIALTOJOIN	To join the call press one.
105	EOCP_CONFWILLEND	This conference will end in
106	EOCP_MINUTES	minutes.
107	EOCP_ENDNOW	Please conclude your conference now to avoid being disconnected when this conference terminates.
108	EOCP_LDREXTEND	The designated leader will now be asked to extend this conference. You may continue this conference while the leader is away.
109	EOCP_LDRMNU1	Extend conference. Press the * key to cancel and return to the conference at any time.
110	EOCP_LDRMNU2	To extend the conference for 15 minutes, press one; for 30 minutes, press two, for 45 minutes, press three; for 60 minutes, press four.
111	EOCP_EXTGOOD	This conference has been extended successfully.
112	EOCP_EXTFAIL	I'm sorry, currently there are not enough ports available to extend this conference for that length of time.
113	EOCP_TOOLONG	Please select a shorter extension period
114	EOCP_ENDED	This call has ended. Goodbye.
115	EOCP_LDRMNU3	or press the * key to return to the conference.
116	AUDIO_LOCKED	This conference has been locked by the leader.
	1	(Sheet 5 of 6)

 Table 18: English (United States) Voice Prompts (continued)

#	Prompt Name	Script
117	AUDIO_LK_MNU1	To lock this conference, press 5.
118	AUDIO_LK_MNU2	To unlock this conference, press 5.
119	AUDIO_LK_ST_1	This meeting is now locked.
120	AUDIO_LK_ST_2	This meeting is now unlocked.
121	PID_TOGGLE	To enter a Personal ID, press star.
122	PID_SELECT	Enter your Personal ID, then press pound.
123	ACODE_TOGGLE	To enter an Access Code, press star.
124	PID_SKIP	To skip your Personal ID, press star.
125	PID_RETRY	That Personal ID isn't recognized, please try again.
126	PID_FINAL	That Personal ID isn't recognized.
127	PID_APPROVAL	Access to this conference requires leader approval.
128	PID_LEADER	Contact your Conference Leader to accept your request to attend this conference.
129	PID_MNU_4	To enter your Personal ID, press 4.
130	PID_MNU_RET	To return to the conference, press star.
131	PID_NOT_REG	That Personal ID isn't registered for this conference.
132	PID_CHG_FAIL	There was an error when attempting to change your Personal ID.
133	ACODE_SELECT	Enter an Access Code, then press pound.
134	JOIN_MUTED	Your audio is muted. You can hear the conference but cannot speak unless enabled by the conference leader.
135	DUPLICATE_PID	This conference restricts duplicate Personal IDs. That Personal ID is already in use.
136	AUDIO_ONLY_CONF	You have accessed an audio-only conference. Video is not available.
		(Sheet 6 of 6)

Table 18: English (United States) Voice P	<pre>Prompts (continued)</pre>
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