MiCollab General Information Guide

- MiVoice Business
- MiVoice Office 250

RELEASE 8.0 SP1
DECEMBER 2017
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Chapter 1

INTRODUCTION
ABOUT THIS DOCUMENT

PURPOSE

This guide provides an overview of the Mitel® MiCollab solution. It describes the MiCollab product and provides details about the supported applications, platforms, and deployment configurations.

AUDIENCE

This guide is intended for the following audience:

• Customers
• Solution Providers
• Sales Executives
• Sales Engineers

ABOUT MICOLLAB DOCUMENTATION

The documentation set consists of guides in PDF format and online help systems that you can view using an Internet browser:

The following documents are the main source of information for the MiCollab platform:

• MiCollab Engineering Guidelines provide information about the characteristics, requirements, configurations, capacities, and performance of the MiCollab solution.

• MiCollab Installation Guide provides installation instructions for the MiCollab software and for the supported applications.

• MiCollab Platform Integration Guide describes how to deploy MiCollab with Mitel communication platforms.

• Virtual Appliance Deployment Solutions Guide provides engineering guidelines for deploying Mitel Virtual Appliances and applications in a VMware virtual infrastructure.

• MiCollab Administrator Online Help Systems provide administration and programming procedures for the MiCollab applications.

Additional guides and help systems are available that provide instructions on how to configure and use the individual Mitel applications that are supported on MiCollab. The complete documentation set is listed in the MiCollab Installation and Maintenance guide.

To access the MiCollab product documentation set:

1. Log on to Mitel Connect.
2. Click Mitel Online.
3. Click Support and then click Product Documentation.
4. Click Applications & Solutions and then click MiCollab.
ABOUT MICOLLAB

MiCollab unifies Mitel applications into an easy-to-use, cost effective communications solution for small, medium, and enterprise sized businesses. MiCollab provides co-residency of applications that support the following business needs:

- Mobility
- Collaboration
- Casual or Work-group Customer Interaction
- Communications Usage Reporting
- Voice Messaging
- Speech Auto Attendant
- Unified Messaging

MiCollab

Users have single point of access to all their Mitel applications through the MiCollab End User portal, a web-based interface. The MiCollab End User portal allows users to

- set personal settings, such as passwords and phone numbers.
- configure and maintain their communication applications, such as voice mail and MiCollab Audio, Web, and Video (AWV) Conferencing.

Installation and management costs are minimized because multiple communication applications are consolidated on a single industry-standard server. MiCollab can also be installed as a virtual application running in a VMware or Hyper-V environment.

IMPROVE YOUR BUSINESS COMMUNICATIONS

The MiCollab applications are designed to simplify and improve communication between employees, workgroups, and customers:

- MiTeam is a collaboration tool that enables teams to create work spaces in their MiCollab clients and share content, ideas, and solutions. Users can store files, hold chats, create to-do lists, and set up online meet sessions.

- MiCollab Client converges the call control capabilities of Mitel communications platforms with contact management, Dynamic Status, and collaboration applications, to simplify and enhance real-time communications.

- MiCollab Audio, Web, and Video (AWV) Conferencing allows your employees to collaborate in real time, give presentations, and conduct interactive online meetings

- MiVoice Border Gateway (MBG) provides the following services:
  - Teleworker service to connect remote employees with the main office while minimizing communication costs

Note: Referred MBG Teleworker is for MiCollab Clients.
- Secure Recording Connector (SRC) service allows you to record system calls using third-party call recording equipment

- MiVoice Skype for Business provides seamless integration with Microsoft Skype clients through the Mitel Skype Plugin. Mitel Skype plug-in is an application that integrates with Microsoft Skype Client and allows Skype users to use Mitel telephony functionality through its feature rich MiCollab Client infrastructure.

- NuPoint Unified Messaging™ provides extensive voice mail and FAX messaging capabilities.

- Speech Auto Attendant provides a speech-enabled auto attendant with Microsoft Office Communications Server presence.

**REDUCE COSTS AND IMPROVE EFFICIENCIES**

Cost reduction while improving efficiency is a challenge for most businesses. The MiCollab solution is designed to help you meet this challenge. Consolidating Mitel applications on a single MiCollab platform provides the following benefits:

- decreases costs by reducing the number of application servers (all applications can be installed on a single server platform or as a single virtual machine in a cloud environment)
- reduces initial installation time (single install)
- simplifies ongoing administration through a single web-base administrator portal
- provides users with single-point of access to all their application settings through the Mi-Collab End User portal

MiCollab deployments are supported for

- small business sites to up to 500 users
- mid-market business sites up to 1500 users
- enterprise single or multi-application sites up to 5000 users
- multi-MiCollab server sites up to 40,000 users (MiVoice Business)

**Note:** System capacities and performance levels are dependent upon the type of MiCollab platform, the number of users, and the installed applications. Refer to MiCollab System Capacities, Performance and Constraints in the MiCollab Engineering Guidelines for details.

**IMPROVE EMPLOYEE PRODUCTIVITY**

The MiCollab applications provide employees with the following features and capabilities:

- receive all their calls at a single phone number and voice mail box regardless of their location with MiCollab Client.
- view emails, listen to voice mails, direct FAXs, from any location with Unified Messaging
- share presentations and conduct interactive online meetings with Mitel Conferencing,
• place calls by speaking a person’s name, department name, or telephone number with Speech Auto Attendant.
• extend office communications to their home office using the Teleworker service of MBG.

USER WEB PORTAL

Users can access their MiCollab End User portal web page using a single URL, user ID, and password from a PC on the corporate LAN or from a PC on the internet. Secure connection for users on the internet is supported through the MBG web proxy on an MBG server that is located in the DMZ. From their MiCollab End User portal, users can manage all their application settings and access application features. Because all the user’s applications are unified within a single web portal interface, the user experience is simplified and training costs reduced.

When MiCollab is used in conjunction with an MiVoice Business platform, user updates to phone parameters, such as Passcode, can be automatically updated in the MiVoice Business programming database via single-point provisioning (see “Flow through Provisioning” on page 41).

Figure 1: MiCollab End User portal General Settings

Users can configure general application settings such as
• configure their email address.
• set the language of their telephone user interfaces (TUI) to one of the available supported languages. From the administrator web portal, the administrator can also apply a system preferred TUI language for all users.
• select the default page that the MiCollab End User portal will display after log in.
• change their portal login password. The administrator sets the password strength at Weak, Medium, or Strong for all users.
NUPOINT UNIFIED MESSAGING

The NuPoint Unified Messaging component allows users to configure and manage their Web View and Call Director settings.

WEB VIEW

The NuPoint Unified Messaging Web View allows users to access and manage voice, fax, and recorded messages from their e-mail client or web browser. It allows users to

- manage personal Web View settings
- record mailbox greetings
- create and manage personal distribution lists
- play a voice or Record-A-Call (RAC) message over PC speakers or over the phone
- record a phone conversation
- read, print, and send faxes
- reply to a voice, RAC, or fax message with a text message
- forward a message
- call back the message sender from a mobile device.

CALL DIRECTOR

Call Director allows users to create an automated attendant application (known as a call flow) to handle their calls when they can't answer them personally.

A call flow is a collection of call-processing actions programmed by the call flow owner to control how an incoming call is handled. Call flow owners can be either the end user of the phone, or the system administrator. The user programs personal call flows, which are associated with their own voice mailboxes. Users can create call flows that direct NuPoint Unified Messaging to:

- play a message
- perform a call transfer (blind, supervised, or screened) to an extension or external phone
- forward a call to a specified voice mailbox
- send a page or a text message
- send the caller to the dial-by-name application, or
- hang up.

MICOLLAB AWV

MiCollab AWV users can schedule and manage conferences through the MiCollab End User portal. From the interface, users can manage three types of conferences: Audio and Web, Audio only, and Web only.

Audio conferences allow users to

- upload documents to present to callers during a conference call
• mute, drop, and add participants, and place individual participants on hold while the call is in progress

When hosting a Web conference, users can
• upload documents, transfer files, record the conference, chat online, and broadcast videos
• share applications or desktop and use white board features.

TYPES OF USERS

MiCollab supports several types of users

USERS WITH MiCOSLAB SERVICES

These are users who are assigned MiCollab services.

MiVoice Business: Flow Through Provisioning is the recommended method of provisioning users and services for MiVoice Business platforms. You can also provision users using the Bulk User Provisioning tool or Integrated Directory Services.

CORPORATE CONTACTS WITH MONITORING

Some users may require presence monitoring but not availability or any additional MiCollab services. Typically corporate contacts are created using the UCC Basic or Teamwork Mode role. For this user class, external numbers are not sent to MiCollab Client. End users can provision them in their MiCollab Mobile or Desktop Client.

CORPORATE CONTACTS WITHOUT MONITORING

Some Mitel communications platforms have a greater user capacity than a single MiCollab server. To support the MiCollab Client "Click-to-Call" feature to the other non-MiCollab users, the IDS connector from the MiCollab obtains the user accounts from the communications platform directory and adds them to the MiCollab Client directory as corporate contacts without monitoring.
CONSOLIDATED CONFIGURATION AND ADMINISTRATION

Administrators can enter the system configuration and administration settings for all the applications in a single web-based interface. Common data elements are shared among the applications, reducing both the need for duplicate entry and the possibility for error.

The Users and Services Provisioning application is a single, easy-to-use interface that administrators use to add, edit, or delete user data and to modify users’ application settings. This application significantly reduces administration costs.

The system can automatically send Service e-mails to users that contain the user’s communications settings, such as login ID, password, primary e-mail address, phone type and number, and service information. You can send the Service e-mail with a default or custom greeting message. With the exception of the custom greeting, the information can be sent in two languages.

Flow-Through provisioning is supported for MiVoice Business platforms, reducing data entry requirements (see “Flow through Provisioning” on page 41 for details).

![Figure 2: Users and Services Provisioning](image)
MIVOICE OFFICE 250

Initial user provisioning can be performed by exporting user entries from the communications platform and then importing them into MiCollab. Afterwards, all changes, including additions and deletions, must be done manually on both MiCollab and the communications platform.

**Note:** User are deleted manually.

**Note:** Imported users cannot be modified or removed through another import.
SYSTEM STRUCTURE

The MiCollab system is comprised of the Mitel Standard Linux (MSL) operating system and a combination of the following software applications:

- **Users and Services**: solution software that provides seamless interaction between co-resident applications to provide consolidated administrator and MiCollab End User portals. It allows the administrator to manage users’ phone services and applications.

- **MiCollab Audio Web and Video Conferencing**: provides flexible, cost-effective audio and web collaboration tools

- **MiVoice Border Gateway Application**: Teleworker connects a remote office user to the corporate voice network to provide full access to voice mail, collaboration tools and all the other features of the office phone system.

- **NuPoint Web Console**: Mitel’s powerful call routing, voice, and unified messaging system.

- **Speech Auto Attendant**: speech-enabled auto attendant with Microsoft Office Communications Server presence.

- **MiCollab Client Service**: supports communications client that integrates presence and availability, secure instant messaging, audio conferencing and web and video collaboration with the call control capabilities of Mitel Communications Platforms. MiCollab Client also integrates with leading business productivity tools like Google®, Microsoft® Exchange/Outlook®, and Office as well as IBM® Lotus Notes®.

- **MiCollab Client Deployment**: supports the simplified deployment of MiCollab for Mobile. End users are no longer required to enter configuration settings such as server and SIP credentials. Administrators configure these settings and MiCollab for Mobile clients are deployed Over the Air (OTA). The administrator portal enables administrators to:
  - deploy large groups
  - leverage profiles
  - download multiple files to the clients
  - update clients.

- **Vidyo**: a video conferencing solution that provides user with high definition, low-latency video to mobile phones, desktops, and meeting rooms.
Figure 3 illustrates how the MiCollab system is structured:

• User and services provisioning is supported through the Bulk User Provisioning tool. This tool allows administrators to import a comma separated value (CSV) file or LDAP Data Interchange Format (LDIF) file of entries into the MiCollab User and Services database.

• The Administrator portal allows the administrator to access the server manager console. This web based administration interface allows the administrator to provision the user data and services, perform server administration and configuration, and set security parameters.

• The MiCollab End User portal allows users to
  - control their general settings: password, TUI personal identification number, and preferred language
  - access their application settings: voicemail, FAX, call director, and conferencing.

• Users access application features and functions through the application TUIs and end user interfaces.

• The MiCollab server is the repository for the application databases.

• The suite applications function separately and are supported in any combination.

**Note:** Not all applications are supported on MiVoice Office 250 communication platform.
The following table provides a glossary of the terms used in the MiCollab documentation suite.

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<td>3300 ICP</td>
<td>3300 IP Communications Platform</td>
<td>Mitel IP communications platform supporting 30 to 60,000 users. The 3300 ICP is the hardware platform that runs the MiVoice Business (MiVoice Business) software.</td>
</tr>
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<td>AMC</td>
<td>Application Management Center</td>
<td>A web-based service that handles licensing of Mitel products</td>
</tr>
<tr>
<td>ARID</td>
<td>Application Record ID</td>
<td>An identification number obtained from the Mitel Application Management Center (AMC). Used to license software on a specific Mitel product.</td>
</tr>
<tr>
<td>Authorized Partner</td>
<td></td>
<td>Dealers, resellers, and solutions providers who are authorized by Mitel to sell and service Mitel products and solutions.</td>
</tr>
<tr>
<td>BUP</td>
<td>Bulk User Provisioning</td>
<td>A software tool within the USP application that allows you to bulk import user data from a CSV or LDIF file; use Quick Add to provision a single user; program a range of fields using Auto-Fill; apply roles to multiple users; and resolve detained and failed IDS updates.</td>
</tr>
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<td>CA</td>
<td>Certificate Authority</td>
<td>To securely authenticate connections, applications may request a security certificate signed by the MSL server using a Mitel Certificate Authority (CA). You can manage Certificate Signing Requests (CSRs) and issued certificates using the Certificate Management panel in the MiCollab Server Manager.</td>
</tr>
<tr>
<td>CESID</td>
<td>Caller Emergency Service Identification.</td>
<td>A number that uniquely identifies the device that dialed 911. The CESID is fed into the automatic location identification (ALI) database at the Public Safety Answering Point (PSAP) so that emergency services can be dispatched to the correct location.</td>
</tr>
<tr>
<td>Cluster</td>
<td></td>
<td>Refers to a grouping of elements (for example, a network of MiVoice Business systems) that share common dialing plans, or common directory information, such as Remote Directory Numbers with Telephone Directory.</td>
</tr>
<tr>
<td>COR</td>
<td>Class of Restriction</td>
<td>A programming feature of the MiVoice Business that gathers Class of Restriction numbers into groups. The COR Groups define which Classes of Restriction cannot access an outgoing trunk route. COR group numbers are assigned to users to restrict their outgoing call privileges.</td>
</tr>
<tr>
<td>COS</td>
<td>Class of Service</td>
<td>A programming feature of the MiVoice Business that specifies the optional features associated with that COS. Classes of Service, identified by Class of Service numbers, are assigned to MiVoice extensions and trunks.</td>
</tr>
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</table>
Detained Queue

The **Detained Queue** in the **Bulk User Provisioning** tool lists the detained and failed Integrated Directory Services operations:

- Detained IDS operations are operations that have been performed on the directory server that have not been applied to the USP database yet.
- Failed IDS operations are directory server updates that the Mitel Applications Suite system could not apply to the USP database.

From the Detained Queue, you can save or delete IDS operations that have been detained.

**DID**

**Direct Inward Dial**

Also known as DDI (Direct Dialing Inwards). Allows an external caller to dial an internal extension without having to go through an attendant or operator.

**Directory Server**

A directory server is not simply a form of database, but a specialized server for directories. A directory can be distinguished from a general-purpose database by the usage pattern. A directory contains information that is often searched but rarely modified. Host names or user names, for example, are assigned once and then looked up thousands of times. Directory servers are tuned for this type of usage, whereas relational databases are much more geared toward maintaining data that is constantly changing. Another difference is that relational databases store information in rows of tables, whereas in directory server they use object-oriented hierarchies of entries.

**DLM**

**Designated License Manager**

The Designated License Manager (DLM) connects with an Application Group on the AMC in order to obtain licenses which may then be shared among the group members. The DLM also tracks license usage and violations for the group, and provides statistics to the AMC. The DLM requires a Group Application Record ID (GARID) with Enterprise License Sharing enabled.

**DMZ**

**Demilitarized Zone**

A computer host or small network inserted as a “neutral zone” between a company’s private network and the outside public network. It prevents outside users from getting direct access to a server that has company data.

**ESX Hypervisor**

Main Hypervisor from VMware. Phased out in favor of ESXi in Release 4.1.

**ESXi Hypervisor**

The latest variant of Hypervisor. It has a smaller footprint because it does not require or include the ESX Service Console.

**Flow Through Provisioning**

A MiCollab feature that allows an administrator to perform user and service provisioning for a cluster of MiVoice Business elements from a single administration interface (that being the MiCollab Users and Services application).

Flow Through Provisioning synchronizes updates made between the MiCollab and MiVoice system databases using System Data Synchronization (SDS). The following data is synchronized:

- user and services data
- Programmable Ring Groups (PRGs)
- Multi-Device User Groups
- roles, and
- templates.
Hot Desk

Hot Desking allows a number of users to share one or more hot desk sets. Anyone with a Hot Desk DN and User PIN can log to log in to an available hot desk-enabled telephone. Once logged in, the user can

- Receive incoming calls at the set
- Place outgoing calls
- Retrieve voice messages
- Program and use feature keys

Hot Desking is ideal for telecommuters, sales agents, and other employees who spend only part of their time in the office. With Hot Desking, a company does not have to provide a dedicated phone for each of these employees. Instead, the company can make a pool of shared phones available on a first-come, first-served basis.

Hunt Groups

A hunt group is a group of stations to which incoming calls are directed by dialing a master number. Two types of hunting are provided by the system, circular and terminal:

- Circular hunting starts at the extension after the last extension in the hunt group to which a call was completed (the extension rung), and hunts overall extensions in the hunt group in the sequence programmed. Hunting stops at the first idle extension found.
- Terminal hunting starts at the first extension in the hunt group and terminates at the first idle extension found. Hunting takes place in the order in which the extensions were programmed into the hunt group.

Hypervisor

A platform that allows multiple operating systems to run on a host computer at the same time.

ICP

Integrated Communications Platform

IDS

Integrated Directory Services

Synchronizes user and service data between a corporate directory server and the MiCollab-IDS using the Lightweight Directory Access Protocol (LDAP). Once the data is synchronized, it is distributed from the MiCollab-IDS to the various member elements in the System Data Synchronization (SDS) network or cluster.

LAN Mode

Local Area Network Mode

A deployment model for the MiCollab (or Mitel Standard Linux) server. When MiCollab is deployed in server-only mode, it provides the network with services, but not the routing and security functions associated with the role of "gateway". The LAN mode configuration is typically used for networks that are already behind a separate firewall. In other words, a separate firewall fulfills the role of gateway, providing routing and network security. (Also known as Server-only mode).

LDAP

Lightweight Directory Protocol

Lightweight Directory Access Protocol is a software protocol for enabling anyone to locate organizations, individuals, and other resources such as files and devices in a network. LDAP is a "lightweight" (smaller amount of code) version of DAP (Directory Access Protocol), which is part of X.500, a standard for directory services in a network.

MBG

MiVoice Border Gateway

Formerly know as the Multi-Protocol Border Gateway. MBG software supports teleworking and call recording services. The MBG server supports the Teleworker service in the DMZ.
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<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>MCS</td>
<td>Mitel Communications Suite</td>
<td>This communications platform consists of MiVoice Business call processing software running on an SUN Microsystems server. MiCollab is supported for the MCS platform.</td>
</tr>
<tr>
<td>MiCollab</td>
<td></td>
<td>Mitel software solution that enables applications to be co-resident on one server.</td>
</tr>
<tr>
<td>MiCollab Audio, Web, and Video (AWV) Conferencing</td>
<td></td>
<td>Mitel software solution that provides conferencing and collaboration services using a Web-based browser. In previous MiCollab releases, the product name for this application was Mitel Conferencing Advanced.</td>
</tr>
<tr>
<td>MiCollab Client</td>
<td></td>
<td>Software solution that provides clients (MiCollab Client deskphone users or MiCollab Client softphone users) with a single access point for communication and collaboration needs. It converges the call control capabilities of Mitel communications platforms with contact management, Dynamic Status, and collaboration applications, to simplify and enhance real-time communications</td>
</tr>
<tr>
<td>MiCollab Client Integration Wizard</td>
<td></td>
<td>A software application (wizard) that integrates MiCollab Client user and phone data with the MiCollab USP data (see MiCollab Client Integrated Mode). If you are installing a new MiCollab system into an existing site that consists of one or more MiVoice Business platforms, you can use this wizard to update the MiCollab database with the user and phone data from the MiVoice Business.</td>
</tr>
<tr>
<td>MiCollab Client Integrated Mode</td>
<td></td>
<td>In this mode, the MiCollab system keeps the Users and Services database and MiCollab Client database synchronized so they function like a single database on the MiCollab server. This mode is only supported for MiCollab with MiVoice Business systems. It allows you to provision MiCollab Client services from the MiCollab Users and Services application and supports Single Point of User Provisioning of the MiCollab Client services on the MiVoice Business platform(s). This is the recommended mode for sites that meet the integration requirements.</td>
</tr>
<tr>
<td>MiCollab Client Co-located Mode</td>
<td></td>
<td>In this mode, the Users and Services data and MiCollab Client data are contained in separate, independent databases on the MiCollab server. This mode is supported for sites with either MiVoice Business or MiVoice Office platforms. With this mode, you must provision MiCollab Client services separately from the MiCollab Client Server Application interface.</td>
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<tr>
<td>MiCollab Client Integration Wizard</td>
<td></td>
<td>Migrates the MiCollab Client database in a MiCollab system from co-located mode to integrated mode:</td>
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<tr>
<td>MiCollab Server</td>
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<td>MiCollab software installed in conjunction with the MSL operating system on a server platform.</td>
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<tr>
<td>MiCollab Virtual Appliance</td>
<td></td>
<td>MiCollab system deployed as a virtual appliance (vApp) running in a VMware vSphere or vCloud environment.</td>
</tr>
<tr>
<td>MICW</td>
<td>Mitel Integrated Configuration Wizard</td>
<td>A standalone software application that performs initial system setup of the MiCollab server and the MiVoice Business software.</td>
</tr>
<tr>
<td>TERM</td>
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<td>MiVoice for Skype for Business</td>
<td>MiVoice for Skype for Business</td>
<td>An application that integrates with the Microsoft Skype for Business client and allows Skype users to use Mitel telephony functionality through its feature rich MiCollab Client infrastructure.</td>
</tr>
<tr>
<td>MiVoice Business</td>
<td>MiVoice Business</td>
<td>MiVoice Business (MiVoice Business) is the brand name of the call-processing software that runs on hardware platforms, such as 3300 ICP controllers.</td>
</tr>
<tr>
<td>MiVoice Business-ISS</td>
<td>MiVoice Business for Industry Standard Servers</td>
<td>This communications platform consists of MiVoice Business call processing software running on an industry standard platform. MiCollab is supported for the MiVoice Business-ISS platform.</td>
</tr>
<tr>
<td>MiVoice Office 250</td>
<td>MiVoice Office 250 Communications Platform</td>
<td>Mitel IP communications platform (formerly Inter-Tel 5000 Network Communications Solutions) supporting up to 250 users.</td>
</tr>
<tr>
<td>MOL</td>
<td>Mitel Online</td>
<td>Mitel’s web portal for authorized dealers and technicians.</td>
</tr>
<tr>
<td>MSL</td>
<td>Mitel Standard Linux</td>
<td>The operating system that supports MiCollab software; along with Mitel SDK components, it comprises a base for all MiCollab software.</td>
</tr>
<tr>
<td>MWI</td>
<td>Message Waiting Indication</td>
<td>Line keys on multi-line phones can be programmed as message waiting indicators which are associated with the mailboxes of other phones. The indicator flashes when a message is waiting in the associated mailbox.</td>
</tr>
<tr>
<td>Network Edge Mode</td>
<td></td>
<td>A type of deployment for the MiCollab (or Mitel Standard Linux) server. In this deployment configuration, MiCollab manages the connection to the Internet by routing Internet data packets to and from the network (which allows all the computers on the network to share a single Internet connection) and by providing security for the network, minimizing the risk of intrusions. When one of the computers on the local network contacts the Internet, MiCollab not only routes that connection, but seamlessly interposes itself into the communication. This prevents a direct connection from being established between an external computer on the Internet and a computer on the local network, which significantly reduces the risk of intrusion. (Also known as Server-gateway mode).</td>
</tr>
<tr>
<td>NP-UM</td>
<td>NuPoint Unified Messaging</td>
<td>Server-based voice processing system that provides call processing along with voice messaging and paging support.</td>
</tr>
<tr>
<td>Oria</td>
<td></td>
<td>A system management and customer self-service application. It allows a service provider to manage and deploy hosted voice services to their customers. Oria also allows a service provider to offer each of their customers an administration and self-service portal to make site specific moves, adds, changes, and deletes.</td>
</tr>
<tr>
<td>OVA</td>
<td>Open virtual appliance or application</td>
<td>A packaging format for virtual machines that allows virtual machine templates to be distributed, customized, and instantiated on any OVA supporting VMM/hypervisor.</td>
</tr>
</tbody>
</table>
### OVF

**Open Virtualization Format**

A distribution format for virtual appliances that uses existing packaging tools to combine one or more virtual machines with a standards-based XML wrapper. OVF gives the virtualization platform a portable package containing all required installation and configuration parameters for virtual machines. This format allows any virtualization platform that implements the standard to correctly install and run virtual machines.

### PRI

**Primary Rate Interface**

A standardized telecommunications service level within the Integrated Services Digital Network (ISDN) specification for carrying multiple DS0 voice and data transmissions between a network and a user. PRI is the standard for providing telecommunication services to offices. It is based on the T-carrier (T1) line in the US and Canada, and the E-carrier (E1) line in Europe. The T1 line consists of 24 channels, while an E1 has 32.

### Reach Through

MiCollab Reach Through provides you with the ability to access MiVoice Business System Administration tool (ESM) forms from links or drop-down menus within specific USP pages. Because you have logged into the MiCollab server manager, you are allowed direct access and do not have to log in separately to the MiVoice Business.

This functionality reduces that amount of time it takes to perform programming tasks, such as modifying a user's MiVoice Business phone and group settings, that require configuration on the MiVoice Business.

### Reconcile Wizard

The Reconcile Wizard pairs user entries in the MiCollab database with matching user entries in the MiVoice Business databases in a network that is being configured to support Flow Through Provisioning. (See "Flow Through Provisioning" on page 14.). It also identifies any user data conflicts between the databases so you can manually resolve them.

### Role

A role defines the task, position, or responsibilities for a type of user within the organization. Roles are associated with user templates that define the common phone and application service settings for the roles.

### SAA

**Speech Auto Attendant**

Speech-enabled software application that allows users to place calls quickly and efficiently by speaking a person's name, a department name, or telephone number.

### SAS

**Suite Applications Services**

This application provides single-point user services provisioning and centralized management of shared system resources for all the MiCollab applications. This application also provides the My Unified Communications web portal.

### SDS

**System Data Synchronization**

An MCD feature that shares system programming data among a network or cluster of elements (MiCollab and MiVoice Business systems) and synchronizes the system data of those elements with the data of a master element. This application reduces the amount of time required to maintain consistent data across the elements. SDS also allows you to share user and device data between a primary and secondary controller.
Server Console
A text-based control panel built into the Mitel Standard Linux operating system that technicians use to perform maintenance tasks such as
- install the MiCollab software
- configure network parameters
- perform upgrades and software updates
- upgrade application suite licensing
- perform backups.

Server-gateway mode
See Network Edge mode.

Server Manager
A web-based control panel, also called the "server manager", that administrators use to
- configure and administer the MAS applications
- perform server administration tasks, such as view logs, display system information, assign system users, and perform backups
- configure network and server security settings
- set system-wide parameters, such as system language and password strength.

Server-only mode
See LAN mode.

SIP
Session Internet Protocol
IP is an ASCII-character-based signaling protocol designed for real-time transmission using Voice over IP (VoIP). The appeal of SIP is the promise of interoperability of telephones from propriety PBXs. SIP extends the foundation of open-standards from the Internet to messaging, enabling disparate computers, phones, televisions and software to communicate. SIP is a streamlined protocol, developed specifically for IP telephony. It is smaller and more efficient than H.323. SIP takes advantage of existing protocols to handle certain parts of the process. For example, Media Gateway Control Protocol (MGCP) is used by SIP to establish a gateway to connect to the PSTN system. SIP operates independently of the underlying network transport protocol and is indifferent to media. Instead, it defines how one or more participant's end devices can create, modify and terminate a connection whether the content is voice, video, data or Web-based. Using SIP, programmers can add new fragments of information to messages without compromising connections.

SMDR
Station Message Detail Recording
Records and prints out the details of incoming and outgoing trunk calls. Such details include the numbers of all parties involved in the call, the time and duration of each call, account codes and other pertinent details.

Speech AA
Speech Auto Attendant
A speech-enabled application that allows users to place calls to people quickly and efficiently by speaking their names. In addition to placing calls by name, users can say a department name or telephone number. A tutorial introduces users to the system features, and voice-based help is available to answer questions. The SAA feature uses an automated attendant to route incoming calls based on spoken commands. Typically, you say the name of the person you want to speak to and the system transfers your call to the requested party.
<table>
<thead>
<tr>
<th>TERM</th>
<th>NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPP</td>
<td>Single Point Provisioning</td>
<td>A pre-MiCollab Release 7.0 feature that allowed an administrator to perform user and service provisioning for a MiVoice Business platform from a single interface -- the MiCollab Users and Services application. SPP uses MiMXL to apply updates to the MiVoice Platform. Updates made on the MiVoice Office are not distributed back to the MiCollab. SPP is not supported in MiCollab Release 7.0 or later; Flow Through Provisioning is supported instead. (See “Flow Through Provisioning” on page 14.)</td>
</tr>
<tr>
<td>SRC</td>
<td>Secure Recording Connector</td>
<td>Formerly a standalone call recording product, SRC is now incorporated in the MBG software.</td>
</tr>
<tr>
<td>STT</td>
<td>Speech to Text</td>
<td>An optional, licensed feature of NuPoint UM that converts voice mail messages to text, allowing users to discreetly access voice messages in a text format.</td>
</tr>
<tr>
<td>SWAS</td>
<td>Software Assurance</td>
<td>A Mitel subscription-based service that provides customers with access to new software releases, software upgrades, and product support services for all users (ports) on a given Application Record ID (ARID).</td>
</tr>
<tr>
<td>Template</td>
<td></td>
<td>A User and Services template defines the user information, phone services, and applications for a type of user. You can use templates to provision users quickly. User and Services templates are comprised of sub-sections that define each service.</td>
</tr>
<tr>
<td>TW</td>
<td>Teleworker</td>
<td>Software that connects a remote office to the corporate voice network to provide full access to voice mail, conferencing and all the other features of the office phone system.</td>
</tr>
<tr>
<td>TSL</td>
<td>Transport Layer Security</td>
<td>A communication security protocol used for LDAP connections. TLS is a successor to SSL (Secure Sockets Layer).</td>
</tr>
<tr>
<td>UCC</td>
<td>Unified Communications and Collaboration Licensing</td>
<td>Mitel’s licensing model. The platform and application user licenses are bundled together to meet the needs of different user levels (for example, Entry, Standard, and Premium). Instead of ordering an MiVoice Business user license and multiple individual applications licenses for each MiCollab user, you order a single UCC license per user.</td>
</tr>
<tr>
<td>MiCollab End User portal</td>
<td>A MiCollab web interface (formerly known as My Unified Communications portal) that provides a common portal for users to update/enter user-configurable information for all applications.</td>
<td></td>
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<tr>
<td>USP</td>
<td>Users and Services</td>
<td>Refers to the interface used to provision users and services on MiCollab.</td>
</tr>
<tr>
<td>VA</td>
<td>Virtual Appliance</td>
<td>Defined by VMware as: “a pre-built software solution, comprised of one or more virtual machines that is packaged, maintained, updated, and managed as a unit.”</td>
</tr>
<tr>
<td>vCenter</td>
<td>VMware’s management system</td>
<td>A management system that runs on top of a Windows server to organize a collection of VMware ESXi hosts and offer advanced VMware feature and solutions (such as clustering and Site Recovery Manager).</td>
</tr>
</tbody>
</table>
### Introduction

vCloud: VMware's administration interface

An administration layer on top of VMware vSphere, that uses vSphere resources, and provides users with an abstracted view of vSphere resources. vCloud Director uses VMware vShield Edge to create secured organization networks and other networking constructs; this is largely invisible to the user.

Vidyo: A video conferencing solution that provides users with high definition, low-latency video to mobile phones, desktops, and meeting rooms. Refer to the Vidyo Product Documentation and the Mitel Vidyo Quick Reference Administrator Guide for details.

VM: Virtual Machine

Virtual machines allow the sharing of the underlying physical machine resources between different virtual machines, each running its own operating system. The software layer providing the virtualization is called a hypervisor. A hypervisor can run on bare hardware (Type 1 or native VM) or on top of an operating system (Type 2 or hosted VM).

vMiCollab: Virtual MiCollab

MiCollab running as a virtual application (vApp) within the VMware vSphere environment.

vSphere: VMware’s Cloud Operating System

Cloud computing is Internet-based computing. VMware’s Cloud Operating system provides software resources and information to computers and other devices on-demand over the Internet.

vSphere Standalone: VMware vSphere deployed as a standalone ESX/ESXi host.

vSphere Managed: VMware vSphere deployed as a vCenter Server “managed” environment with ESX/ESXi hosts.

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Chapter 2

SERVICES AND APPLICATIONS
INTRODUCTION

MiCollab supports the following services and applications:

- MiCollab Team (MiTeam)
- MiCollab Client
- MiCollab Audio, Web and Video Conferencing
- MiVoice Border Gateway
- NuPoint Unified Messaging
- Speech Auto Attendant
- Resiliency
- Integrated Directory Services

MICOLLAB TEAM (MITEAM)

MiTeam is a cloud-based mobile first collaboration tool that allows teams to work together in real time no matter where they are. It is integrated into the iOS and Android native mobile clients and launched from the MiCollab Client for Mobile left tab.

MiTeam includes the following user features:

- Create collaboration channels (streams)
- Hold chat sessions with associated annotation features, pages, to-do lists
- Participate in real-time meetings hosted through AWV technology
- Invite participants to streams as guests.

SUPPORTED COMMUNICATION PLATFORMS

MiTeam is supported for single and multiple MiCollab server deployments on the following Mitel communication platforms:

- MiVoice Business
- MiVoice MX-ONE
- MiVoice 5000
- MiVoice Office 400

MiTeam is only supported in MiCollab Client Integrated Mode. It is not supported for MiCollab Client Co-located mode or on MiCollab Client stand-alone systems.

SUPPORTED CLIENTS

MiTeam is supported with the following MiCollab clients:
• MiCollab for PC Client for Windows (Windows 7 and 10 only)
• MiCollab Web client for PCs (Windows/MAC only)
• MiCollab for Mobile clients (iOS/Android only).

The following minimum operating systems are required:
• Phone (4s +)/IOS 9+ (not supported on iPad or iPod)
• Android Phone 5.0 +

MiTeam is not supported on the following clients:
• MiCollab Desktop clients
• Legacy web clients
• Blackberry clients
• Windows Phone clients.

MICOLLAB CLIENT

This application provides a single access point for all your business communication and collaboration needs. It converges the call control capabilities of Mitel communications platforms with contact management, Dynamic Status, and collaboration applications, to simplify and enhance real-time communications. It gives you unprecedented control over your communications and allows real-time access to everyone in the organization, on or off the premises, with user and phone presence information that makes every phone call or instant message (IM) count. Employees can find, communicate, and collaborate with others quickly, simply, and in the moment.

MiCollab Client is a solution that meets the needs of your user communities. It delivers increased efficiency and productivity, reduced costs, enhanced responsiveness, and streamlined business operations.

SOFTPHONE, WEB PORTAL, AND MOBILE SUPPORT

You can access features from the following interfaces:
• MiCollab Desktop Client
• MiCollab MAC Desktop Client
• MiCollab Web Client
• MiCollab WebRTC Client
• MiCollab for Mobile for BlackBerry®, Android®, iPhone™, and Windows Client
• MiVoice for Skype® for Business

INTEGRATED APPLICATIONS

The following Mitel applications are accessible from the clients:
- **MiTeam**: Provides users with the ability to create collaboration spaces and share information.

- **MiCollab Audio, Web and Video Conferencing**: Provides access to collaboration features such as real-time audio, video, and Web conferencing, annotation, desktop and application sharing, and file transfer from the MiCollab Desktop Client.

- **MiCollab Unified Messaging™ (UM)**: Provides access to voice mail and FAX messages from the MiCollab Client interfaces.

- **MiVoice Border Gateway and Remote Proxy**: Provides a secure communications path for remote MiCollab Client users to the MiCollab Client Service.

### FEATURES AND FUNCTIONALITY

- **Simplified MiCollab for Mobile deployment**: MiCollab for Mobile and MiCollab MAC Desktop client deployment has been simplified. This solution is supported in integrated and co-located MiCollab Client deployments. End users are no longer required to enter configuration settings such as server and SIP credentials. Administrators configure these settings and MiCollab for Mobile clients are deployed Over the Air (OTA). The administrator portal enables administrators to:
  - deploy large groups
  - leverage profiles
  - download multiple files to the clients
  - update clients

  A new customizable deployment email with end user credentials is available.

- **Simplified Call Management and Logging**: Provides users with the advanced call management features of the Mitel communications platform. The server logs incoming calls for the MiCollab clients, even when the MiCollab client software is not running. When a MiCollab client is re-started, the server updates the client with all the cached call log information since the last session. It also stores frequently dialed phone numbers and allows users to call these numbers from a drop-down menu.

- **Dynamic Presence and Availability**: Informs you of a person’s availability -- whether they are on the phone, away from their desk, or available for secure instant chat or collaboration. You can also tag selected users so that you get a visual indication when they log into MiCollab Client.

- **Contact Grouping**: Combines Corporate, Personal and Favorite contact groups into a single view. A Corporate directory group is visible with the flexibility to create additional groups. Personal contacts from Google® or Microsoft® Exchange® can also be integrated and imported into the MiCollab Client application.

- **Hot Desk**: Allows anyone with a Hot Desk DN and User PIN to log in to an available hot desk-enabled telephone. Once logged in, the user can
  - Receive incoming calls at the set
  - Place outgoing calls
  - Retrieve voice messages
  - Program and use feature keys.
• **External Hot Desking User:** Extends hot desking capabilities to an external device, which makes it appear as an extension on the system. When the external hot desk user (EHDU) is logged in to the communications platform, a caller only needs to dial the extension number assigned to the user and the system automatically rings the user's cell phone, home phone or other device of choice—including an extension on another private network or PBX. This feature is available on MiVoice Business systems only.

• **Call Handoff:** Supports the handoff of an active call from the Desktop Client to another device. It can also pick up an active call from another device (such as a softphone). This feature is available on MiVoice Business systems only.

• **Teamwork mode:** Allows MiCollab clients to work without being associated with a PBX device. A subset of features such as contact grouping, presence, dynamic status and chat are supported in Teamwork Mode.

• **Corporate Secure Instant Messaging:** Facilitates secure instant messaging and file sharing. Initiate a single or multi-party chat at the click of a mouse and, at the same time, share documents by dragging and dropping files into the chat session.

• **Dynamic Status:** Provides the user with an easy method of specifying Instant Messaging, presence, and call routing options when showing a specific Dynamic Status. The status can be changed from within MiCollab Client or it can be automatically updated based on the user’s Microsoft® Outlook® calendar information.

• **Dynamic Location:** Allows Mobile Client users to define the GPS locations to associate with each Dynamic Status and automatically changes Dynamic Status based on GPS location or by manual selection.

• **Console:** Provides attendants and receptionists with console features and presence information allowing them to process calls efficiently.

• **Client Only Software Delivery:** delivers Windows Desktop Client and mobile clients software without having to upgrade the MiCollab server version. Supported clients: Desktop, Android, BlackBerry and Web clients.

• **Dialed Digits Processing Flexibility:** allows the administrator to modify the dialed digit processing logic to suit their site specific needs. When a user dials a telephone number from the client, MiCollab Client can apply pre-defined digit modification rules (such as pre-pending the PBX outgoing prefix) before the number is dialed out.

**SUPPORTED INTEGRATIONS**

• **Integration with Mitel Teleworker Service:** Teleworker allows users to access their corporate voice network through the MiCollab Client softphone, from home or on the road, without the need for a virtual private network (VPN) connection.

• **Integration with Mitel Dynamic Extension and Dynamic Extension Express:** A MiCollab client user who also has Dynamic Extension or Dynamic Extension Express can answer an incoming call directed to their desk phone on a device of their choice— for example, on a cell phone or home phone. When the call is answered, the MiCollab Client application changes the user’s telephony presence to “off hook.” This enables MiCollab Client to display the correct telephony status for a user, regardless of whether the call was answered on a user’s desk phone, softphone, or mobile device.
• **Integration with MiCollab Audio, Web and Video Conferencing**: integration with this application allows users to place a video call with the click of a button, and create or schedule collaboration sessions.

• **Integration with Business Applications**: integrates with popular communications and productivity tools such as Outlook and Microsoft Office. Users can dial from their Outlook contact list, integrate their Dynamic Status with their Outlook calendar, and click-to-dial using smart tags. MiCollab Client integrates with Outlook to provide MiCollab Client Presence status information and IM availability in Outlook contact card. MiCollab Client also integrates with IBM Lotus Notes, allowing users to launch web / video collaboration sessions and integrate their Dynamic Status with their calendar.

• **Integration with MiVoice for Lync®**: supports seamless integration with Microsoft Lync clients through the Mitel Lync Plugin. Mitel Lync plug-in is an application that integrates with Microsoft Lync Client and allows Microsoft Lync users to use Mitel telephony functionality through its feature rich MiCollab Client infrastructure.

• **MiVoice for Skype for Business**: supports seamless integration with Microsoft Skype clients through the Mitel Skype Plugin. Mitel Skype plug-in is an application that integrates with Microsoft Skype Client and allows Microsoft Skype users to use Mitel telephony functionality through its feature rich MiCollab Client infrastructure.

• **Vidyo**: a video conferencing solution that provides user with high definition, low-latency video to mobile phones, desktops, and meeting rooms. Refer to the Vidyo Product Documentation and the Mitel Vidyo Quick Reference Administrator Guide for details.

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**Note:** ACD Hot Desking is supported for MiCollab Client in combination with Ignite. The user has the ability to login and logout from within the MiCollab Client as an ACD Hot Desk user on either their physical phone, or their MiCollab MiNET Softphone. The Ignite Client provides support for make busy, group presence, Account Codes, requesting help, as well as mid-call feature support (hold, transfer, and so forth).

• **Integration with Mitel InAttend**: MiCollab Client supports integration with Mitel InAttend using SIP SIMPLE presence connection. MiCollab Telephony Presence is not supported in Mitel InAttend.

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**INTEGRATED OR CO-LOCATED WITH USER AND SERVICES PROVISIONING**

MiCollab Client is supported in either integrated or co-located mode:

• **Integrated Mode**: In this mode, the MiCollab system keeps the User and Services database and client database synchronized so they function like a single database on the MiCollab server. It allows you to provision client services from the User and Services application and supports single point provisioning of the client services on the MiVoice Business platform(s). This is the recommended mode for sites that meet the integration requirements.

• **Co-located Mode**: In this mode, the Users and Services data and client data are contained in separate, independent databases on the MiCollab server. This mode is supported for sites with either MiVoice Business or MiVoice Office platforms. This mode is not supported for the other Mitel communication platforms. With this mode, you must provision MiCollab...
Client services separately from the MiCollab Client Service Administration interface. Single point provisioning of MiCollab Client services is not supported.

By default, a MiCollab system is in co-located mode. You must run the MiCollab Client Integration Wizard to put it into integrated mode.

**MICOLLAB AUDIO, WEB AND VIDEO CONFERENCING**

MiCollab Audio, Web and Video Conferencing allows users to schedule and create audio or web conferences. A web-based interface is used to schedule conferences, and to view conference calls. Conferencing configuration is performed from the MiCollab administrator portal. All interfaces are directly accessed through the secure HTTPS protocol. Authorization and authentication allows only valid users to access the services. Secure Sockets Layer (SSL) encryption for secured messages and server-side digital certificates are used to meet the highest security requirements.

MiCollab Audio, Web and Video Conferencing is integrated into the MiCollab End User portal and provides the following features:

- **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, and for billing purposes. Conference accessibility via personal identification is also available for an even more secure experience.

- **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.

**MIVOICE BORDER GATEWAY**

The MiVoice Border Gateway (MBG) is a multi-service software solution that provides the following functionality:

- **Web proxy blade**: provides a secure method for MiCollab end user web clients to connect with their LAN-based applications

- **Teleworker service**: connects MiCollab Client mobile softphones, remote office phones and SIP softphones to the corporate voice network providing full access to voice mail,
collaboration tools, and all the other features of the office phone. When configured for teleworker use, the remote device:

- has a secure, encrypted, voice path between the IP Phone and the system across the Internet.
- has adaptive jitter buffering and other software enhancements to improve voice quality over the Internet.
- uses G.729 compression to reduce bandwidth requirements.
- operates in the same manner as any other phone connected to the network.
- operates over any broadband LAN connection that provides connectivity back to the corporate office where the MiCollab is visible from the Internet Mobility Solutions.
- directly accesses the corporate office phone system (for example, voice mail and collaboration tools).
- supports SIP protocol for the MiCollab desktop and Mobile SIP soft phones.

**Web Proxy Service:** An MBG server with web proxy installed in the Demilitarized Zone (DMZ) protects the MiCollab server in the LAN from Internet exposure. In a DMZ configuration, the firewall is the gateway for all IP network traffic with the Internet. The Web Proxy blade provides:

- provides a secure method for remote web browser users, such as web conferencing users, to connect with a MiCollab server located on the corporate LAN.
- provides Internet-based clients (for example, clients) with access to a MiCollab system located on the LAN. Remote web browser users and clients connect to MiCollab in the LAN through the Web Proxy blade that is installed on a separate MBG server in the DMZ.
- acts as a reverse proxy, providing a secure method for Mitel end user web clients to connect with their LAN-based applications on the MiCollab system. In the current release, the Web Proxy supports desktop and conferencing clients.
- restricts access only to those Purls that belong to the end user web interfaces for the applications.
- provides secure Internet access from an Internet-accessible server to an Internet-protected server on the LAN.

**SIP trunk proxy service:** You can use SIP trunks provided by an Internet Telephony Service Provider to connect your communications platform to the traditional PSTN network. Three components are required to successfully deploy SIP trunks:

- a Mitel communications platform with SIP-enabled trunk side
- an Internet telephony or SIP Trunking service provider
- MiCollab with MBG SIP Trunk proxy service to connect the service provider to the ICP on the LAN. The MBG SIP Trunk Proxy service on MiCollab also serves as a SIP-aware firewall and eliminates the need for 3rd party firewalls, simplifying configuration and deployment. (Not Supported on MiVoice MX-ONE and MiVoice 5000 platforms).

- MBG supports MiCollab Client softphones and MiCollab for Mobile clients for integrations with Mitel communications platforms. Teleworker service is supported.

- Remote Proxy services (web proxy to MiCollab) is supported.
• Secure remote SIP access for IP phones on the MiVoice Business and an outbound proxy for SIP trunking from internal MiVoice Businesses to external third-party SIP providers
• Secure Recording Connector service to facilitate the recording of Mitel-encrypted voice streams by third-party call recording equipment.

TELEWORKER SERVICE

To deploy Teleworker service you must
• install MiCollab in Network Edge mode (see Figure 4), or
• install MiCollab in LAN mode and install a separate MBG server in the DMZ to support the teleworker services (see Figure 5).

A MiCollab server, by itself in LAN mode, does not support Teleworker service.

![Figure 4: MiCollab in Network Edge Mode Running MiVoice Border Gateway (Teleworker) Solution](image-url)
The Teleworker service connects remote office phones to the corporate voice network providing full access to voice mail, collaboration tools, and all the other features of the office phone system. Teleworker service can be completely configured at the head office using most models of MiVoice IP phones. On the telephone keypad, you enter the IP address of the MBG server that is installed at the head office. Using a two-click process, you can set a MiVoice IP phone to operate in teleworker mode. The phone can then be taken off-site and plugged into any broadband Internet connection. When the phone is powered up, it automatically establishes a connection with the MBG server and is registered as a standard extension of the office phone system. The phone can also be returned to normal (non-teleworker) mode with the touch of a button.

When configured for teleworker use, the remote IP Phone has the following capabilities:

- Encryption to provide a secure voice path between the phone and the system across the Internet
- Adaptive jitter buffering and other software enhancements to improve voice quality over the Internet
- G.729 and G.711 compression to reduce bandwidth requirements
- Operates in the same manner as any other phone connected to the network
- Operates over any broadband LAN connection that provides connectivity back to the corporate office where the MiCollab is visible from the Internet Mobility Solutions
- Directly accesses the corporate office phone system (for example, voice mail and collaboration tools)
Services and Applications

• Support for the SIP protocol
• Support for browser-based voice and video calling using Web Real-Time Communication (WebRTC).
• MiVoice Border Gateway scales teleworker functionality for large enterprise.
• Teleworker functionality is not supported on MiVoice Office 250 platforms.

SIP TRUNK PROXY SERVICE

The MBG application on the MiCollab server supports SIP trunk proxy service.

You can use SIP trunks provided by an Internet Telephony Service Provider to connect your communications platform to the traditional PSTN network. Three components are required to successfully deploy SIP trunks:

• a Mitel communications platform with SIP-enabled trunk side
• an Internet telephony or SIP Trunking service provider
• MiCollab with MBG SIP Trunk proxy service to connect the service provider to the ICP on the LAN. The MBG SIP Trunk Proxy service on MiCollab also serves as a SIP-aware firewall and eliminates the need for 3rd party firewalls, simplifying configuration and deployment.

A "SIP trunk" in the context of the MBG blade is simply a pair of endpoints, defined by their IP addresses and signaling ports. One of the endpoints is usually your ICP, and the other is your SIP provider's firewall or SBC.

A trunk can have any number of "channels," each of which corresponds to an active media stream. A channel license is required for each active channel, so you will need enough channel licenses to cover the maximum number of active calls. As an analogy, an ISDN PRI link contains 23 B channels for audio and one D channel for signaling, and can carry a maximum of 23 simultaneous calls. This would be equivalent to a SIP trunk with 23 channel licenses.

For SIP Trunking support, you require one SIP Trunking Channel license for each of the maximum number of simultaneous calls you estimate to make. No extra licenses are required for SIP device support.

SECURE RECORDING CONNECTOR SERVICE

• The Secure Recording Connector (SRC) allows you to record Mitel-encrypted voice streams using third-party call recording equipment (CRE). SRC is positioned between the ICP and the sets to be recorded, where it accepts requests from an authorized CRE to establish taps in the voice stream. These taps are separate (mirrored) streams from the SRC service to the CRE.

NUPOINT UNIFIED MESSAGING

NuPoint Unified Messaging is a powerful, voice processing application that provides voice messaging and paging support. Users can access their voice mails remotely and can be notified by telephone or pager when a voice message is left for them. Users can also use NuPoint's Unified Messaging capabilities to listen to their voicemails through their Lotus Notes, Novell
GroupWise, or Microsoft Outlook clients with Message Waiting Indicator (MWI) on playback via a URL. In addition, they can play their emails through the Telephony User Interface. Messages between these clients and the NuPoint TUI are synchronized for message playback. NuPoint Unified Messaging also offers desktop access of voice messages from an email client or web browser.

If NuPoint Unified Messaging is integrated with a resilient MiVoice Business system, resiliency is supported for the voicemail services. When in resilient mode, voice mail ports conform to the behavior of resilient IP phones. It is not necessary to configure the NuPoint Unified Messaging application for resiliency on MiCollab; it is configured entirely on the MiVoice Business platform.

NUPOINT UNIFIED MESSAGING FEATURES

Features of the NuPoint Unified Messaging application include:

- Scalability from small to large enterprise systems.
- Advanced call processing and automated attendant.
- Unified Messaging with the ability to send, receive, forward, save, and sort voice and fax messages from the PC. Unified Messaging emails contain Caller ID information. Users who receive UM email notifications on mobile devices (such as Apple iPhone or Windows Mobile devices) can click the text to return a call.
- NuPoint Unified Messaging includes the Speech Auto Attendant (SAA) application (see “Speech Auto Attendant” on page 35 for details).
- Multiple language support per system. Callers can select from up to five languages at the Auto Attendant. Once selected, all remaining prompts will be played in the selected language.
- Speech Navigation enables users to manage their mailboxes using voice commands in North-American English.
- Integration to MiVoice Business, MiVoice Office 250, MiVoice 5000 and MiVoice MX-ONE platforms.
- Streamlined management support for SNMP and remote system management and administration.
- Ability to respond to voice mail messages by dialing back to the caller who left the message.
- Ability to dispatch alarm messages to email addresses as well as SNMP management systems. Administrators can configure alarm notification frequency and create alarm reports using the Web console.
- Per-user voice mailbox licensing
- Outbound FAX
For MiCollab with MiVoice Business communication platforms, the NuPoint Unified Messaging application is supported. See the NuPoint Unified Messaging General Information Guide for details.

**Note:** Mitel's NuPoint UM application is also available as a separate standalone product that is distinct from the MiCollab-NuPoint UM application. The NuPoint UM application on the MiCollab product does not support all the same features and functionality of the NuPoint standalone version. Refer to "MiCollab Client Feature Support" on page 65 for a list of the supported features.

### SPEECH AUTO ATTENDANT

The NuPoint Unified Messaging Speech Auto Attendant (SAA) is a speech-enabled application that allows users to place calls to people quickly and efficiently by speaking their names. In addition to placing calls by name, users can say a department name or telephone number. A tutorial introduces users to the system features, and voice-based help is available to answer questions.

Speech Auto Attendant has the ability to store four numbers per person and provides the configurable option for the user to select which phone number will be called. Department names are also supported and can be heard after speaking the "Department" command. The auto attendant provides users with the ability to optionally play back the current presence state of the matched person prior to transferring a caller. This feature is supported:

- via integration with IBM Sametime, or
- via integration with Microsoft Live Communications Server (LCS), and Microsoft Office Communications Server (OCS).

The supported languages for Speech Auto Attendant are North-American (NA) English and United Kingdom (UK) English.

### END USER APPLICATIONS - LANGUAGE SUPPORT

The following table indicates which languages are supported in MiCollab end user applications.

<table>
<thead>
<tr>
<th>Language</th>
<th>MiCollab End User Portal</th>
<th>NuPoint Unified Messaging</th>
<th>MiTeam</th>
<th>MiCollab PC Client</th>
<th>MiCollab for Mobile</th>
<th>MiCollab Web Client</th>
<th>MiCollab Vidyo</th>
<th>NuPoint Unified Messaging Web Client</th>
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</thead>
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<tr>
<td>Chinese (Simplified)</td>
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</table>
### Table 1: MiCollab Application End User Portal Language Support

<table>
<thead>
<tr>
<th>Language</th>
<th>MiCollab End User Portal</th>
<th>MiCollab AWV</th>
<th>NuPoint Unified Messaging</th>
<th>MiTeam</th>
<th>MiCollab PC Client</th>
<th>MiCollab for Mobile</th>
<th>MiCollab Web Client</th>
<th>MiCollab Vidyo</th>
<th>NuPoint Unified Messaging Web Client</th>
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</table>
Chapter 3

INSTALLATION AND MAINTENANCE FEATURES
INSTALLATION

EASY-TO-INSTALL SOFTWARE

MICOLLAB SERVER PLATFORM

To simplify software installation for the technician, the MiCollab applications are installed as a product rather than as a collection of separate software components. The MiCollab software installation wizard guides the technician through the software installation process to prevent any possibility of error.

The software required for each installation is determined by an Application Record ID (ARID). Technicians create an ARID for the MiCollab installation in their AMC license account. All the software installation components (MSL operating system and MiCollab application software) are available for download from Mitel Online.

After technicians obtain the MiCollab software and copy it to CD/DVDs or to a USB stick, they can install it on the MiCollab hardware platform on site. Based on the Application Record ID, the installation wizard prompts the technicians to copy the required applications to the system. If any of the software applications are an out-of-date version, the wizard automatically prompts the technician to obtain the correct version.

MICOLLAB VIRTUAL APPLIANCE PLATFORMS

You can deploy MiCollab as virtual machine in the VMware vSphere or Microsoft Hyper-V cloud environments.

• For VMware deployments, MiCollab is installed as a virtual appliance on a VMware vSphere Standalone host or via a vCenter Server. The entire MiCollab virtual appliance is installed as an image in OVF package format (file ending in OVA). The OVA file contains the VMware tools, MSL operating system, MiCollab software, and MiCollab applications as an image.

• For Microsoft Hyper-V deployments, you create a virtual machine and then install and configure the MiCollab system on it. The Virtual Appliance Deployment Solutions Guide lists the MiCollab Hyper-V virtual machine resource requirements.

MINIMAL INSTALLATION WITH MICOLLAB SERVER APPLIANCE

You also have the option of purchasing the MiCollab Server Appliance. This server has the MSL and MiCollab software pre-installed. The technician only has to set up the server, configure some site-specific values and system attributes, and provision users. Then, the MiCollab Server Appliance is up and running. You can complete user provisioning quickly using the Bulk User Provisioning Tool.

Note: the MiCollab Server Appliance is currently only available in North America and UK.

Refer to the MiCollab Installation and Maintenance Guide for more information.
SIMPLIFIED INITIAL USER PROVISIONING

Initial provisioning of MiCollab is simplified with the use of the Bulk User Provisioning tool. This tool allows you to bulk import user data from a comma-separated value (.csv) file or an LDAP Data Interchange Format (LDIF) file into the MiCollab system’s Users and Services database.

- For MiCollab integrations with MiVoice Business platforms, Flow Through Provisioning is supported. User provisioning that you perform in the MiCollab USP applications is updated on the MiVoice Business. Likewise, user provisioning that you perform on the MiVoice Business is applied to the MiCollab database.

ROLES AND TEMPLATES

You can use roles and templates to apply common configuration data across multiple user entries. This approach greatly reduces the amount of time that it takes to enter customer data. Roles define the task, position, or responsibilities for a type of user within the organization. Roles are associated with user templates that define the common phone and application service settings for the roles.

You identify types of users within the enterprise that have common phone and application service needs and then create user templates that define the required services for each user type. After creating the user templates, the administrator assigns a role to each template and applies the templated information to new users using any of the following methods:

- **Quick Add:** allows you to create a new user through the User and Services application and apply a role in the Users tab. The role automatically applies the associated template data to the user entry.

- **Bulk User Provisioning:** allows you to import a CSV or LDIF file of user entries and specify user roles for the entries. The roles reference templates that automatically apply common data during the import process. You also have the ability to auto-fill a selection of user entries in the bulk user provisioning tool with roles, directory entries, and e-mail addresses.

- **Provisioning with IDS:** When a directory server is integrated with MiCollab, you can map a directory service attribute to a MiCollab role. When a user is provisioned in the directory service and synchronized with the MiCollab database, the associated template data is applied to user entry that is created in the MiCollab database.

Default roles and templates are provided with the system.
FLOW THROUGH PROVISIONING

When you add, update or delete information for a single user on MiCollab, you can optionally update the MiVoice Business system database at the same time. If Flow Through Provisioning is enabled, new configuration data that you enter into MiCollab (such as phone and mailbox creation, COS option setup, and Call Forwarding setup) is automatically updated in the MiVoice Business programming database at the same time.

MiVoice Business system programming forms are updated with data via Flow Through Provisioning. For example:

- User and Device Configuration
- Telephone Directory Assignment
- Station Service Assignment
- Multiline Set Key Assignment
- User Call Forwarding
- Class of Service
- Personal Ring Groups

When you use Flow Through Provisioning in conjunction with roles and templates, bulk user provisioning, Integrated Directory Services, or Quick Add you can further minimize the time spent user provisioning.

RECONCILE WIZARD

The Reconcile Wizard pairs user entries in the MiCollab database with matching user entries in the MiVoice Business databases in a network that is being configured to support Flow Through Provisioning. It also identifies any user data conflicts between the databases so you can manually resolve them.

REACH THROUGH

MiCollab Reach Through provides you with the ability to access MiVoice Business System Administration tool (ESM) forms from links or drop-down menus within specific USP pages. Because you have logged into the MiCollab server manager, you are allowed direct access and do not have to log in separately to the MiVoice Business. This functionality reduces that amount of time it takes to perform programming tasks, such as modifying a user's MiVoice Business phone and group settings, that require configuration on the MiVoice Business.

The MiVoice Business also supports Reach Through. It allows administrators to link directly to MiCollab USP forms from specific MiVoice Business system administration tool programming forms.

MICOLLAB CLIENT INTEGRATION WIZARD

The MiCollab Client Integration Wizard allows administrators to integrate the MiCollab Client application database with the USP application database. After the databases are integrated, you can manage client services from the USP application. Single point provisioning of client services from the USP application is supported to the MiVoice Business platforms. The
Integration Wizard steps the administrator through the process of integrating the databases and provides instructions on how to resolve any configuration issues or database conflicts.

Installers can also use the Integration Wizard when they are installing a new MiCollab system into a site with existing MiVoice Business platforms. In this scenario, the wizard can be run to update the MiCollab database with the user and phone data from the MiVoice Business platforms.

MAINTENANCE

COMPREHENSIVE ADMINISTRATION AND MAINTENANCE TOOLS

Maintenance and system administration are performed from the following interfaces:

- **Server Console**: a text-based control panel built into the MSL operating system that technicians use to perform maintenance tasks such as
  - install the MiCollab software
  - configure network parameters
  - perform upgrades and software updates
  - upgrade application suite licensing
  - perform backups.

- **MiCollab Administrator Portal**: a web-based control panel, also called the "server manager" that administrators use to
  - configure and administer the MiCollab applications
  - perform server administration tasks, such as view logs, display system information, assign system users, and perform backups
  - configure network and server security settings
  - set system-wide parameters, such as system language and password strength.

REMOTE MANAGEMENT OF MICOLLAB VIA MBG REMOTE PROXY SERVICES

MiCollab supports secure remote access from clients on the internet to the MiCollab server manager interface through a standalone MBG server. The standalone MBG server requires the Remote Proxy Services application to support this functionality.

INTEGRATED DIRECTORY SERVICES

The following sections highlight the MiCollab integrated directory services. Refer to the *Integrated Directory Services* book in the MiCollab server manager help for details.

MICOLLAB WITH MIVOICE BUSINESS

You can integrate the user database of a corporate directory service with the MiCollab database to minimize data entry and administration. The user data and MiCollab Client contacts on the corporate directory server are synchronized with the MiCollab database using Lightweight Directory Access Protocol (LDAP). If Flow Through Provisioning is enabled, then MiCollab
distributes the user data to the MiVoice Business platforms. Synchronization occurs in one direction only—from the directory server to MiCollab.

On the directory server, you can assign an attribute ("employeeType" by default) to each user data record. The "employeeType" attribute maps to a "role" in the MiCollab database which corresponds to a MiCollab user template. The user template allows you to apply additional personal data, telephone services, and application services to the user entry.

MiCollab detects updates that are made on the directory server via polling. MiCollab polls the directory server on a pre-specified interval or on-demand.

If IDS fails to process a directory service update, the operation is sent to the detained queue. Operations in the detained queue can have two states: detained or failed. Detained operations are operation that the system has not yet processed. These only occur if the detain-all option is enabled. Failed operations are operations that the system has been unable to process. You manage failed and detained operations from the Bulk User Provisioning Tool in the Users and Services application.

**ACTIVE DIRECTORY AUTHENTICATION**

You can configure the integrations described above with Active Directory Authentication. This feature allows users to log into their MiCollab applications interfaces (for example: MiCollab End User Portal) using their Active Directory server credentials (login name and password). See Configure Active Directory Authentication for details.

**EXTERNAL (OFF-BOARD) DIRECTORY**

You can configure the MiCollab Client Service with access to a large, external off-board LDAP directory, such as Mitel MetaDirectory. MiCollab Client users can then search for corporate contacts from a very large number of entries.

The directory entries from multiple databases, such as Lotus Notes or Microsoft Exchange can be aggregated within the metadirectory. Typically, you would not synchronize contacts from the external directory to the MiCollab Client service.

The following diagram shows an overview of the solution:
You can also partition (filter) the external corporate directory such that users are only presented a subset of the corporate directory contact entries. For example, supplier contacts could be excluded from the directories of users who do not need to call these numbers.

You can partition the directory by organizational unit or by attribute:

- **Organizational unit**: When users perform a search, the results are only drawn from the entries in their organizational unit.

- **Attribute**: When users perform search, only results that share the same attribute are presented.
SUPPORT FOR SSL CERTIFICATES

The MiCollab server manager allows you to request and import SSL certificates from a trusted Certificate Authority. An SSL certificate authenticates the identity of a web site and encrypts information between a server and a client using Secure Sockets Layer (SSL) technology. The presence of an SSL certificate on the MiCollab web server also prevents security alert warnings from appearing in your browser when users access the MiCollab web portals. To purchase a SSL Certificate, you send the Certificate Signing Authority a Certificate Signing Request (CSR). The Certificate Signing Authority sends back an SSL certificate that can be imported into system by the administrator via the MiCollab server manager.

FLEXIBLE BACKUP AND RESTORE

MICOLLAB SERVER AND MICOLLAB SERVER APPLIANCE PLATFORMS

Technicians and administrators can back up system data (including all application data) from either the server manager interface or from the server console:

- Server manager "Backup" option: Supports database backups to a local workstation or to a network file server. When backing up to a network file server, you can perform an immediate backup (Backup Now) or schedule automatic backups on a daily, weekly, or monthly basis.

- Server console "Perform Backup" option: Supports database backups to a USB stick or to a network file server.

Backups can also be performed remotely by leaving a non-bootable USB device permanently attached to the MiCollab server and logging into the console via Secure Shell (SSH). For more information about the server console, backups, and SSH, refer to the Mitel Standard Linux Installation and Administration Guide available at Mitel OnLine.

Database restores are performed from the server console by selecting the "Do you wish to restore from backup?" option.

RESILIENCY

MiCollab for Mobile Softphone Resiliency: In MiCollab Release 7.0 and later, MiCollab Client for Mobile softphones support Domain Name System (DNS)-based SIP resiliency with MiVoice Border Gateways (MBGs). Refer to the MiCollab for Mobile Resiliency Guide for the DNS configuration required to support SIP resiliency for MiCollab Client for Mobile softphones in an Enterprise or Cloud environment.

MiCollab Client Desktop MiNET Softphone - Server Independence: If the MiCollab server is taken out of service, for example due to an upgrade or hardware failure, the Desktop MiNET softphone continues to provide the limited functionality. Refer to the MiCollab Client Desktop MiNET Softphone - Server Independence Guide for details.
Chapter 4

LICENSING
INTRODUCTION

MiCollab is licensed as a base package with a series of optional, add-on specialty application packages. There are several core packages available. Add-on packages, enhance the base package functionality.

The base package provides application software and a minimal number of user licenses that allows customers to evaluate the applications. Customers then have the option of purchasing uplift license packages for each application to increase capacity up to the supported system maximums as defined in the system capacity tables of the MiCollab Engineering Guidelines.

AMC LICENSING

MiCollab supports licensing through the Mitel Application Management Center (AMC) and the Mitel Software Assurance (SWAS) program. The Mitel AMC manages the software licensing and entitlement of the Software Assurance Program. After you obtain an Application Record ID (ARID) from the AMC, the AMC uses your Application Record ID (ARID) to provide you with access to licenses, software releases, and upgrades.

The Application Management Center (AMC) allows licensing keys to be automatically created at all times (24 hours a day, 7 days a week) through remote license keys generation.

The AMC is also the procurement and provisioning interface for AMC-delivered products and services. As a reseller of Mitel products, you receive a unique licensing account on the AMC. By logging in to the AMC with the username and password you are given when you obtain your account, you can view a list of your AMC-enabled products, check their status, and add services to any of them.

When you place a new order for products with the Mitel Customer Care Center, the order information is entered into the AMC system. The AMC places the purchased licenses into your licensing account for use in creating an application record. You must then log in to the AMC and create the application record; assign purchased products, features, and options to that application record; and then activate the customer's Mitel Standard Linux (MSL) operating system (OS) before you can install the MiCollab application.

MiCollab uses the AMC to obtain licensing information, which is required for installing main base software, for installing upgrade software, and for installing system option upgrade software. You must install MiCollab and then register it with the AMC online.

When you install MiCollab, MSL generates a unique Hardware ID that includes the MAC address of the server. When you connect to the AMC over the Internet, MSL uses the Hardware ID and the Application Record ID to communicate with the AMC to obtain licensing information (also called "sync").

SOFTWARE ASSURANCE

The Mitel Software Assurance (SWAS) Program is a subscription-based service that provides customers with access to new software releases, software upgrades, and product support services for all users (ports) on a given application record. The Mitel Applications Management Center (AMC) manages the entitlement of the Software Assurance Program, determining
whether a given application record ID for a customer is entitled to a specific software installation or upgrade. Refer to the MiCollab Ordering Guide for details.

**MICOLLAB VIRTUAL APPLIANCE LICENSING DETECTION AND VIOLATION MODE**

MiCollab appliances must maintain online connectivity to the AMC at all times. Loss of AMC connectivity for a short period of time due is tolerated by the system. However, AMC connectivity must be re-established without delay in order to maintain access to all system functions and features. If AMC connectivity is lost for an extended period of time, an automatic email alert is generated and sent to the named Channel Partner AMC account administrator. If AMC connectivity is not re-established, then the virtual appliance system goes into license violation mode and certain capabilities are no longer be accessible.

Mitel recognizes that in some deployment situations, it is not practical to implement online connectivity to the AMC from each virtual appliance deployed at a customer’s site. For this reason, Mitel supports the ability to proxy online AMC connectivity from each Virtual Appliance through a single named proxy within the customer data center environment. This enables AMC online connections to be managed and controlled from one central point within the data center rather than from each individual product.

**UCC LICENSING**

Unified Communications and Collaboration (UCC) licensing helps to simplify the selling and ordering process because it bundles the platform and application user licenses together. Instead of ordering a MiVoice Business user license and multiple individual applications licenses for each MiCollab user, you order a single UCC license per user. The existing “à la carte” licensing options will still be available; however, UCC licensing offers the following benefits:

- Simplifies the licensing of a MiCollab user by bundling an MiVoice Business user license with a specific set of application user licenses.
- Offers a significant pricing discount over “à la carte” licenses.
- Provides tiered functionality with progressive discounts. The following UCC user licenses are available:
  - **UCC Entry license**: provides an MiVoice Business user license, voicemail, and unified messaging.
  - **UCC Standard license**: adds the UCC desk and web client and full audio and web collaboration to the Entry license.
  - **UCC Premium license**: adds full mobile UCC functionality to the Standard license.

Refer to the MiCollab Ordering Guide for a definition of the licenses contained in each tier.

- Software assurance is more cost effective: The Mitel Software Assurance (SWAS) Program is a subscription-based service that provides customers with access to new software releases, software upgrades, and product support services for all users (ports) on a given application record. Under the SWAS program, software upgrades are provided at no additional cost without any of the new features or functionality that are available in the base upgrade package.
- Offers license packs for Standard and Premium licenses with discounted pricing for volume.
MiTeam is only available to users who are assigned with a UCC Premium bundle and who have an active MiTeam subscription. Each UCC Premium user is granted free subscription to MiTeam for a period of 365 days. The 365-day period begins as soon as the MiCollab for Mobile Client is started or invited to a stream. Before the free period ends, you must contact Mitel and obtain a MiTeam subscription license for the user to maintain his or her MiTeam service. If the user is not licensed after the free period ends, the user's account is disabled and there is a 30-day grace period during which time the user's account data is maintained. At the end of the 30-day grace period, if the user is still not licensed, the user's MiTeam account is deleted.

Prior to licensed grace period expiry, administrators will receive reminders and warnings to ensure that users' MiTeam licenses do not lapse accidentally, resulting in a loss of MiTeam services and account data:

Administrators can also generate a report that shows the status of MiTeam users.
Chapter 5

SUPPORTED CONFIGURATIONS
OVERVIEW

This chapter provides an overview of the required hardware platforms, supported communication platforms, deployment topologies, and supported applications. Refer to the MiCollab Engineering Guidelines for detailed information.

HARDWARE PLATFORMS

MiCollab is available on the following hardware platforms:

- Industry Standard Server
- Server Appliance
- Virtual Appliance

**Note:** System capacities and performance levels are dependent upon the type of platform, the number of users, and the installed applications. Refer to MiCollab System Capacities, Performance and Constraints in the MiCollab Engineering Guidelines for details.

INDUSTRY STANDARD SERVER

This option provides a small enterprise solution for up to 1500 users. Customers have the flexibility of purchasing their own MSL qualified server and then installing the MSL operating system software and MiCollab software on it.

SERVER APPLIANCE

This option provides a small business solution for up to 150 users. The MiCollab Server Appliance is a rack-mount Dell PowerEdge server with the MSL operating system software and MiCollab software pre-installed at Mitel. After the technician configures the server site-specific values, the MiCollab Server Appliance is ready to use. This option simplifies the installation process and reduces the time on site required to get the system up and running.

**Note:** the MiCollab Server Appliance is currently only available in North America and UK.

VIRTUAL APPLIANCE

MiCollab can be deployed as a

- virtual appliance (vApp) within the VMware vSphere Cloud Operating System, or
- on a Microsoft Hyper-V virtual machine.
MiCollab Virtual Appliance deployments on VMware are supported for
• small business multi-application sites to up to 500 users,
• mid-range business multi-application or single application sites up to 1500 users
• enterprise multi-application sites up to 5000 users.
• enterprise single-application sites (MiCollab Client or AWV) up to 5000 users.
• large scale multi-MiCollab deployments up to 40,000 users

MiCollab Virtual Appliance deployments on Hyper-V are supported for
• small business multi-application sites to up to 500 users,
• mid-range business multi-application or single application sites up to 1500 users
• large scale multi-MiCollab deployments up to 40,000 users

MITEL COMMUNICATIONS PLATFORMS

You can integrate MiCollab with the following Mitel communications platforms:
• MiVoice Business:
  - MiVoice Business for 3300 controller
  - MiVoice Business for Industry Standard Servers (MiVoice Business-ISS)
  - MiVoice Business Virtual Appliance
• MiVoice 5000
• MiVoice MX-ONE
• MiVoice Office 400
• MiVoice Office 250

MiCollab is not available for integration with the following Mitel communications platforms:
• SX-2000, SX-200, SX-200 ICP, MXe Server, Multi Instance Communications Director (MICD), or MiVoice Business-Unified IP Client (UIPC).
DEPLOYMENT TOPOLOGIES

MiCollab is supported in the following deployment topologies:

Small Business
- Network Edge Deployment (Server-gateway mode)
- LAN Deployment (Server-only mode)

Mid-range Business/Enterprise Site
- LAN Deployment with Separate MBG Server in DMZ
- LAN Deployment with Separate MBG Server in Network Edge

Note: Refer to the MiCollab Engineering Guidelines for details.

Large scale Multi-MiCollab Deployments
- with MiVoice Business (up to 40,000 users), or

NETWORK EDGE DEPLOYMENT (SERVER GATEWAY)

In this configuration, MiCollab is installed on an internet-facing server with firewall capability.

This deployment configuration
- supports all MiCollab applications
- provides a high level of security by using the MSL firewall with pre-configured filtering and port forwarding.

Figure 8: Network Edge Deployment
LAN DEPLOYMENT (SERVER ONLY)

In this configuration, the MiCollab server is located in the LAN with the communications platform. This configuration does not support MBG Teleworker service with teleworker phones configured in MiCollab. Firewall configuration and port forwarding must be configured to allow internet access to the Application Management Center (AMC).

This deployment configuration

• supports all MiCollab applications that do not require Internet access (for example, Nupoint Unified Messaging). **Note:** Internet based services, such as MBG Teleworker service and remote audio and web conferencing clients, are not supported for this configuration.

• requires firewall configuration. You must configure port forwarding to allow application clients on the public network to connect through the firewall to the MiCollab server on the private network.

![LAN Deployment Diagram](image)

**Figure 9: LAN Deployment**

LAN DEPLOYMENT WITH SEPARATE MBG

To support applications that have clients on the Internet, such as, MBG-Teleworker, MiCollab Client and MiCollab AWV, you require a separate MBG server running the Web Proxy application to protect the MiCollab server in the LAN from Internet exposure. This deployment configuration:

• supports all MiCollab applications.

• provides the highest level of security. It uses the separate MBG server as a stateful proxy for Internet communications.

This configuration uses a MiCollab server connected to a second MBG server in one of the following deployments:

• MiCollab in LAN mode with Web Proxy running on a second MBG server in the DMZ (see Figure 10), or

• MiCollab in LAN mode with Web Proxy running on a second MBG server on the network edge (see Figure 11).
The deployment of MiCollab server in the Local Area Network (LAN) connected to a second MBG server in the Demilitarized Zone (DMZ) supports two variants:

- The **Web Proxy** deployment consists of a MiCollab server on the corporate LAN with Web Proxy running on an MBG server in the DMZ. Remote web browser users connect to the MiCollab server through the Web Proxy service that is running on the MBG server in the DMZ.

- The **Teleworker Service and Web Proxy** deployment consists of a MiCollab server on the corporate LAN with Teleworker and Web Proxy on a MBG server located in the DMZ. The MBG is a multi-service software application with a Web Proxy that provides a secure method for Teleworker Web clients to connect to the LAN. Teleworker service is installed on both the MiCollab and MBG servers. The Teleworker service in the MiVoice Border Gateway (MBG) is used to support the teleworkers in the DMZ. The Teleworker service in the MiCollab server is only used to remotely manage the Teleworker phones that are configured on the MBG server. The Web Proxy service is also installed in this configuration.

![Figure 10: LAN Deployment with MBG in DMZ](image-url)
SECURE RECORDING CONNECTOR DEPLOYMENTS

MiCollab supports the Secure Recording Connector (SRC) services in the following deployment configurations:

- MiCollab in LAN Mode
- MiCollab in LAN Mode with MBG Server in Network Gateway Mode
- MiCollab in LAN Mode with MBG Server in the DMZ

MICOLLAB IN LAN MODE

In this configuration, MiCollab is installed in LAN mode with either the MiCollab Server Software Base Package or MiCollab Virtual Appliance Software Base Package which include the MBG application. The MBG application on the MiCollab platform provides SRC services for devices on the LAN only. SRC services are not supported for teleworker devices.

**Note:** MiCollab with SRC is not supported in Network Edge mode.
Supported Configurations

Refer to the MiCollab Engineering Guidelines for deployment configuration details.

Figure 12: MiCollab with SRC in LAN Mode

MICOLLAB IN LAN MODE WITH MBG SERVER IN NETWORK EDGE OR DMZ

In this configuration, you deploy the MiCollab in the LAN or DMZ with the MiCollab Base Software Package. This software package allows the teleworker and SRC licenses to be shared with an MBG server in the network edge or DMZ. A separate MBG server is installed in the network edge or DMZ. The MBG application on the MiCollab platform:

- provides the SRC services for the LAN devices, and
- allows you to manage the teleworker devices supported by the MBG server that is located on the network edge or in the DMZ.

The standalone MBG server on the network edge or DMZ provides the teleworker and SRC services for all WAN devices. Cluster zoning is used to minimize the teleworker and call recording licensing requirements on the LAN side. After you create a cluster and divide it into two zones: MiCollab server in a "LAN" zone and MBG in the "Default" zone, the teleworker and call recording licenses are shared between the MiCollab and MBG servers. The devices in the "LAN" zone each consume one call-recording license (when in use) but no teleworker licenses. Teleworker sets in the "Default" zone each consume one Teleworker license, and if required one call recording license (when in use).
LARGE SCALE MULTI-MICOLLAB DEPLOYMENTS

The following large scale multi-MiCollab deployments are supported:

• Up to eight MiCollab servers with 40,000 users in MiCollab with multiple MiVoice Business platforms:

Active Directory is not supported for multiple MiCollab servers.
SUPPORTED APPLICATIONS

The applications supported by a MiCollab installation are dependent on the following criteria:

• Communications platform
• Deployment configuration, and
• MiCollab platform.

MIVOICE BUSINESS COMMUNICATION PLATFORMS

For the supported MiVoice Business communications platforms, the following MiCollab applications are supported:

• NuPoint Unified Messaging
• Speech Auto Attendant
• MiCollab Client in either integrated or co-located mode; see page 28 for a description of these modes.
• MiCollab Audio, Web, and Video (AWV) Conferencing.
• MiVoice Border Gateway: Refer to the MiVoice Border Gateway Installation and Maintenance Guide for a table of the supported features.
• MiVoice for Skype for Business
• Vidyo

Note: The Speech Navigation option is only supported if NuPoint Unified Messaging is the only installed application. This restriction applies to both the MiCollab server and virtual MiCollab. Although all applications are installed in the vMiCollab OVA, if you only apply NuPoint licenses (à la carte) then it is considered a single application installation.

CLIENT STATION SUPPORT

MiCollab clients (for example, MiCollab End User portal, MiCollab System Administrator portal, MiCollab AWV clients, and so forth) are supported on various operating systems. Refer to the MiCollab Engineering Guidelines for details.
FEATURE SUPPORT

The tables in this appendix list the features supported on the clients for the platforms. In order for a feature to be supported on the client on a specific communications platform, the feature must be “Yes” in both the client column and the platform column.

CONTACT MANAGEMENT FEATURES

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>MICOLLAB CLIENTS</th>
<th>MOBILE CLIENTS</th>
<th>WEB</th>
<th>MAC</th>
<th>NG PC CLIENT</th>
<th>DESKTOP (LEGACY) CLIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate contacts</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-employee corporate contacts</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Contact card</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Search contacts</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Search contact attributes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Favorites contact group</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Add contacts to multiple groups</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Edit / create groups</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Add caller to contacts option</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Search contact list</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Call from search results</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Dial from high-lighted number in mobile</td>
<td>Yes</td>
<td>n/a</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</table>

CONTACT ACCESS

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>MICOLLAB CLIENTS</th>
<th>MOBILE CLIENTS</th>
<th>WEB</th>
<th>MAC</th>
<th>NG PC CLIENT</th>
<th>DESKTOP (LEGACY) CLIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacts - Outlook</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Contacts - Google</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Corporate directory - LDAP</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Corporate directory - Active Directory</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Personal directory</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>
# CALL FEATURES

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>MOBILE CLIENTS</th>
<th>WEB</th>
<th>MAC</th>
<th>NEW NG PC CLIENT</th>
<th>DESKTOP (LEGACY) CLIENT</th>
<th>MIVB</th>
<th>MX-ONE</th>
<th>MIV 5000</th>
<th>MIV400</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACD features (agent login/out / make busy/busy cancel)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Agent based console</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>ACD status</td>
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<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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</tr>
<tr>
<td>Dial from Outlook</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Global DND and forward control</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Call forward</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Call history - missed calls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Call history - dialed calls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tr>
<tr>
<td>Call history - received calls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Make call from call history entries</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Recent call list</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Frequent call list</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Record call - deskphone</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Record call - softphone</td>
<td>MIVB MX-ONE</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>Yes</td>
<td>Yes</td>
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<td>Call annotation notes</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
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<tr>
<td>Direct outward dialing (DOD)</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Multiline / basic multicall</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Speed call keys</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Note:** MiCollab for Mobile Client for Windows phone does not support Video, MiTeam, and Call accept in lock screen.
<table>
<thead>
<tr>
<th>FEATURES</th>
<th>MICOBLLAB CLIENTS</th>
<th>MIVB</th>
<th>MX-ONE</th>
<th>MIV 5000</th>
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<tbody>
<tr>
<td></td>
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<td>WEB</td>
<td>MAC</td>
<td>NEW NG</td>
<td>DESKTOP</td>
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<td>CLIENTS</td>
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<td>PC CLIENT</td>
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<td>Accept call</td>
<td>MiVB</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td></td>
<td>EHDU</td>
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<tr>
<td></td>
<td>Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blind transfer</td>
<td>MiVB</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>EHDU</td>
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<tr>
<td></td>
<td>Only</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Toggle</td>
<td>MiVB</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>EHDU</td>
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<td></td>
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<tr>
<td></td>
<td>Only</td>
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<tr>
<td>Supervised transfer</td>
<td>MiVB</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td></td>
<td>EHDU</td>
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<td></td>
<td>Only</td>
<td></td>
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<td>Hold</td>
<td>MiVB</td>
<td>Yes</td>
<td>Yes</td>
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<td>EHDU</td>
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<td></td>
<td>Only</td>
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<tr>
<td>Move call to other devices</td>
<td>MiVB</td>
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<td>Yes</td>
<td>Yes</td>
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<td>(hand-off / take)</td>
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<td></td>
<td>Only</td>
<td></td>
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</tr>
<tr>
<td>Hand-off to softphone</td>
<td>MiVB</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>EHDU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-party conferencing</td>
<td>MiVB</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>EHDU</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send IM to caller</td>
<td>MiVB</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>EHDU</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Only</td>
<td></td>
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</table>
## MiCollab Client Feature Support

### SOFTPHONE CALL CONTROL (SIP)

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>MOBILE CLIENTS</th>
<th>WEB</th>
<th>MAC</th>
<th>NEW NG PC CLIENT</th>
<th>DESKTOP (LEGACY) CLIENT</th>
<th>MIVB</th>
<th>MX-ONE</th>
<th>MIV 5000</th>
<th>MIV400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept call</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Transfer</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Supervised transfer</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Toggle</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hold</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hang up</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Move call to other devices (hand-off / take)</td>
<td>Yes</td>
<td>MiVB</td>
<td>MiVB</td>
<td>MiVB</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3-party conferencing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Send IM to caller</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Auditory alerts (accessibility/disability)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Call pickup group log on/log off</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>?</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Do Not Disturb (DND) setting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Initiate video call from Contact List (via escalation from audio to video)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Seamlessly escalate from audio to video</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Record video</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Integration with Vidyo - Meeting Room (HD) Video system</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

n/a = not applicable

**Note:** Softphone available on following mobile operating systems: Android, iPhone, Windows 8 phone, and Windows 10 phone.
## USABILITY

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>MICOLLAB CLIENTS</th>
<th>MIVB</th>
<th>MX-ONE</th>
<th>MIV 5000</th>
<th>MIV400</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MOBILE CLIENTS</td>
<td>WEB</td>
<td>MAC</td>
<td>NG PC CLIENT</td>
<td>DESKTOP (LEGACY) CLIENT</td>
</tr>
<tr>
<td>Mute key (for softphone)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Handset receiver volume control (for softphone)</td>
<td>n/a</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Plantronics RCC (SDK)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Jabra RCC (SDK)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Redial</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Incoming call audio notification</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>System tray status icon</td>
<td>n/a</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Ability to switch modes (desk/softphone)</td>
<td>n/a</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Speaker phone</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Avatar support on client</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Avatar support on MiVoice 69xx IP Phones</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Select dialed device preference - member of PRG</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Active call window</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Visual voice mail - play, delete Messages</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MiCollab advanced messaging support</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>n/a</td>
</tr>
<tr>
<td>VM - sync MWI</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Program Mitel desktop phones - favorite contacts / speed dial</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Launch pad - speed-dial / application launch</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>User log-in notification</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Preferential contacts</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>MiCollab - console</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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### MiCollab Client Feature Support

#### PRESENCE AND STATUS

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>MICOLLAB CLIENTS</th>
<th>MOBILE CLIENTS</th>
<th>WEB</th>
<th>MAC</th>
<th>NG PC CLIENT</th>
<th>DESKTOP (LEGACY) CLIENT</th>
<th>MIVB</th>
<th>MX-ONE</th>
<th>MIV 5000</th>
<th>MIV400</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSS feeds - user defined</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>PIM integration</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Knowledge management</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Account codes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
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<td>Collaboration</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>MiTeam</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

#### Voice presence - on/off hook
- Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

#### Presence of any device in ring group - i.e. softphone
- Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

#### Video Presence - available to receive video calls
- Set Availability | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

#### Dynamic Status - control incoming call based on presence
- Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

#### Dynamic status change based on calendar (Exchange)
- Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

#### Dynamic status change based on time of day
- Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes |

#### Dynamic Status change based on geographical location
- Yes | No | No | No | No | Yes | Yes | Yes | Yes | Yes |

#### Auto IM responder - based on dynamic status
- No | No | No | No | Yes | Yes | Yes | Yes | Yes | Yes |

#### Advisory message - free form
- Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
Appendix B

MICOLLAB NUPOINT FEATURE SUPPORT
FEATURE SUPPORT IN MiCOLLAB-NUPOINT

This appendix describes the NuPoint features supported by MiCollab with MiVoice Business integrations.

The MiCollab-NuPoint product does not support all of the same features and functionality of NuPoint UM standalone. The following section outlines the differences between the two implementations of the NuPoint UM product.

GENERAL DIFFERENCES

• MiCollab-NuPoint is licensed on a per mailbox basis. NuPoint standalone is licensed on a per port basis.

• Single Point User Provisioning applies to MiCollab applications, including MiCollab-NuPoint, but does not apply to NuPoint standalone.

• The MiCollab NuPoint application is supported as a trusted service on MiVoice Business systems. NuPoint standalone is not supported as a trusted service on MiVoice Business.

• UCC licensing bundles apply to MiCollab-NuPoint; they are not applicable to NuPoint standalone.

• MiCollab-NuPoint is available as a software only solution, a turnkey platform, and as a virtual application.

• MiCollab platforms can be deployed on the LAN or on the network edge.

PBX AND EMAIL SUPPORT

MiCollab-NuPoint supports the following:

• Integration with Mitel Axxess PBX through a 5000 Gateway over IP.

• Integration with MiVoice Business/3300 ICP.

• Integration with MiVoice MX-ONE.

• Integration with MiVoice Office 5000.*

• Integration with MiVoice Office 250.*

  * NuPoint standalone does not support these integrations.

MiCollab-NuPoint does not support the following:

• Integration with MiVoice Office 400

• Integration with Mitel SX-200.

• Integration with Mitel SX-2000.

• Integration with third-party PBX integrations (e.g. Dialogic Media Gateway 1000).

• T1/E1 integrations.

• Integration with the Mitel Messaging Gateway.

• Integration with multiple PBXs.
• MWI information shared between multiple PBXs.
• Message Waiting Notifications for PBXs that do not support MWI.

USER INTERFACE, LANGUAGE AND PROMPT SUPPORT
• MiCollab-NuPoint does not support the Competitive Telephone User Interface feature.
• MiCollab systems support either numeric or mnemonic prompts in North American English. The option to provide some users with mnemonic prompts and other users with numeric prompts in a single system is not available with MiCollab-NuPoint. See “System Prompt Language Support” on page 81 for details.
• MiCollab-NuPoint and NuPoint standalone support different languages. See “MiCollab-NuPoint Language Support” on page 82 for details.
• MiCollab-NuPoint supports only English TUI prompts for Call Director (Personal Edition).
• MiCollab-NuPoint supports Speech Auto Attendant and Text-to-Speech only in North American and UK English. MiCollab-NuPoint does not support the bilingual capability.
• With MiCollab-NuPoint, the languages for the GUIs and TUIs are set from the MiCollab administrator portal, not from NuPoint via an LCOS setting. End users can set their own prompt language on the Settings page of their My Unified Communications portal.

BASE FEATURE SUPPORT
• On a MiCollab-NuPoint system, while all languages are included in the base pack, features that require multiple mailboxes may require you to purchase additional mailbox licenses.
• MiCollab-NuPoint supports up to 50 simultaneous Web View sessions.
• On MiCollab-NuPoint, every mailbox includes a Call Director license.
• The NuPoint Multilingual Service feature provides support for up to five prompt languages. However, on MiCollab-NuPoint systems, the following configuration options are not supported:
  - Custom language selection prompt
  - Language selection prompt timeout
  - Play only second language selection prompt.

Also note the following concerning the NuPoint Multilingual Service feature:
• On MiCollab-NuPoint, the Language Selection Template in Call Director is assigned to users through LCOS.
• MiCollab-NuPoint does not provide an option to create custom language prompts. System prompts must be used on MiCollab systems.

OPTIONAL FEATURE SUPPORT
• MiCollab-NuPoint and NuPoint standalone support different numbers of Advanced and Standard Unified Messaging users. See “Summary of Standard and Optional Features” on page 79 for details regarding system capacities.
MiCollab NuPoint Feature Support

- MiCollab-NuPoint cannot be integrated with third-party databases such as Active Directory for Speech Auto Attendant phonebook and presence information. On MiCollab-NuPoint, SAA must collect its user data from the MiCollab database.
- MiCollab-NuPoint does not support Hospitality features and applications.
- MiCollab-NuPoint does not support Voice Mail Networking using the Audio Messaging Interchange Specification (AMIS).
- MiCollab-NuPoint does not support SMS.

SYSTEM ADMINISTRATION AND MAINTENANCE DIFFERENCES

- In MiCollab-NuPoint, user and mailbox administration is performed in the MiCollab User and Provisioning application rather than through the NuPoint application. The User and Provisioning application provides a single point of provisioning for MiCollab applications.
- In MiCollab-NuPoint, system administration for NuPoint is accessed through the MiCollab Administrator web portal.
- In MiCollab-NuPoint, system administration for Active Directory is accessed through the MiCollab Administrator web portal.
- Backups and restores are performed for all MiCollab applications. You cannot back up and restore only the NuPoint database.
- The configurable passcode expiry feature is not supported in MiCollab-NuPoint.
- The Hot Desk PIN synchronization feature is available in MiCollab-NuPoint. To enforce a controlled level of security for Hot Desk users, administrators can configure passcode synchronization. Hot Desk PINs can then be synchronized with NuPoint TUI passcodes and managed through the NuPoint voice system.
- In MiCollab-NuPoint, upgrades and migrations are performed through MiCollab, not through the NuPoint application.
- In MiCollab-NuPoint, software assurance and licensing are managed through MiCollab, not through the NuPoint application.
PLATFORM COMPATIBILITY - COMMON FEATURES

This section lists the most common features supported by NuPoint UM for the MiVoice Business, MiVoice Office 250, MiVoice MX-ONE and MiVoice 5000 call control platforms.

Table 2: Platform Compatibility - Features

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>MiVOICE BUSINESS</th>
<th>MiVOICE BUSINESS</th>
<th>MiVOICE OFFICE 250</th>
<th>MiVOICE MX-ONE</th>
<th>MiVOICE 5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
<td>MiTAI</td>
<td>SIP</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Call Transfers:</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• Blind Transfers: A Blind Transfer dials the destination and then releases the call regardless whether the destination is busy or not answering.</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• Supervised Transfer: A Supervised Transfer waits for the called party to answer before completing the transfer. If the call is not answered or the called party is busy, it returns to the call flow for further processing.</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• Screened Transfer: A Screened Transfer, is similar to a Supervised Transfer, except that the caller’s name is first recorded and then played back to the called person. The called person has the option to accept or reject the call.</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>• Alternate Transfer: An Alternate Transfer is used to route calls to an external destination, such as a cell phone or pager, and for text messaging.</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Message Waiting Indicator (MWI): MWI synchronization.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Pager:</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>The Pager application causes the NuPoint Unified Messaging server to initiate, rather than receive, a telephone call. It is used for sending messages to pagers, but also for a number of other functions that require out dials. An out dial is a call placed by the server.</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Fax:</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Receiving and replying to fax messages.</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>DTMF:</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Dual tone multi frequency (DTMF) recognition and collection.</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>G.729 Support:</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>If the system is licensed for G.729, when you program a line group you can select between two audio codecs, G.711 (the default) and G.729. Without a license, only G.711 is supported.</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Speech Recognition Features: Speech Auto Attendant and Speech Navigation.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes for MiVoice Office 250</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>In MiCollab NP, Speech Auto Attendant is available in North American (NA) and UK English, and Speech Navigation is available in NA English.</td>
<td></td>
<td></td>
<td>Not available for MX-ONE and MiVoice 5000.</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
SUMMARY OF STANDARD AND OPTIONAL FEATURES

Table 3 lists the standard and optional features that are available with a NuPoint UM application on the MiCollab platform. Refer to the NuPoint Unified Messaging General Information Guide for descriptions of these features:

Table 3:   Standard and Optional Features

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>Availability on MiCollab-NuPoint Product</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MiVOICE BUSINESS</td>
</tr>
<tr>
<td>Text to Speech (TTS):</td>
<td>Yes</td>
</tr>
<tr>
<td>TTS is used to read email to Advanced UM users in North American (NA) English.</td>
<td></td>
</tr>
<tr>
<td>Resiliency:</td>
<td>Yes</td>
</tr>
<tr>
<td>When NuPoint UM is integrated with a resilient MiVoice Business system, resiliency is supported for the voicemail services. When in resilient mode, voice mail ports conform to the behavior of resilient IP phones. It is not necessary to configure the NuPoint UM system for resiliency on MiCollab; it is configured entirely on the MiVoice Business communications platform.</td>
<td></td>
</tr>
<tr>
<td>Voice Mail Soft Keys:</td>
<td>Yes</td>
</tr>
<tr>
<td>The Voice Mail Soft Keys feature allows users to control voice mail functions through context-sensitive keys on the telephone.</td>
<td></td>
</tr>
<tr>
<td>Record-A-Call (RAC):</td>
<td>Yes</td>
</tr>
<tr>
<td>RAC is an optional feature that allows mailbox subscribers to record both ends of a two-party external call at their phone. Recorded conversations are delivered to the user's voice mailbox. Unlike regular voice mail messages, RAC messages are stored immediately as saved messages, so they do not trigger Message Waiting Indicator on the user's telephone.</td>
<td></td>
</tr>
</tbody>
</table>
### Table 3: Standard and Optional Features (continued)

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>Availability on MiCollab-NuPoint Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution Lists</td>
<td>Yes</td>
</tr>
<tr>
<td>Message Management</td>
<td>Yes</td>
</tr>
<tr>
<td>NP Receptionist</td>
<td>Yes</td>
</tr>
<tr>
<td>Multilingual Service</td>
<td>Yes</td>
</tr>
<tr>
<td>Call Director - Corporate Edition</td>
<td>Yes</td>
</tr>
<tr>
<td>Classes of Service</td>
<td>Yes</td>
</tr>
<tr>
<td>System Day/Night Hours</td>
<td>Yes</td>
</tr>
<tr>
<td>Dial-by-Name</td>
<td>Yes</td>
</tr>
<tr>
<td>Dial-Back</td>
<td>Yes</td>
</tr>
<tr>
<td>System Prompts</td>
<td>Yes</td>
</tr>
<tr>
<td>Wait Prompts</td>
<td>Yes</td>
</tr>
<tr>
<td>Pager Application</td>
<td>Yes</td>
</tr>
<tr>
<td>RAD Support</td>
<td>Yes</td>
</tr>
<tr>
<td>Message Waiting Notification</td>
<td>Yes</td>
</tr>
<tr>
<td>Unified Messaging (STMP)</td>
<td>Yes</td>
</tr>
<tr>
<td>Functionally Partitioned System Administration (FPSA) for Web Console and Text Console</td>
<td>Yes</td>
</tr>
<tr>
<td>Visual Voice Mail</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Optional Features

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>Availability on MiCollab-NuPoint Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Directory Integration</td>
<td>Yes (via MiCollab-IDS)</td>
</tr>
<tr>
<td>Call Detail Recorder</td>
<td>Yes</td>
</tr>
<tr>
<td>Call Directory - Personal Edition</td>
<td>Yes</td>
</tr>
<tr>
<td>Competitive TUI Emulator</td>
<td>No</td>
</tr>
<tr>
<td>DMG Integrations</td>
<td>No</td>
</tr>
<tr>
<td>Hospitality</td>
<td>No</td>
</tr>
<tr>
<td>Language Support</td>
<td>Yes</td>
</tr>
<tr>
<td>NP Cut Through Paging</td>
<td>Yes</td>
</tr>
<tr>
<td>NP FAX Services</td>
<td>Yes</td>
</tr>
<tr>
<td>NP Forms</td>
<td>Yes</td>
</tr>
<tr>
<td>NP Net</td>
<td>Yes</td>
</tr>
<tr>
<td>NP Ondemand</td>
<td>Yes</td>
</tr>
<tr>
<td>NP Ondemand</td>
<td>Yes</td>
</tr>
<tr>
<td>NP Rapid Dial</td>
<td>Yes</td>
</tr>
<tr>
<td>NP TDD</td>
<td>No</td>
</tr>
<tr>
<td>NP Wakeup</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 3: Standard and Optional Features (continued)

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>Availability on MiCollab-NuPoint Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP-UM IP Miscellaneous Applications</td>
<td>Yes</td>
</tr>
<tr>
<td>PMS Integration</td>
<td>No</td>
</tr>
<tr>
<td>Record A Call (see Note 1)</td>
<td>Yes</td>
</tr>
<tr>
<td>Redundancy - NP-UM System</td>
<td>No</td>
</tr>
<tr>
<td>Redundancy - Hard Disk</td>
<td>No</td>
</tr>
<tr>
<td>Resiliency - Voice Mail Resiliency in MiVoice Business Clusters (only)</td>
<td>Yes</td>
</tr>
<tr>
<td>Softkey Support (see Note 1)</td>
<td>Yes</td>
</tr>
<tr>
<td>SMS Notification (UK only)</td>
<td>Yes</td>
</tr>
<tr>
<td>Speech Auto Attendant (See Note 2)</td>
<td>Yes</td>
</tr>
<tr>
<td>Speech Navigation (See Note 3)</td>
<td>Yes</td>
</tr>
<tr>
<td>Text to Speech (See Note 2)</td>
<td>Yes</td>
</tr>
<tr>
<td>Unified Messaging - Standard</td>
<td>Yes</td>
</tr>
<tr>
<td>Unified Messaging - Advanced</td>
<td>Yes</td>
</tr>
<tr>
<td>Visual Voice Mail (MiVoice Business only; See Note 4)</td>
<td>Yes</td>
</tr>
<tr>
<td>Voice Profile for Internet Mail (VPIM)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note 1: No charge option.

Note 2: Speech Auto Attendant and Text to Speech are available in North-American (NA) English and UK English only.

Note 3: Speech Navigation is available in North-American (NA) English only.

Note 4: Only users on MiVoice Business platforms can view Visual Voice Mails on their phones. However, Visual Voice Mail to MiCollab Client is supported on all the MiVoice platforms (that is, MiCollab Client users can see a NuPoint UM visual voice mail message regardless of which MiVoice Call Control platform they are supported on).

SYSTEM PROMPT LANGUAGE SUPPORT

Table 4 summarizes the system prompt language support for MiCollab-NuPoint:

Table 4: Summary of System Prompt Support for MiCollab-NuPoint

<table>
<thead>
<tr>
<th>PROMPT SET</th>
<th>WHAT IS IT?</th>
<th>SUPPORTED PROMPT LANGUAGES</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numeric</td>
<td>Press 7 to play</td>
<td>See Table 5</td>
<td>NA English and choice of one other language is included in NuPoint UM base software</td>
</tr>
<tr>
<td>Numeric (default) or Mnemonic</td>
<td>Press 7 to play OR Press P to play</td>
<td>NA English</td>
<td>Included in NuPoint UM application software</td>
</tr>
</tbody>
</table>

Note 1: The prompt sets default to Numeric.
### MICOLLAB-NUPOINT LANGUAGE SUPPORT

Table 5 summarizes the languages supported for NuPoint UM features on MiCollab:

<table>
<thead>
<tr>
<th>LANGUAGES</th>
<th>NP-UM ON MICOLLAB PROMPTS</th>
<th>WEB VIEW GUI</th>
<th>CALL DIRECTOR PERSONAL EDITION (SEE NOTE 1) Prompts</th>
<th>WEB VIEW GUI</th>
<th>TEXT -TO-SPEECH (SEE NOTE 2)</th>
<th>FAX PROMPTS</th>
<th>SAA FOR NP-UM ON MICOLLAB PROMPTS</th>
<th>EXTENDED ABSENCE GREETING PROMPTS</th>
<th>CLOCK FORMAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>24</td>
</tr>
<tr>
<td>Danish</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>Dutch</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>English (NA)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>12</td>
</tr>
<tr>
<td>English (UK)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>12</td>
</tr>
<tr>
<td>Finnish</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>24</td>
</tr>
<tr>
<td>French (Canadian)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>French (European)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>German</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>24</td>
</tr>
<tr>
<td>Italian</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>Mandarin</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>24</td>
</tr>
<tr>
<td>Norwegian</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>24</td>
</tr>
<tr>
<td>Portuguese (Brazil)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>24</td>
</tr>
<tr>
<td>Portuguese (European)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>Spanish (LA)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>12</td>
</tr>
<tr>
<td>Spanish (European)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>Swedish</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>24</td>
</tr>
</tbody>
</table>

**Note 1:** Call Director - Personal Edition TUI prompts are only supported in English.

**Note 2:** Text to Speech is used in SAA for playing Mailbox and Directory names and used in Advanced UM Email playback. Text to Speech is available in NA and UK English only.