

# MiCollab Advanced Messaging

## Software Release Note

For version 6.1 SU3

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# Preface

This document introduces you to the new features and capabilities available in MiCollab Advanced Messaging (MiCollab AM) version 6.1. The details of how MiCollab AM works are found in the full set of documentation available through the following sources:

- MiCollab AM documentation library which is included on the Mitel MiCollab AM 6.1 Telephony Server DVD in the Documentation folder.
- Online help is available within most of the MiCollab AM administrative utilities and is accessible via the Help menu or by pressing **F1**.

Additionally, this document provides:

- The hardware and software requirements necessary to install and run MiCollab AM and its various components and applications.
- Third-party hardware and software compatibility information.
- Languages supported by MiCollab AM in the various end-user client interfaces.
- High-level capacity and limitations information.

# New and Improved Features

This section provides a high-level overview of the improvements and other changes that have been made to MiCollab AM.

## 6.1 SU3

### Ability to Show Recipient's Email Address in Subject Line

With MiCollab AM 6.1 SU3, we have added support for adding the Recipient's email address to the subject line in the notification messages. This applies to SMS and Simple UM Notification messages.

### Avaya IP Office Manager 10.0 Qualification

With MiCollab AM 6.1 SU3 comes qualification for the most recent version of Avaya IP Office Manager, version 10.0 SU1.

### Cisco Unified Communications Manager 11.5 Qualification

With MiCollab AM 6.1 SU3 comes qualification for the most recent version of Cisco Unified Communications Manager, version 11.5.

### Mitel MiVoice Business 8.0 Qualification

With MiCollab AM 6.1 SU3 comes qualification for the most recent version of Mitel MiVoice Business, version 8.0.

### Original Telephone User Interface (TUI) Enhancement

In MiCollab AM 6.1 SU3, the original TUI has been enhanced with the ability for an outside caller to mark a message *Private*.

### Support for Avaya Local Survivable Processor

MiCollab AM 6.1 SU3 now supports the Avaya Local Survivable Processor (LSP) as a failover solution. The Avaya Local Survivable Processor utilizes the Avaya S8300 hardware and software components and requires an Avaya Communication Manager software license to activate the LSP feature. This software license allows the S8300 Media Server to be a survivable call-processing server for remote/branch customer locations, as well as a redundant call controller for a standalone S8300 Media Server.



## Support for OpenText RightFax 10.6 Feature Pack 3

MiCollab AM 6.1 SU3 now supports integration with OpenText RightFax 10.6 Feature Pack 3.

## TeamQ Enhancements

Agents can now configure the desktop client to suppress call notification sounds when the agent is connected to a call. This is a convenience feature for agents who are using a softphone with a headset.

## 6.1 SU2

### Avaya IP Office Manager 9.1 Qualification

With MiCollab AM 6.1 SU2 comes qualification for the most recent version of Avaya IP Office Manager, version 9.1.

### Mitel MiVoice MX-ONE Service Node SIP Trunk Integration

MiCollab AM 6.1 SU2 now supports integration with the Mitel MiVoice MX-ONE system using Service Node SIP trunk. For more information, please see the new *Mitel MiVoice MX-ONE Service Node SIP Trunk Integration Technical Note*.

### Mitel MiVoice Business 7.2 Qualification

With MiCollab AM 6.1 SU2 comes qualification for the most recent version of Mitel MiVoice Business, version 7.2.

### Message Option Enhancement for WPM and Mobile Client

The Web PhoneManager (WPM) and Mobile Client for the system that uses the Original TUI type have been enhanced to allow **Reply All** to a message if there are multiple message recipients.

## Mobile Client Enhancements

MiCollab AM 6.1 SU2 includes the following list of new features and enhancements for Mitel Mobile Client:

- Mobile clients have been changed to no longer require a PA license to use the client for standard features. A PA license is only needed for PA features.
- Mobile clients use authentication tokens now instead of stored user credentials. With the new authentication tokens feature, you can:
  - Configure expiration time to force users to re-authenticate periodically.
  - Revoke authentication tokens for one user or all users, which prevents unauthorized access to the mobile client until user re-authenticates.

- Reduce mailbox lockouts that would result from a security code change if the user didn't update their security code in the mobile client right away.
- Mobile analytics have been changed from opt-out to opt-in.
- A potential security issue has been fixed where it was possible to access one user's messages using another user's login credentials.

## ShoreTel ShoreWare Version 14.2 Qualification

With MiCollab AM 6.1 SU2 comes qualification for the most recent version of ShoreTel ShoreWare, version 14.2.

## Skype for Business Updated Minimum Requirements

Due to issues with Callouts to a PSTN and other changes that were made with the release of MiCollab AM 6.1 SU2, the MiCollab AM minimum requirements for the Skype for Business 2015 SIP Trunk integration are now MiCollab AM 6.1 SU2 and above.

## Support for XMediusFAX® Integration

MiCollab AM 6.1 SU2 now supports integration with XMediusFAX®. For more information, please see the new *XMedius Fax Integration Guide*.

## Support for Twilio and Zang Integrations for Sending SMS/MMS Messages

MiCollab AM 6.1 SU2 supports the ability to add the Twilio or Zang as an SMS/MMS service provider for sending SMS notifications to users through REST (REpresentational State Transfer) API that sends request over HTTPS. Once Twilio or Zang are added as the service provider, their services can be configured as an alternative to the other existing SMS notification types provided by MiCollab AM such as SMPP, GSM, TAP, and UCP.

## TeamQ Enhancements

TeamQ® Reports has been enhanced with the following new Report types:

- **Agent Call Listing Report:** Contains a data record for each call the agent was involved with. Fields displayed in the report relate to caller-specific data as opposed to call handling data.
- **Team Call Listing Report:** Contains a data record for each call that entered queue for the team. Fields displayed in the report relate to caller-specific data as opposed to call handling data.
- **Team Call Listing by Agent Report:** A variation of the **Team Call Listing** report that includes a subsection for each agent in the team.
- **Queue Call Listing Report:** Contains a data record for each call that entered the queue.

- **Queue Call Listing by Agent Report:** A variation of the **Queue Call Listing** report that includes a sub-section for each team assigned to the queue.
- **Listing by Callback Number Report:** Contains data for calls where the data in the callback number field matches the specified callback number filter.
- **Listing by Calling Party (ANI) Report:** Contains data for calls where the data in the calling party (ANI) field matches the specified calling party filter.
- **Listing by Identification Number Report:** Contains data for calls where the data in the identification field matches the specified identification number filter.

## 6.1 SU1

### Ability to Import Customer-Provided SSL Certificate

MiCollab AM 6.1 SU1 has added the ability to use customer-provided certificates instead of the vendor-signed certificates that MiCollab AM ships with.

### Avaya Aura Communication Manager 7.0 Qualification

With MiCollab AM 6.1 SU1 comes qualification for the most recent version of Avaya Aura Communication Manager, version 7.0.

### Cisco Unified Communications Manager 11.0 Qualification

With MiCollab AM 6.1 SU1 comes qualification for the most recent version of Cisco Unified Communications Manager, version 11.0.

### Enhanced Google Gmail Authentication Support

MiCollab AM 6.1 SU1 now has the ability to use OAuth 2.0 for Google Gmail authentication. This allows MiCollab AM to work with Gmail when it's configured for 2-step authentication or single sign-on. Using this authentication method, users are no longer required to store their email password within MiCollab AM. Instead, users authorize MiCollab AM to be able to access their Gmail account. Authorization can be revoked at any time by users by going into their Gmail account settings.

Switching to OAuth for authentication is not automatic. It's recommended to create a new email server profile (configured for OAuth) and switch users over to it at your own pace.

### OpenSSL 1.0.2 Qualification

With MiCollab AM 6.1 SU1 comes qualification for the most recent version of OpenSSL, version 1.0.2.

## S/MIME-Encryption Capability for Messages

The S/MIME-encryption capability has been added to Digital Networking that exchanges voice and fax messages through the VPIM (Voice Profile for Internet Mail) protocol. S/MIME will be used for VPIM messages to encrypt the contents of the voice and directory messages during transport.

## Support for Microsoft Products

This release of MiCollab AM 6.1 SU1 extends supports to:

- Microsoft Exchange 2016
- Microsoft Outlook 2016
- Microsoft Skype for Business Client 2016
- Microsoft Skype for Business Server 2015
- Microsoft Windows 10

## Support for Neverfail System Server with Call Services

MiCollab AM 6.1 SU1 now supports Neverfail for redundancy of a combined System Server/Call Server reducing the minimum number of servers necessary for a fully redundant system from 4 to 2. Neverfail can be deployed as either High Availability, Disaster Recovery or both.

When using a combined System Server/Call Server, only IP-based PBX Integrations, where MiCollab AM registers with the PBX or where the PBX supports multiple end points, are supported.

## Support for Neverfail System Server with Hyper-V

MiCollab AM 6.1 SU1 now supports Neverfail running on a Microsoft Hyper-V virtual environment.

## Support for VMware vSphere/ESXi

MiCollab AM now supports VMware vSphere/ESXi version 6.0 Update 2.

## TeamQ New Features and Enhancements

MiCollab AM 6.1 SU1 includes the following list of the new features and enhancements for TeamQ.

- **Maximum Calls in Queue Setting.** A call queue can be configured to limit the number of calls waiting in queue at any one time to a specific number. The action to take when additional calls arrive is configurable, and can include requesting the caller to leave a message or automatically creating a callback request.
- **External Data Lookup.** Ability to configure the TeamQ script to query external data sources, including common databases and custom .NET assemblies, in order to validate caller-entered input and provide data for display to agents.

- **Extended Call Notes Availability.** Agents are now allowed to add and edit call notes while in wrap-up status after disconnecting a call.
- **Enhanced Multi-Box Phrase Management.** When a TeamQ phrase is added, changed or deleted through the Administration TUI the changes will be distributed to all call servers within the system.
- **Support for Remote UCCONNECT Server.** Running the TeamQ script from a remote UCCONNECT server is now fully supported.

## 6.1

### Availability Enhancements

The following enhancements have been made to the *Availability* feature for subscribers with a *Personal Assistant* license and have the *Availability* feature enabled.

- Administrators can now create an unlimited number of greetings that subscribers can pre-record and assign to availability states.
- Subscribers can now have different work hours on different days and work hours that span across midnight.
- Return time prediction has been improved greatly.
 

**For example:**

It now takes into consideration work hours and days so that the system doesn't say a return time outside of the subscriber's *Work Hours*.
- Subscribers that have the UM for Exchange® client installed now have the ability to schedule future availability changes to any availability state using Outlook®.
 

**For example:**

Scheduling vacation time in advance and setting it to play a vacation-specific greeting.
- Availability states now have the ability to automatically locate subscribers instead of the caller having to explicitly choose to locate them. Administrators can choose whether to locate before the subscriber's availability is played or after.
- Availability states now have the ability to turn on/off mobile notifications per availability state, allowing users to switch to a hands-free/eyes-free configuration by a simple availability change.
- Availability states now have the ability to turn on/off call screening per availability state. Combined with turning on/off mobile notifications, it allows to switch between audio call screening and visual call screening per availability state.

### Fax Tone Detection on IP Integrations

MiCollab AM can now detect fax tones in RTP streams allowing IP-based MiCollab AM systems to be integrated with OpenText® RightFax and reap the benefits of unified messaging.

## Single Number Voice & Fax Improvements

MiCollab AM has supported single number voice and fax for a long time, but we've revamped things quite a bit to make it much simpler for users and administrators alike. It no longer requires the use of an ESP call processor. We've added fax tone detection to all caller interfaces, speech, availability, etc. No matter how a fax call ends up in MiCollab AM, the system can now handle it.

If the subscriber has answered a fax call, they can now simply transfer the call to the voicemail pilot number and MiCollab AM will do the rest. No need for subscribers to transfer it to themselves and press key sequences to receive the fax.

## Microsoft Windows Server 2012 R2 Hyper-V Support

Mitel has formally certified the use of MiCollab AM in Microsoft Windows Server® 2012 R2 Hyper-V® virtual environments. For anyone who is already using Hyper-V, MiCollab AM 6.1 now supports using a software license with Hyper-V eliminating the need for a dongle and AnywhereUSB® device.

The following table provides additional details regarding support for Hyper-V.

Table 1. Hyper-V Support

Feature	Supported	Details
MiCollab AM Licensing	Yes	<ul style="list-style-type: none"><li>• Either software licensing or use of a dongle connected to an AnywhereUSB device is supported.</li></ul>
Neverfail	Yes	<ul style="list-style-type: none"><li>• MiCollab AM with Neverfail running on a Hyper-V virtual environment has been certified.</li></ul>
Live Migration	Yes	<ul style="list-style-type: none"><li>• There may be instances of degraded audio (including DTMF) for brief periods as the system transfers.</li></ul>
High Availability	Yes	<ul style="list-style-type: none"><li>• Hyper-V uses Microsoft Clustering Service (MSCS) and Network Load Balancing (NLB) for virtual machine High Availability.</li><li>• MSCS and NLB are included in Windows Server 2012 R2 Standard, Datacenter, and Hyper-V 2012 R2 Core.</li><li>• Shared storage and a trusted Active Directory domain are also required.</li></ul>
Dynamic Memory	No	<ul style="list-style-type: none"><li>• The MiCollab AM application suite does not support Dynamic RAM. Virtual servers running the MiCollab AM application must be assigned a fixed amount of RAM.</li></ul>
Pass Through	No	<ul style="list-style-type: none"><li>• Pass through of any type, including USB, is not supported.</li></ul>
AnywhereUSB	Yes	<ul style="list-style-type: none"><li>• AnywhereUSB is a 3<sup>rd</sup>-party device that has been tested with the MiCollab AM application suite in Hyper-V</li></ul>

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environments. Mitel does not sell or provide technical support for this product.

- Consult the manufacturer's documentation for additional information about using AnywhereUSB products in virtualized environments.
- 

## TeamQ Enhancements

TeamQ® has the following new capabilities:

- Callers can now request a call back instead of waiting on the line without losing their place in queue.
- *Agents* can now enter notes for each call for later reference.
- A new comprehensive reporting tool to generate a myriad of activity and statistical types of reports covering *agents*, *teams* and *call queues*.

## Software Licensing Enhancements

The following enhancements have been made to software licensing:

- Support for using a proxy server to connect to the Sentinel Cloud licensing server.
- Improved notification of loss of connection to the licensing server, including status messages on the Licensing tab, pop-ups in the Administration utility, and email notification through the Reliability tab.
- A new column in the *License Management Utility* that shows the *Entitlement* version.
- Numerous other minor improvements.

## Virtual Locations for Auto Attendant Scheduling

For centralized systems that service multiple locations, it is now possible to set the location of the *Call Routing* entry differently than the location of the underlying switch section. This allows an *Auto Attendant* to be virtually located anywhere in the world regardless where the call servers reside. The significance of this change is that schedules in *Schedule mailboxes* can be configured based on the virtual location of the auto attendant.

### For example:

If the company has an office in Paris with that has a local phone number that forwards to the centralized system in London, the *Schedule mailbox* for the Paris *Auto Attendant* can be configured using Paris time instead of London time. While the *Schedule mailbox* for the London office can be configured using London time.

## Office 365 Performance Improvements

The Office 365® integration has been reworked and optimized to greatly improve performance and MWI scalability.

## New GENBAND EXPERiUS SIP Integration

MiCollab AM now supports integration with a GENBAND® EXPERiUS® telephone system using the Session Initiation Protocol (SIP). For more information, please see the new *GENBAND EXPERiUS SIP Integration Technical Note*.

## NEC MCI LAN Integration Update

The MCI LAN integration for NEC® telephone system has been updated to handle variable packet lengths better.

## Dial-by-Name Directory Segregation

Use the new Group Directory call process action to create a dial-by-name directory that is limited to one or more groups. This helps avoid misrouted calls, especially in organizations that have multiple people with the same name.

## Ability to Delete Greetings

Subscribers now have the ability to delete *Greetings* through all of the following interfaces:

- All of the various Telephone User Interfaces (TUIs)
- Voice User Interface (VUI)
- Web PhoneManager
- Mobile clients

This is especially useful for subscribers who switch to using *Availability* and no longer need a personal greeting. Depending on configuration, the *Availability* feature will automatically speak most information that people put in their personal greetings, making a personal greeting unnecessary in many cases.

## Control of the MWI Checkbox via Class of Service

The MWI checkbox for the subscriber primary extension can now be enabled/disabled via *Class of Service*.

## Zero Out to Operator While Recording

Callers can now press zero to transfer to an operator while the system has begun recording a message. If the caller has not recorded the minimum recording length, then the recording will be discarded. If the minimum recording length has been reached, the caller will be asked if they wish to send the message or not before being transferred.

## Silence Timeout While Recording Results in Help Prompting

A silence timeout while recording a message will now pause the recording and present the caller with help prompting.



## Improved NAT Traversal for Lync 2013 Integrations

The Lync® 2013 integration has been updated to provide improved NAT traversal.

## Immediate Message Notification Improvements

Optimization improvements have been made to *Immediate Message Notification* for better performance.

## Support for Android 5 and iOS 9

The mobile clients for Android and iPhone mobile devices have been updated to support Android 5 and iOS 9 respectively.

## Nuance Vocalizer Update

The Vocalizer TTS engine has been updated to version 6.0.3 to resolve some issue with the prior version.

## Java Runtime Environment Update

The Java® Runtime Environment (JRE) that MiCollab AM ships with has been updated to version 8 for improved performance and security.

## Web Services (SOAP/XML) Changes

SOAP API changes have been made to support the new Availability Enhancements.

# Discontinued Features

This version of MiCollab AM no longer supports the following:

- Integration with Mitel® PBXs using MiTAI®. Mitel recommends using the Mitel MiVoice/MCD SIP integration instead.

**NOTE** While MiTAI is not supported with 6.1, it has not been removed from the software yet. As such, it is possible to upgrade to 6.1 and then switch to SIP afterwards.

**IMPORTANT** MiTAI will be completely removed from the software in the next version of MiCollab AM.

- OpenText RightFax 9.4
- PHP 5.5 and older
- Google discontinued C2DM support for push notifications to Android devices back in June 2012 in favor of the newer GCM protocol. Google shut down the C2DM servers in July 2015 making it no longer possible to use C2DM. As such, the configuration settings for C2DM have now been removed from the Mobile Service web application.
- IBM Notes 7.0

# Localization

This section details what languages are supported for the various MiCollab AM client interfaces.

## System Prompts/TUIs

As of this release, the system prompts, various telephone user interfaces (TUIs), and standard database are localized into the following languages:

- Arabic
- Chinese – Cantonese
- Chinese – Mandarin
- Danish
- Dutch
- English – Australian
- English – British
- English – North American
- Finnish
- French – Canadian
- French – European
- Italian
- German
- Japanese
- Norwegian
- Portuguese – Brazilian
- Portuguese – European
- Russian
- Spanish – Latin American
- Spanish – European
- Swedish
- TTY

## Client Applications

As of this release, the MiCollab AM end-user client applications, as well as MiCollab AM Mobile Admin, are localized into the following languages:

- Danish
- Dutch
- English – North American
- Finnish
- French – European
- German
- Italian
- Norwegian
- Spanish
- Swedish

## Text-to-Speech

As of this release, MiCollab AM supports the text-to-speech (TTS) languages and voices below. **Bold text** indicates the preferred voice when a language has more than one:

**NOTE** Version 6.0 replaced the previous RealSpeak TTS engine with Nuance Vocalizer. As such, you will need to update the TTS engine and any TTS languages when upgrading from any version prior to 6.0.

Table 2. Text-to-Speech

Language <sup>1</sup>	Dialect	Gender	Voice
Basque	Basque	F	Arantxa
Czech	Czech	F	Zuzana
Danish	Danish	F	Ida
Dutch	Belgian	F	Ellen
Dutch	Netherlands	F	Claire
English	Australian	F	Karen
English	Australian	M	Lee

English	British	F	Serena
English	British	M	Daniel
English	Indian	F	Sangeeta
English	Irish	F	Moira
English	Scottish	F	Fiona
English	U.S.	F	Donna
English	U.S.	F	Samantha
English	U.S.	M	Tom
French	French	F	Virginie
French	Canadian	F	Julie
German	German	F	Steffi
Greek	Greek	M	Alexandros
Italian	Italian	F	Silvia
Norwegian	Norwegian	F	Stine
Polish	Polish	F	Agata
Portuguese	Brazilian	F	Raquel
Portuguese	Portuguese	F	Joana
Russian	Russian	F	Milena
Spanish	Castilian	F	Monica
Spanish	Americas	F	Paulina
Swedish	Swedish	F	Alva
Turkish	Turkish	F	Aylin

<sup>1</sup> The System supports only one voice for a particular language.

## Automatic Speech Recognition (ASR)

As of this release, MiCollab AM supports the ASR languages listed below.

Table 3. ASR

Language	Dialect
French	Canada
French	France
English	Australia
English	UK
English	United States
Spanish	Spain
Spanish	United States
Swedish	Sweden

# Upgrading and Migrating to MiCollab AM 6.1

For detailed instructions on how to upgrade and migrate previous versions of MiCollab AM to MiCollab AM 6.1, please refer to the *Upgrading and Migrating MiCollab AM* online book included in the Documentation folder on the MiCollab AM 6.1 Telephony Server DVD.

For detailed instructions on how to migrate from Kinesis to MiCollab AM 6.1, please refer to the Kinesis Data Migration Guide included in the Documentation folder on the MiCollab AM 6.1 Telephony Server DVD.

For detailed instructions on how to migrate from Repartee to MiCollab AM 6.1, please refer to the *Repartee Data Migration Guide* included in the Documentation folder on the MiCollab AM 6.1 Telephony Server DVD.

# Computer Platform Requirements

This section describes the basic computer hardware and software configurations necessary to run MiCollab AM and provides compatibility information for *UCConnect*, *OpenText RightFax*, and *NetConnect Digital Networking* installations.

## Windows Update Policy

Mitel recommends the following rules for Windows Update:

- *Important updates* for the current supported operating system should be installed.
- *Recommended* and *Optional updates* should be reviewed for compatibility prior to installing.
- Service Pack or major release updates should only occur if they have been validated by Mitel.
- Backups should be made prior to any updates.

## Minimum Hardware Requirements

You must dedicate a platform to the operation of MiCollab AM, its client utilities, and its maintenance programs. This computer platform must satisfy the following minimum requirements:

**NOTE** The following list represents the minimum hardware and software required for a basic four-port MiCollab AM version 6.1 system. The hardware requirements for your implementation of MiCollab AM may be substantially greater, depending on the features purchased, the type of integration installed, the expected traffic load, and any future upgrade planning.

- Windows Server 2008 R2 with Service Pack 1 (64-bit/x64) or Windows Server 2012 R2 (64-bit/x64)
- 60 GB hard disk with a 40 GB C partition.
- 2.6 GHz single core, 1.8 GHz dual core Intel® Pentium IV™ or better microprocessor
- 4 GB memory with or without speech
- Microsoft .NET 3.5 SP1
- 1024 x 768 Color VGA-compliant graphics adapter and monitor
- DVD drive compatible with DVD±R media
- Network interface card
- Remote connectivity through TCP/IP (preferred), or a Windows compliant external modem and dedicated RS-232 serial (COM) port, to support remote administration
- Appropriately configured feature and license certificate files
- At least one USB port on the System Server, if using hardware-based licensing



- Sufficient full-length PCIe, PCI, or PCI-X expansion slots to support all required linecards, DSP cards, and digital interface cards. 5-volt cards require 5-volt PCI slots, while universal cards may be installed in 5-volt PCI, 3.3-volt PCI, or PCI-X slots.
- If integrating with a circuit-based switch, at least one compliant voice linecard. No physical voice linecards are required with an IP telephony integration
- If integrating using an outband RS-232 integration, at least one dedicated COM port and serial cable to communicate with the telephone system is required. If there is a single serial port with calls spread across multiple call servers, the serial port must be on the system server. If there are multiple serial links to a PBX, one serial port per call server is required and the serial links must be plugged into the individual call servers. Alternatively, a Perle IOLAN DS1 serial to IP converter can be used to connect a serial integration to MiCollab AM using TCP/IP instead of a serial (COM) port. Optionally, the IOLAN DS1 can split the integration data across multiple call servers as well.
- If Short Message Service (SMS) support is installed, a dedicated modem to contact the SMS provider or the subscribers' GSM-based mobile telephones (in addition to the modem used for remote administration); contact your SMS provider for their modem requirements and refer to the SMS Online Book for additional information. Note that SMTP-based message notification and delivery, which is configured as an SMS provider, does not require such a modem; instead, it uses the network interface card and TCP/IP connectivity specified earlier in this list.

Table 4. Supported Voice Line Cards

Line Card or Digital Interface Card	PCI Slot Requirements
Aculab Prosody X	PCIe slots
Dialogic D/41JCT-LS	PCIe <sup>2</sup> or Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI X slots)
Dialogic D/41JCT-LS Euro	PCIe or Universal (compatible with 5-volt PCI, 3.3-volt PCI and PCI X slots)
Dialogic D/42JCT	PCIe or Universal (compatible with 5-volt PCI, 3.3-volt PCI and PCI X slots)
Dialogic D/82JCT-U	PCIe or 5-volt PCI
Dialogic D/82JCT-U-PCI-UNIV	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI X slots)
Dialogic D/120JCT-LS	PCIe or 5-volt PCI
Dialogic D/120JCT-LS-U	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)
Dialogic D/120JCT-LS Euro	PCIe or Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI X slots)

Dialogic D/240JCT-T1	PCIe or Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI X slots)
Dialogic D/480JCT-2T1EW	PCIe (compatible with 5-volt PCI, 3.3-volt PCI, and PCI X slots)
Dialogic D/480JCT-2T1-U	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI X slots)

<sup>2</sup> The PCIe cards listed in this table are an x1; however, according to Dialogic, all but the D/41 cards require the chassis to have the Power Budgeting feature or the card must be plugged into a x4 or greater slot to provide enough power to the card.

## Server Class Configurations

Refer to the configurations provided from [Table 5](#) through [Table 10](#) to determine hardware requirements.

## Recommended Hardware Configurations

Table 5. Recommended Hardware Configurations

Server Class	Processor Reference	Memory (Windows Server 2008 R2 with SP1 or 2012 R2, 1 ASR language)	Memory (Each additional ASR language)
A	1 x Intel Core 2 Duo E6400 2.13 GHz CPU or better	4GB	1GB
B	1 x Quad Core Intel Xeon E5504 2.0 GHz CPU or better	4GB	1GB
C	2 x Quad Core Intel Xeon E5504 2.0 GHz CPU or better	6GB	1GB
D	2 x Six Core Intel Xeon E5- 2640 2.5 GHz CPU or better	8GB	1GB

**NOTE** Unless otherwise specified in the [New and Improved Features](#) section of the SRN, the hardware requirements for the current feature release (for example 6.1) have not changed from the most recent previous feature release (for example 6.0). As a result, if an existing system running the previous feature release is operating satisfactorily, it can be upgraded to the current version without performance concerns. However new customers, or customers that are planning to add capacity to their systems with or without upgrading, should review the above classification in order to assure satisfactory system performance.



## Recommended Hardware by Server and Ports

Table 6. Recommended Hardware by Server/Ports

System Server				
Total Ports	Up to 96	Up to 288	Up to 384	Up to 500 speech Up to 752 no-speech
Server Class	A	B	C	D
Call Servers	1-8	1-8	1-20	1-20
Call Server <sup>3</sup>				
Ports	4-24	4-48	4-96	4-144
Speech Resources	0-24	0-48	0-48	0-120
Server Class	A	B	C	D
System Server with Call Services				
Ports	4-24	4-48	4-96	4-144
Speech Resources	0-24	0-48	0-48	0-120
Server Class	A	B	C	D
Additional Call Services	No	1 <sup>4</sup>	3	3

<sup>3</sup> Please refer to Minimum Requirements for VMware vSphere or Microsoft Hyper-V if running a Call Server in a virtual environment.

<sup>4</sup> Additional Call Servers may be possible if none are at full capacity. Contact Mitel Sales Engineering to discuss this type of configuration before ordering.

## Recommended Hardware by Server Class

Table 7. Recommended Hardware by Server Class

System Server				
Server Class	A	B	C	D
Total Ports (no speech)	4-96	4-384	4-384	4-752
Total Ports (speech)	4-96	4-384	4-384	4-500
Call Servers	1	8	20	20
Call Server <sup>5</sup>				
Server Class	A	B	C	D
Ports	4-24	4-48	4-96 <sup>6</sup>	4-144 <sup>7</sup>
Speech Resources	0-24	0-48	0-48	0-120
Combined System Server and Call Server				
Server Class	A	B	C	D
Ports	4-24	4-48	4-96 <sup>6</sup>	4-144 <sup>7</sup>
Speech Resources	0-24	0-48	0-48	0-120
Additional Call Servers	No	1	3	3

<sup>5</sup> Please refer to Minimum Requirements for VMware vSphere or Microsoft Hyper-V if running a Call Server in a virtual environment.

<sup>6</sup> Maximum 48 ports when using speech recognition.

<sup>7</sup> Maximum of 96 ports when using speech recognition.

## Maximum Ports by Operating System

Port capacity may vary depending on the operating system used. The following table details port capacity by Operating System.

Table 8. Maximum Ports by Operating System

Operating System	Maximum Number of Ports
Windows Server 2008 R2 with Service Pack 1 or Windows Server 2012 R2	120 with speech or 144 without speech

## Port Distribution across Call Servers

The following table illustrates the class of server to use when splitting your MiCollab AM system across multiple Call Servers when MiCollab AM is using a dedicated System Server (i.e. a System Server with no ports on it). The rows indicate how many ports total across all Call Servers there will be in the system. The columns indicate how many Call Servers those ports would be split across with an equal number of ports on each Call Server. The intersection of the row and column is the minimum type of Call Server required for each of the Call Servers.

### For example:

If you require a 192 port system and are thinking of splitting that into 2 Call Servers with 96 ports each, then you would locate the row for 192 Total Ports and the column for 2 Call Servers and find that you would need a high level server of type C for each of the Call Servers. If you split the system up into 4 Call Servers with 48 ports each instead, you can use low-level Call Servers which may cost less than 2 high level servers. Additionally, using 4 Call Servers would reduce the impact of a Call Server being out of service to only  $\frac{1}{4}$  of overall capacity instead of  $\frac{1}{2}$ .

Table 9. Recommended Server Class by Number of Ports and Call Servers

		Number of Call Servers							
		1	2	3	4	5	6	7	8
Total Ports	4 - 24	A	A	A	A	A	A	-	-
	25 - 48	B	A	A	A	A	A	A	A
	49 - 72	C	B	A	A	A	A	A	A
	73 - 96	C	B	B	A	A	A	A	A
	97 - 120	-	C	B	B	A	A	A	A
	121 - 144	-	C	B	B	B	A	A	A
	143 - 168	-	C	C	B	B	B	A	A
	169 - 192	-	C	C	B	B	B	B	A
	193 - 240	-	-	C	C	B	B	B	B
	241 - 288	-	-	C	C	C	B	B	B
	289 - 336	-	-	-	C	C	C	B	B
	337 - 384	-	-	-	C	C	C	C	B
	385 - 500	-	-	-	D	D	C	C	C
	501 - 752 (no speech only)	-	-	-	-	-	D	D	D

**NOTE** For information about applications not covered from Table 5 through Table 8, contact Mitel.

## Capacities by Number of Call Servers

The table below details the maximum capacities based on the number of Call Servers used.

Table 10. Multiple Call Server Configuration

Call Servers <sup>8</sup>	Max Ports without ASR	Max Ports with ASR	Text to Speech Channels	Max Users without ASR (Approx.)	Max Users with ASR (Approx.)
1	144	120	120	15,000	10,000
2	288	240	240	30,000	20,000
3	432	360	360	40,000	30,000
4	576	480	480	40,000	40,000
5	720	500	500	40,000	40,000
6 – 20	752	500	500	40,000	40,000

<sup>8</sup> Each call server is limited to 3 integration types; the 3 integration types can be any mix of TDM and SIP (e.g. 1 TDM and 2 SIP). There is a limit of 1 Cisco UCM SCCP IP integration per call server, which can be mixed with TDM, but not SIP. Each Call Server can support up to 10 telephone systems in total; for example, 2 Avaya Communication Manager systems using SIP with 5 Avaya IP Office systems using SIP and 3 Siemens HiPath 4000 systems using Station Set Emulation.

### Additional Notes Regarding Table 5 through Table 10

- All orders or inquiries involving Call Servers that are not co-located (where co-location is defined as the installation of 2 or more Call Servers in the same physical location, serving a homogeneous group of users, typically to support high volumes of traffic) must be submitted through Mitel.
- The NetConnect directory propagation server must be on a separate platform from the MiCollab AM server; the two products are incompatible on the same server.
- For mission-critical MiCollab AM applications, Mitel strongly recommends the use of an uninterruptible power supply (UPS), redundant hot swappable platform power supplies, redundant hot-swappable fans with washable air filters, and a RAID 1 or RAID 5 disk drive array with hot spare.
- MWI response time can vary widely depending on the number of indicators being changed at a time and the number of ports that are available and designated for changing MWIs. A MiCollab AM messaging application that subjects the system to high levels of burst MWI activity (an application that includes an all-company distribution list, for example) may need additional port capacity to satisfy customer requirements for MWI response. If the MiCollab AM application being planned involves a large number of Unified Messaging subscribers, if large distribution lists are frequently used, or if the customer has specific requirements for MWI response time, contact Mitel for assistance in configuring the system.

# Minimum Server Requirements for Neverfail

Following are the minimum server requirements for the *Neverfail Heartbeat* application.

- MiCollab AM 6.1 requires Neverfail 6.7.7 be installed or upgraded to.
- The primary, secondary, and tertiary System Servers must meet the minimum requirements, as any one of them may be the active System Server at any time. Mitel recommends identical platform hardware for all System Servers.
- The same Windows operating system, Service packs and hot fixes must be installed on all System Servers.
- Network adapters must be as follows:
  - 2 NICs are required for Primary-Secondary *Neverfail* topology
  - 3 NICs are required for Primary-Secondary-Tertiary *Neverfail* topology
  - Teaming is supported, but only among the NICs that participate in the same data link.

**For example:**

Two servers have four NICs each, and you are deploying Primary-Secondary topology:

- Data link 1 (public + maintenance) can be a team of two NICs
    - Data link 2 (heartbeat/replication) can be a team of two NICs
  - You cannot team adapters that are meant to serve different data links.

**For example:**

Two servers have two NICs each, and you are deploying a Primary-Secondary topology:

- You cannot team the NICs in the servers, as each NIC must serve a different data link.
  - A minimum of 3 non-teamed network adapters are required in each server. One adapter is for the LAN connection, the second adapter is for the replication channel, and the third adapter serves as the maintenance port.
  - A minimum of 1GB of memory. Refer to [Table 5. Recommended Hardware Configurations](#) for the memory requirements for your system.
  - A minimum of 2GB free disk space on which you want to install Neverfail
  - Administrator access to the primary, secondary, and tertiary servers
  - Onsite expertise is required to install and verify the application and setup. Installers must be certified on *Neverfail* prior to installation or an Mitel Professional Services engineer must be onsite to perform the installation.

For problem resolution of *Neverfail* applications on MiCollab AM systems please contact the Mitel Technical Support department.

For more information on *Neverfail* and the *Neverfail* products please see the *Neverfail* website, [www.neverfailgroup.com](http://www.neverfailgroup.com).



## Minimum Web PhoneManager Requirements

Depending on its configuration, as many as three server platform components may be involved in the deployment of *Web PhoneManager*: the MiCollab AM System Server, the *Web PhoneManager* server, and the *Message Cache Manager* server. See the *Web PhoneManager* online book for requirements on the latter two servers.

**NOTE** On the server platform where *Web PhoneManager* resides, the web server software (either Microsoft Internet Information Services or Apache Web Server) and the scripting engine software (PHP) must be present and running correctly before *Web PhoneManager* can be installed or configured. Mitel cannot provide support for the web server or the scripting engine.

**NOTE** The *Web PhoneManager* online book discusses how to test these components using the *phpinfo()* function. Before contacting Mitel Technical Support, the web server administrator must conduct this test to verify that both components are working properly and that the PHP SOAP and XSL modules are installed.

## Site Requirements

- TCP/IP-based connectivity between the various server components involved

## Microsoft Internet Information Server (IIS) Requirements

- Microsoft IIS 7.0 or above
- PHP version 5.6 or 7.0
- World Wide Web Publishing Server (World Wide Web Service) installed
- To ensure web security using SSL, a certificate purchased from a Certificate Authority (optional)

## Linux-based Apache Web Server Requirements

**NOTE** Most current Linux server distributions include copies of Apache and PHP. However, because those distributions are not updated between releases, you may need to download, build, and install the required versions of Apache and PHP.

- Current server-class Linux distribution such as Fedora, Debian, or OpenSUSE Linux
- Apache Web Server 2.2.x or above
- PHP version 5.6 or 7.0
- OpenSSL 1.0.2 or above (optional)
- To ensure web security using SSL, a certificate purchased from a Certificate Authority (optional)

## Subscriber Browser Requirements

MiCollab AM subscribers can use *Web PhoneManager* through a web browser on current releases of the Windows, Mac OS X, or Linux operating systems. The following table shows the current browser and operating system combinations under which Mitel has tested and verified *Web PhoneManager*.

Table 11. Web PhoneManager Browser and Operating System Support

Browser	Windows	Mac OS	Linux
Microsoft Internet Explorer 9 and Above	✓		
Mozilla Firefox	✓	✓	✓
Apple Safari	✓	✓	
Opera	✓	✓	✓
Google Chrome	✓	✓	✓

## Minimum Standalone Integrated Client Access Server Requirements

**NOTE** For systems with more than 96 ports or 1,000 subscribers, Integrated Client Access (ICA) must be installed on a separate server platform. Each dedicated ICA server can support up to 3,000 concurrent connections and may support up to 5,000 subscribers, depending on how often your client application connects to the ICA server and how long it remains connected. Each MiCollab AM system can support multiple dedicated ICA servers for a maximum total of 10,000 subscribers.

If you are installing a standalone ICA server, the platform must meet the following requirements:

- 2.4 GHz Pentium 4 or better; Windows Server 2008 R2 with Service Pack 1 or 2012 R2 64-bit requires a x64 processor or a Dual Core processor.
- 2GB of RAM
- 20 GB or larger hard disk drive with at least 10 GB of free space available (additional free space is required if the operating system will be installed on the platform over a network)
- DVD drive
- TCP/IP protocol
- Availability to both subscriber workstations and the MiCollab AM server platform over the LAN or WAN

# Minimum UConnect Developer Platform Requirements

The *UConnect* developer platform is a platform dedicated to the development of *UConnect IVR* applications. *UConnect* developer platforms require the hardware and software components shown in [Table 12. UConnect Developer Platform Requirements](#).

**NOTE** The following list represents the minimum hardware required to develop *UConnect IVR* scripts. The hardware you require to develop *UConnect IVR* scripts may be greater. Contact Mitel for specific hardware requirements.

Table 12. UConnect Developer Platform Requirements

Platform Requirements	Windows 7 and Windows 8	Windows Server 2008 R2 with SP1 and 2012 R2
Processor group	1.0 GHz Pentium III or better	1.0 GHz Pentium III or better
RAM	256 MB	512 MB
Hard disk space	20 GB with 10 GB free	20 GB with 10 GB free

- Microsoft Windows Server 2008 R2 with Service Pack 1, Windows Server 2012 R2, Windows 7 (32-bit and 64-bit editions), or Windows 8 (32-bit and 64-bit editions)
- Microsoft Visual Studio 2008 or above

**NOTE** By default, all .NET applications compile with a Target CPU of AnyCPU; however, *UConnect* scripts compiled with this setting do not function on 64-bit operating systems. To correct this limitation, open the Advanced Compiler Settings window, and then set the Target CPU to x86.

- Microsoft .NET 3.5 SP1
- Color VGA-compliant display adapter and monitor
- DVD drive
- Sound card and microphone that support recording and playback of .wav files
- Sound editing software – The Windows Sound Recorder provides basic sound editing functionality. However, an editor with the ability to trim silence at the beginning and end of a phrase and to do other audio manipulations is recommended. Such an editor may be included with the software bundled with the computer's sound card. Refer to the *Recording Prompts* section of the *UConnect Getting Started* online book for more information.

## Minimum UConnect Remote Platform Requirements

The *UConnect* remote platform is a computer platform dedicated to the execution of *UConnect* IVR scripts and connected to the MiCollab AM server through a LAN. *UConnect* remote platforms require the following hardware and software components:

- Microsoft Windows Server 2008 R2 with Service Pack 1 or Microsoft Windows Server 2012 R2
- Microsoft .NET 3.5 SP1
- Color VGA-compliant display adapter and monitor
- Windows-compatible LAN adapter card
- DVD drive compatible with DVD+R media

**NOTE** This list represents the minimum hardware required to run *UConnect* IVR scripts on a remote platform. The processor and memory requirements for a specific remote *UConnect* platform depend on the size, complexity, and number of scripts the platform runs; the developer of each script is responsible for determining that script's requirements.

## Minimum NetConnect Digital Networking Platform Requirements

### Directory Propagation Server

The *NetConnect Directory Propagation* server must meet the requirements shown below.

**NOTE** The following list represents the minimum hardware requirements for the *NetConnect Directory Propagation* server to function. The hardware requirements for your implementation of *NetConnect Directory Propagation* may be greater. Contact Mitel for specific hardware requirements based on your implementation.

Table 13. NetConnect Directory Propagation Server Requirements

Number of Nodes	Number of Propagated Mailboxes	Processor Group
Up to 20	Up to 20,000	2.8 GHz Pentium 4 or better
21-50	Up to 30,000	Dual 1.0 GHz Pentium III or better
51-75	Up to 50,000	Dual 3.06 GHz Xeon or better

In addition, the server should include the following:

- 2 GB of RAM
- 20 GB or larger hard disk drive
- DVD drive
- Microsoft Windows Server 2008 R2 with Service Pack 1 or Microsoft Windows Server 2012 R2
- Microsoft .NET 3.5 SP1
- Network interface card compatible with your site's LAN
- TCP/IP network protocol installed
- Color VGA-compliant display adapter and monitor
- Windows-compatible Ethernet LAN adapter card with the TCP/IP protocol installed and configured

**NOTE** The Directory Propagation Server must be a dedicated machine. It is incompatible with the MiCollab AM System Server and Call Server software.

## Standalone Digital Networking Server

When running on a computer other than the MiCollab AM server platform, the *NetConnect Digital Networking* server must meet the requirements shown in Table 14: NetConnect Digital Networking.

**NOTE** A standalone *Digital Networking* server is only required if you are running the *Digital Networking* application in *Peer to Peer* mode. You do not need a standalone server if you are running the *Digital Networking* application in *Star Networking* mode.

**NOTE** The following list represents the minimum hardware requirements for the *NetConnect Digital Networking* server to function. The hardware requirements for your implementation of *NetConnect Digital Networking* may be greater. Contact Mitel for specific hardware requirements based on your implementation.

Table 14. NetConnect Digital Networking Server Requirements

Platform Requirements	Windows Server 2008 R2 with Service Pack 1 or Windows Server 2012 R2
Processor group	1.4 GHz x64 processor, or 1.3GHz Dual Core processor or better
RAM	1 GB
Hard disk space	40 GB with minimum 10 GB free

In addition, the server should include the following:

- Microsoft .NET 3.5 SP1
- Color VGA-compliant display adapter and monitor
- DVD drive
- Windows-compatible Ethernet LAN adapter card with the TCP/IP protocol installed and configured

## Minimum MiCollab AM Mobile Service Requirements

The requirements for the MiCollab AM Mobile Service are as follows:

**NOTE** The mobile clients are only compatible with the current and the two previous shipping versions of the mobile service.

### Site Requirements

- TCP/IP-based connectivity between the various server components involved

## Microsoft Internet Information Server (IIS) Requirements

- Microsoft IIS 7.0 or above
- PHP version 5.6 or 7.0 (SOAP, OpenSSL, and cURL must be selected during PHP installation)
- World Wide Web Publishing Server (World Wide Web Service) installed
- To ensure web security using SSL, a certificate purchased from a Certificate Authority (optional)
- Java with the path to the java.exe executable specified in the configuration via config.xml or in the admin page

## Linux-based Apache Web Server Requirements

**NOTE** Most current Linux server distributions include copies of Apache and PHP. However, because those distributions are not updated between releases, you may need to download, build, and install the required versions of Apache and PHP.

- Current server-class Linux distribution such as Fedora, Debian, or OpenSUSE Linux
- Apache Web Server 2.2.x
- PHP version 5.6 or 7.0 (SOAP, OpenSSL, and cURL must be selected during PHP installation)
- To ensure web security using SSL, a certificate purchased from a Certificate Authority (optional)
- Java with the path to the java.exe executable specified in the configuration via config.xml or in the admin page

## Minimum Requirements for VMware ESX/ESXi

When running MiCollab AM servers, applications, or services in a virtual environment, the following identify the minimum requirements for a given configuration:

- VMware ESX/ESXi version 5.1, 5.5 Update 2, or 6.0 Update 2.
- The number of CPU cores specified in the section Server Class Configuration in this document.
- The amount of RAM required per Virtual Machine is defined in the Server Class Configuration section of this document.
- The amount of RAM required per Virtual Machine on 64-bit Windows Server 2012 R2 installations as defined in the Server Class Configuration section of this document.

**NOTE** In cases where a virtual machine encounters heavy activity, additional memory is required.

**NOTE** See the *System Installation Guide* for more details on sizing the MiCollab AM virtual machines.

**NOTE** Technical Support may require you to isolate a specific Call Server virtual machine to a dedicated physical server for troubleshooting purposes.

## Minimum Live Reply for Lync Requirements

In order to run Live Reply for Lync, you must be using:

- Microsoft Lync 2010 or 2013 client
- Microsoft Skype for Business Client 2016
- Microsoft Windows 7, Windows 8/8.1 or Windows 10

## RightFax Support

MiCollab AM supports integration with the following versions of RightFax.

- OpenText RightFax 10.6
- OpenText RightFax 10.5
- OpenText RightFax 10.0

**NOTE** MiCollab AM supports all editions of RightFax except the Branch Office Server edition.

## Unified Messaging Third-Party Compatibility

The following table shows the third-party software versions supported.

Table 15. Supported Versions for Microsoft Exchange, Lotus Notes and Domino, and IMAP

Application	Version	Minimum Required Service Pack
Operating System (Workstation)	Windows 10	
	Windows 8/8.1	
	Windows 7	
Exchange Server <sup>9</sup>	2016	
	2013	
	2010	
	2007	SP1
Office 365	Exchange 2010, 2013 or 2016 based	
Gmail	All	
Outlook	2016 (32-bit and 64-bit) <sup>10</sup>	
	2013 (32-bit and 64-bit) <sup>10</sup>	
	2010 (32-bit and 64-bit)	
	2007 (32-bit)	SP1
Notes / Domino <sup>11</sup> and Notes Client	R9.0 (32 and 64 bit)	
	R8.5 (32 and 64 bit)	
	R8.0	SP1.2
GroupWise Server and Client	6.5.5 and above	
Mirapoint <sup>12</sup>	3.6 and above	

<sup>9</sup> MWI support for server-based UM requires that an English version of Exchange is running on an English version of Windows Server 2008 R1 with Service Pack 1 or Windows Server 2012 R2.

<sup>10</sup> Requires .NET version 4

<sup>11</sup> MWI support for server-based UM requires that an English version of Domino is running on an English version of Windows Server 2008 R1 with Service Pack 1 or Windows Server 2012 R2.

<sup>12</sup> Mirapoint E-mail Server is supported under University of Washington namespace configurations only.



# Capacities and Limitations

The following section lists capacities and limitations for the MiCollab AM of products.

## Single Server

The following are the capacity and limitations for a system running on a single server:

- Up to 300 users per system
  - All users have a Unified Messaging and Personal Assistant license
- Up to 16 ports
  - All ports include ASR and TTS resources and 1 language
  - All ports include SIP/RTP resources
- Up to 5 ASR and TTS languages
- 1 IP integration only

## MiCollab AM Single Server

The following are the capacity and limitations for a MiCollab AM system running on a single server:

- Up to 144 ports on a single server with no ASR resources and 120 ports on a single server using ASR on all ports
- Users per system:
  - 7,500 Local store
  - 3,750 Unified Messaging
  - 3,750 Personal Assistant
- Up to 96 ASR resources and 5 languages
- Up to 96 TTS resources and 5 languages
- Up to 3 integrations total, limit 3 SIP integrations or 1 non-SIP IP integration

## MiCollab AM Multi-Server

The following are the capacity and limitations for a MiCollab AM system running on multiple servers:

- Up to 20 Call Servers per system

- Up to 144 ports on a single Call Server with no ASR resources and 120 ports on a single Call Server using ASR on all ports
- Up to 752 total ports (without speech) and up to 500 total ports (with speech), distributed across all Call Servers in the system.

Example: 20 Call Servers with a varying number of ports on each one, but with no more than 752 ports total (without speech), and 500 ports total (with speech).

- Users per system:
  - 40,000 Local store
  - 20,000 Unified Messaging
  - 20,000 Personal Assistant
- Up to 96 ASR resources per Call Server / 500 ASR resources total per system
- Up to 96 TTS resources per Call Server / 500 TTS resources per system
- Up to 5 ASR and 5 TTS languages per system (same languages on all Call Servers)
- Up to 10 integrations total per system
  - Up to 3 integrations total per Call Server, limit 3 SIP integrations or 1 non-SIP IP integration per Call Server
  - Up to 10 DMG devices per Call Server

## Networking and Global User Administration

MiCollab AM supports the following networking capacities:

- Up to 75 MiCollab AM systems

**NOTE** When using Global User Administration, all of your MiCollab AM servers must be on the same MiCollab AM release. For example, if one of your MiCollab AM servers is on the 6.1 release, the other MiCollab AM servers must be on the 6.1 release as well in order for the Global User Administration feature to work.

- Up to 50,000 fully propagated subscriber mailboxes

## Message Waiting Indication for Unified Messaging

Table 16. Message Waiting Indication for UM

Feature	Capacity <sup>13</sup>
Message-waiting indicator (MWI) support for Microsoft Exchange 2007	Up to 1,000 MiCollab AM users per Exchange server platform, with an overall maximum of 20,000 users. <sup>14</sup>

Message-waiting indicator (MWI) support for Microsoft Exchange 2010 and later	Maximum of 20,000 users. Refer to Microsoft's best practices for the maximum number of mailboxes per Exchange Mailbox Store server.
MWI support for IBM Notes	Up to 5,000 MiCollab AM users

<sup>13</sup> If you need more capacity in any of these features, contact Mitel Sales Engineering to discuss a solution to meet your requirements.

<sup>14</sup> These capacities assume that one MiCollab AM server is integrated with each messaging server (Microsoft Exchange or IBM Domino) in the system. For the user capacities of systems involving disparate numbers of MiCollab AM servers and messaging servers, contact Mitel Sales Engineering.

# For More Information

The following resources are available:

## Documentation Resources

The Mitel MiCollab AM Telephony Server DVD includes a Documentation folder containing all MiCollab AM technical documents that pertain to this release. Additional documentation resources are available on the [connect.mitel.com/connect](https://connect.mitel.com/connect) website for customers with Premium Support.

## Other Resources

For pre-sales technical support, contact Mitel.