

# MiCollab Advanced Messaging Mobile Client Service Administration Guide

For version 9.0 and above

## Notice

The information contained in this document is believed to be accurate in all respects but is not warranted by Mitel Networks™ Corporation (MITEL®). Mitel makes no warranty of any kind with regards to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The information is subject to change without notice and should not be construed in any way as a commitment by Mitel or any of its affiliates or subsidiaries. Mitel and its affiliates and subsidiaries assume no responsibility for any errors or omissions in this document. Revisions of this document or new editions of it may be issued to incorporate such changes.

No part of this document can be reproduced or transmitted in any form or by any means - electronic or mechanical - for any purpose without written permission from Mitel Networks Corporation.

## Trademarks

The trademarks, service marks, logos and graphics (collectively "Trademarks") appearing on Mitel's Internet sites or in its publications are registered and unregistered trademarks of Mitel Networks Corporation (MNC) or its subsidiaries (collectively "Mitel") or others. Use of the Trademarks is prohibited without the express consent from Mitel. Please contact our legal department at [legal@mitel.com](mailto:legal@mitel.com) for additional information. For a list of the worldwide Mitel Networks Corporation registered trademarks, please refer to the website: <http://www.mitel.com/trademarks>.

© Copyright 2017, Mitel Networks Corporation

All rights reserved

# Contents

<b>Preface</b>	<b>5</b>
References	5
Documentation	5
Documentation Updates	6
Help	6
Document Conventions	6
Frequently Used Terms	7
<b>Overview</b>	<b>8</b>
<b>What Is MiCollab AM Mobile Service?</b>	<b>9</b>
MiCollab AM Mobile for Android	9
MiCollab AM Mobile for iPhone	9
MiCollab AM Mobile for Web	9
How It Works	10
<b>Before You Install</b>	<b>11</b>
Web Server Installation Requirements	11
Site Requirements	11
Microsoft Web Server Requirements	11
Microsoft Windows Apache Web Server Requirements	11
Linux-based Apache Web Server Requirements	12
Browser Requirements	12
<b>Installing MiCollab AM Mobile Service Server Components</b>	<b>13</b>
Web Server Software and Other Required Software	13
Configuring IIS	13
Configuring Apache Server	14
<b>Installing the PHP Interpreter</b>	<b>15</b>
Creating Working Folders in the PHP Directory	15
Editing the PHP.ini File (Linux)	15
Testing the PHP Interpreter	16
<b>Changing the Permissions of the Config Directory</b>	<b>18</b>

<b>Configuring the Firewall</b>	<b>19</b>
Internal to DMZ ports	19
DMZ to Internet ports	19
Configuring Firewall for MiCollab AM Mobile Service	20
<b>Setting Up Apple Push Notifications</b>	<b>21</b>
<b>Registering for Google Push Notifications</b>	<b>22</b>
Obtain Google Cloud Messaging Sender ID and Token	22
Incoming Call Notification	23
Badge Notification	23
<b>Installing MiCollab AM Mobile Service</b>	<b>24</b>
<b>Changing the Permissions of the Certificates Directory</b>	<b>25</b>
<b>Configuring MiCollab AM Mobile Service</b>	<b>26</b>
<b>Configuring MiCollab AM Mobile for Android Clients</b>	<b>28</b>
<b>Configuring MiCollab AM Mobile for iPhone Clients</b>	<b>30</b>
<b>Configuring MiCollab AM Subscriber Mailboxes</b>	<b>31</b>
Long Distance Enabled	32
Dialing Plan Setup	32
Trunk to Trunk Reply	32
<b>Upgrading MiCollab AM Mobile Service</b>	<b>33</b>

# Preface

This guide is written for Mitel certified MiCollab Advanced Messaging (MiCollab AM) administrators who are experienced with MiCollab AM and are familiar with its procedures and terminology. This book assumes you are familiar with MiCollab AM, the Microsoft Windows® operating system or the Linux® operating system as well as a working knowledge of web servers and Internet protocols.

Use this document in conjunction with the following Mitel documentation:

- *System Installation and Configuration Guide*
- *System Administration Guide*
- *Software Release Notice*
- *MiCollab AM online help system*

## References

A catalog of technical documentation is included on the MiCollab AM Installation Media. If you are installing any advanced applications, such as Networking and Fax Server applications, you should refer to the appropriate technical documentation for application and installation information.

## Documentation

The technical documentation is produced in the PDF format and requires the PDF reader to view it. The documentation set for this MiCollab AM includes the following documents and resources:

- **Developer Resources.** Contains programming guides and API references for developers for integrating the server clients and web applications with MiCollab AM.
- **Integration Technical Notes (ITN).** Contains a set of guides that describe the integration methods and instructions for a variety of phone systems to work with MiCollab AM. The ITNs are generally used by resellers or administrators who are experienced with MiCollab AM and familiar with the integration procedures and terminology.
- **Quick Reference Card (QRC).** Contains shortcuts and quick instructions telling subscribers how to access and use the messaging system.
- **Server Documentation.** Available as a PDF only. Contains administrative guides for administrators about installing, configuring, and administering the messaging system, and user guides for subscribers about accessing the messaging system and checking and sending messages.
- **Spare Parts Documentation.** Contains a set of guides that describe the instructions for installing and configuring hardware parts to work with MiCollab AM. These documents are written for Mitel certified MiCollab AM technicians who are experienced with MiCollab AM and familiar with the procedures and terminology.

- **Software Release Notice (SRN).** This notice introduces the new features, capabilities, and hardware/software requirements for the corresponding MiCollab AM version.

## Documentation Updates

Documentation updates may be available from the following sources:

- Mitel certified technicians can view or download documents and program files from our partner web site: [connect.mitel.com/connect](https://connect.mitel.com/connect)

## Help

The primary source of information about MiCollab AM is the online help available within any of its administrative utilities. You can access **Help** as follows:

- Click the **Help** button in the dialog box or window in which you are working
- Press the **F1** key at any time.

## Document Conventions

The following conventions are used in this document:

- **Key Names.** Names of keys on the keyboard are shown in a box.

Example: **Enter**

When two keys must be pressed simultaneously, they are joined by a + sign.

Example: **Alt** + **Tab**

- **Reference to Document.** *Italics* fonts can also signify the titles of other documents.

Example: See the *System Installation and Configuration Guide*.

- **UI Element Names.** Names of UI elements such as dialog windows, screens, menu items, tabs, buttons, icons, etc. are shown in bold.

Example: On the **Startup** screen, click the **Start** icon.

- **User Input.** Information required to be typed is shown in italics.

Example: Type the password *voicemail*.

- **Warning, Caution, Important, and Notes.** Text for the contents that require attention are shown as follows:

**WARNING** A warning paragraph advises you of circumstances that can result in the loss of data, harm to the system server platform, or personal harm.

**CAUTION** Failure to follow these recommendations can result in unauthorized access to the system and consequent loss of data.

**IMPORTANT** An important paragraph gives decision-making information or informs you of the order in which tasks need to be completed.

**NOTE** A note gives additional information, provides an explanation, or indicates an exception to the information in the preceding text.

## Frequently Used Terms

Table 1. Frequently Used Terms

Terms	Description
System Server	<p>Term refers to an organization's computer platform(s) that have MiCollab AM software installed and handles the core system functions such as storing messages, database.</p> <p>It can also refer generically to the System Server platform, the Call Server platform, or both. The term is most often used to describe a software or hardware installation or configuration practice where the role of the server platform is not specifically expressed.</p>
Call Server	<p>Term refers to an organization's computer platforms that have MiCollab AM software installed and serve as the interface to the system (PBX). The Call Server(s) interface with the System Server for the purpose of accessing messages, and database.</p>

# Overview

This guide describes how to install the MiCollab AM Mobile Service and assumes that MiCollab AM version 9.0 is running successfully. It contains the following:

- An overview of MiCollab AM Mobile Service
- Installation requirements
- Instructions for preparing your web server to support the MiCollab AM Mobile Service
- Instructions for installing and configuring MiCollab AM Mobile Service

To install MiCollab AM Mobile Service in an organization successfully, the assistance of the following individuals, who constitute the installation team, is required:

- MiCollab AM system administrator
- Microsoft Windows Server administrator
- Web server administrator
- MIS/IT support staff

**IMPORTANT** Ensure each member of the installation team receives a copy of this System Administration Guide several days or weeks before the installation of MiCollab AM Mobile Service.



# What Is MiCollab AM Mobile Service?

MiCollab AM offers several different ways for users to control and administer available mailbox options. In addition to Web PhoneManager™, the following tools are available for mobile use:

- MiCollab AM Mobile for Android: A fully featured mobile client for Android™ based smart phones.
- MiCollab AM Mobile for iPhone: A fully featured mobile client for the iPhone®.
- MiCollab AM Mobile for Web: A more basic mobile optimized version of Web PhoneManager intended for use on mobile devices that don't support a native client.

**NOTE** For software version 8.7 SU4 and above, depending on the system configuration, the user may be automatically logged out of the mobile client after a period of inactivity. The user must re-enter their password to continue using the mobile client.

## MiCollab AM Mobile for Android

MiCollab AM Mobile for Android allows subscribers to manage their mailboxes and messages using an Android operating system based smart phone.

It provides a convenient application screen and standard handset based controls that help to organize messages and mailbox settings and that allows subscribers quick and easy access to their mailbox. Subscribers with questions about MiCollab AM Mobile can access online help by pressing their phone's **Menu** key and selecting settings. Help is available there by clicking the **Navigation Menu → Help**.

## MiCollab AM Mobile for iPhone

**IMPORTANT** In order to use MiCollab AM Mobile for iPhone, MiCollab AM 5.1 or higher is required.

MiCollab AM Mobile for iPhone allows subscribers to manage their mailboxes and messages using an iPhone.

It provides a convenient application screen and standard handset based controls that help to organize messages and mailbox settings and that allows subscribers quick and easy access to their mailbox.

## MiCollab AM Mobile for Web

MiCollab AM Mobile for Web installs automatically with Web PhoneManager. If Web PhoneManager is installed, open the root URL for Web PhoneManager server and append /mobile to access the mobile phone browser optimized site. For example, if Web PhoneManager is installed as <http://server.mycompany.com>, use <http://server.mycompany.com/mobile> to access MiCollab AM Mobile

for Web. For more information on installing Web PhoneManager, see the Web PhoneManager Software Installation Guide.

## How It Works

MiCollab AM Mobile Service operates as a PHP web server application. It acts as a liaison between the subscriber's smart phone and the MiCollab AM System Server. When a subscriber opens the MiCollab AM smart phone application, a connection is established with the System Server. For security purposes, communication between the handset and the server is encrypted when an SSL certificate is installed and configured on the MiCollab AM Mobile server.

**NOTE** Although not required, installing an SSL certificate and implementing encrypted communication is strongly suggested.

**IMPORTANT** If using the *Availability* feature, be sure to synchronize the Mobile Server's clock with the System Server in order for the *Availability* automation to stay precise and perform accurate time calculation.

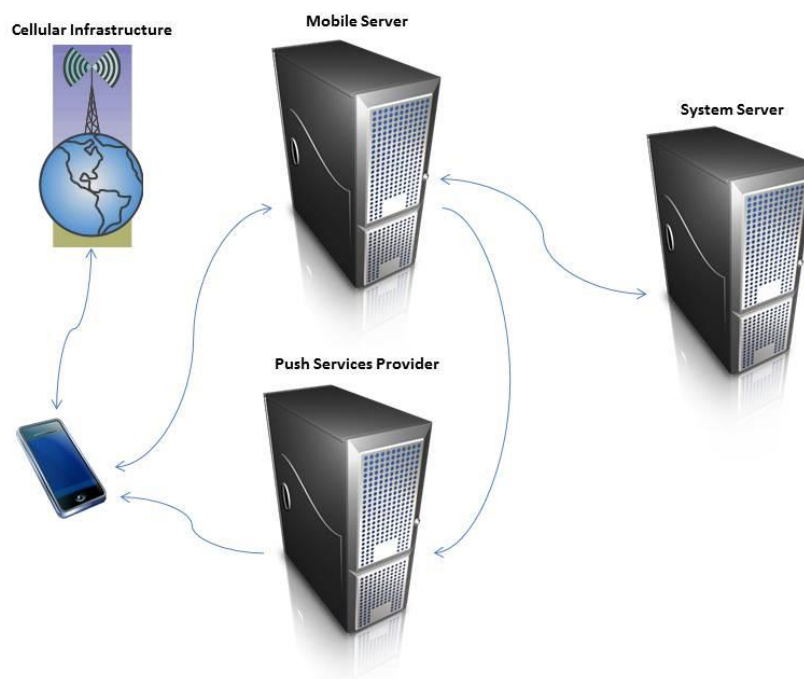


Figure 1. Overview of MiCollab AM Mobile Service

# Before You Install

This section lists the installation requirements for successfully installing MiCollab AM Mobile Service. Be sure to review and meet these requirements before continuing with the other procedures discussed in this document.

## Web Server Installation Requirements

Be sure to review the following installation requirements to ensure that the correct files, versions, and service packs are installed on your web server.

### Site Requirements

- TCP/IP-based connectivity between the MiCollab AM Mobile Service server and the MiCollab AM System Server
- MiCollab AM Mobile Service may run on the same physical server as Web PhoneManager™ and Message Cache Manager.

### Microsoft Web Server Requirements

- Windows Server 2008 R2 with Service Pack 1, Windows Server 2012 R2, or Windows Server 2016 (Server with Desktop Experience) with the Windows Internet Information Server (IIS) version 6.x, 7.0, 7.5, 8.x, or 10.x component installed
- World Wide Web Publishing Service installed and running
- PHP version 7.0 to 7.x with SOAP, XSL, cURL and OpenSSL modules installed
- To ensure web security using SSL, a certificate purchased from a Certificate Authority
- Access to a DVD/USB drive (for software installation)

### Microsoft Windows Apache Web Server Requirements

- Windows Server 2008 R2 with Service Pack 1, Windows Server 2012 R2, or Windows Server 2016 (Server with Desktop Experience)
- Apache Web Server versions 1.3.x or 2.2.x
- PHP versions 7.0 to 7.x with SOAP, XSL, cURL and OpenSSL modules installed
- To ensure web security using SSL, a certificate purchased from a Certificate Authority
- Access to a DVD/USB drive (for software installation)

## Linux-based Apache Web Server Requirements

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

- Current server-class Linux distribution, such as Fedora®, Debian®, or OpenSUSE® Linux
- Apache Web Server versions 1.3.x or 2.2.x
- PHP versions 5.6 or 7.0 with SOAP, XSL, cURL and OpenSSL modules installed
- To ensure web security using SSL, a certificate purchased from a Certificate Authority
- Access to a DVD/USB drive (for software installation)

## Browser Requirements

- Client browsers must support JavaScript.

# Installing MiCollab AM Mobile Service Server Components

Regardless of which server platform you choose to host MiCollab AM Mobile Service — IIS on Windows, Apache on Windows, or Apache on Linux — the basic stages of installation are as follows:

- Install or update the web server software.
- Install the PHP interpreter with its SOAP, XSL, cURL and OpenSSL modules.
- Install and configure the MiCollab AM Mobile Service software.

The following sections discuss this in more detail.

## Web Server Software and Other Required Software

Because of the variety of different web server platforms, this document assumes that you have the web server and all associated software installed and running. If the web server software is not installed, please refer to the documentation appropriate to your operating system and web server selection.

In addition to the web server software, for all web server platforms, install PHP. You can download the software at [www.php.net](http://www.php.net). Follow the installation instructions appropriate to your operating system and web server combination. For MiCollab AM Mobile Service specific configuration instructions, refer to the section, [Installing the PHP Interpreter](#).

## Configuring IIS

Before you configure IIS, add a folder to the \Inetpub\wwwroot folder on your web server. This folder can have any name. However, make a note of the name for later configuration. It becomes the root folder for the MiCollab AM Mobile Service administration web site.

- If you are deploying more than one site, each one must have its own unique port. The customary default port for Web sites is 80, but adjacent port numbers such as 75 or 82 also work. 8000 and 8080 are also common alternative port numbers.
- After you have set up IIS, create a new web site using the \Inetpub\wwwroot\{root folder} folder as the home directory.
- You may also want to create a test web site and populate it with static HTML pages. Using a browser on a second computer, log on to the test site and make sure it functions normally. This tests IIS itself and verifies that the basic IIS installation is working correctly.
- After you have finished configuring IIS, stop all web sites except for the default site.

## Configuring Apache Server

After you have installed the Apache software, you need to adjust a few of its default settings so that it runs correctly. These settings are located in a configuration-setting file named `httpd.conf`.

**IMPORTANT** The following procedure discusses only the configuration settings that pertain directly to MiCollab AM Mobile Service. Changing other configuration settings can prevent your Apache server from operating correctly. For more information about Apache configuration, refer to <http://httpd.apache.org/docs/2.2/configuring.html>.

### To configure your Apache server:

- 1 From the Start menu, select **All Programs > Apache HTTP Server > Configure Apache Server**, and then click **Edit the Apache httpd.conf Configuration File**.
- 2 In the configuration file, update the following settings to the values shown.

Table 2. Configuration Values

Setting	Value	Comment
DocumentRoot	{apachefolder}/htdocs	In most circumstances, you can leave this at its default, which is based on the directory where you installed the Apache software (shown here by [apachefolder])
DirectoryIndex	Index.php index.html	

- 3 From the menu bar, select **File > Save**, and then click **Exit**.

**NOTE** It is recommended that you restart the web server platform after the installation and configuration of the Apache server is complete.

The Apache Web Server software installation places a test page in the server's document root directory. To display the test page, start a web browser on another computer within the web server's network and navigate to `http://myserver`, where *myserver* is the full address you have assigned to the server. You should see the words "*It works!*" in the browser.

# Installing the PHP Interpreter

Because of differences in server platform, web server, and web server configuration, instructions on how to install and configure PHP is beyond the scope of this document. Consult the documentation for your operating system and web server for detailed instructions. Once the PHP interpreter is installed and configured, there are several things to do to allow the installation to work with MiCollab AM Mobile Service.

**NOTE** 1. For Windows based web servers The PHP Group provides an MSI Installer that greatly simplifies the installation and configuration of PHP, available in the Windows Binaries downloads section.

2. PHP 5.5 can have issues on some Microsoft Windows Server 2012 systems. In some cases, the file MSVCR110.dll is missing. This file is a Visual Studio 2012 redistributable DLL not included with PHP. However, the file is available at [www.microsoft.com/en-us/download/details.aspx?id=30679](http://www.microsoft.com/en-us/download/details.aspx?id=30679).

## Creating Working Folders in the PHP Directory

After you have installed the PHP software, create two new folders named **Upload** and **Session** within the directory where you installed PHP. During MiCollab AM Mobile Service sessions, PHP uses these folders as temporary holding locations for uploaded files and session information.

To ensure that these folders function properly for all MiCollab AM subscribers, check and adjust their access permissions as shown in the following table.

Table 3. Working Folder Creation

If your web server runs...	Then...
Windows	It is not necessary to create working folders under Windows. The PHP installer does this automatically.
Linux	Use the <i>chmod</i> and <i>chown</i> commands to give the default web user account ownership and read, write, and file execute (but not directory execute) privileges for the folders.

## Editing the PHP.ini File (Linux)

After you have installed PHP and its SOAP, OpenSSL, XSL, and cURL modules, use a text editor to open the PHP.ini file. This file is located in the root directory that you specified for PHP during its installation.

In the PHP.ini file, verify that the settings in the following table are assigned the values shown. If not, change the settings as needed.

Table 4. PHP.ini File Editing

Setting	Location	Value
cgi.force_redirect	Paths and Directories	0 (if PHP is running in CGI mode)
upload_tmp_dir	Fopen wrappers	The full path to the Upload folder in the PHP root directory
session.save_path	Fopen wrappers	The full path to the Session folder in the PHP root directory
upload_max_filesize		10M
Post_max_size		10M

Verify that references to the SOAP, Open SSL, cURL and XSL modules are added. These references have the following general format:

**Extension = *filename***

Where *filename* refers to the actual filename of the module, (The filename can vary between Windows and various Linux distributions).

Table 5. Locating the module references

If your web server runs...	Then you can find the module references...
Windows	It is not necessary to create working folders under Windows. The PHP installer does this automatically when the optional modules are selected during setup.
Linux	In separate files call <i>soap.ini</i> and <i>xsl.ini</i> , which may be located in an alternate configuration directory (see the PHP status page in the following procedure for the name of this directory if necessary)

## Testing the PHP Interpreter

Once you have installed the PHP interpreter, you can use the web server to test it. The following procedure explains how to call up the PHP status page in a web browser.

**IMPORTANT** Technical Support personnel cannot help you troubleshoot your installation of MiCollab AM Mobile Service until your web server has passed this test.



## To test the PHP interpreter:

- 1 Start a text editor on your web server platform, and then create a new document.
- 2 In the new document, type the following text:  
**<?php phpinfo(); ?>**
- 3 Save the new document in the default root folder of your web server as a text file named `phpinfo.php`.
- 4 At a different computer that has network access to the web server, start a web browser. On the browser's address line, enter the address:

**`http://servername/phpinfo.php`**

(Where *servername* is the network name or domain name of your web server)

- 5 Proceed according to the result you see in your web browser.

If you see...	Then...
An error page	Examine your web server software and reconfigure it as needed.
The PHP status page	Continue to step 6.

- 6 Scroll down the PHP status page to verify that the SOAP, OpenSSL, cURL and XSL modules are installed and enabled.

If...	Then...
One or more modules are not installed or enabled	The PHP interpreter is not configured correctly. Examine your installation of PHP and reconfigure it as needed.
All modules are installed and enabled	The web server and PHP interpreter are working correctly. Continue to step 7.

- 7 Exit your web browser.

# Changing the Permissions of the Config Directory

Upon initial configuration of your MiCollab AM Mobile Service server, you must make the config directory on your web server writable to the web server's guest account. As such, you need to update the permissions of the config folder to give full control to either the Internet Guest Account (if you are using IIS) or to the default web user (if you are using the Apache web server).

To ensure that the directories and files in the MiCollab AM Mobile Service site are available to MiCollab AM subscribers, check and adjust the folders access permissions as shown in the following table.

Table 6. Changing the Config Directory

If your web server runs...	Then...
<b>Windows 2016 IIS 10.x</b>	Grant Full Control permissions to the default Internet Guest Account on the web server platform (USER_platformname)
<b>Windows 2012 R2 IIS 8.x</b>	Grant Full Control permissions to the default Internet Guest Account on the web server platform (USER_platformname)
<b>Windows 2008 R2 IIS 7.x</b>	Grant Full Control permissions to the default Internet Guest Account on the web server platform (USER_platformname)
<b>Linux</b>	Use the <b>chmod</b> and <b>chown</b> commands to give the default web user account ownership and read, write, and file execute (but <b>not</b> directory execute) privileges for the folders.

# Configuring the Firewall

If your organization maintains a firewall between its web-based servers and the organization's users, you must open one of the port addresses in the following table for MiCollab AM Mobile Service to function correctly.

## Internal to DMZ ports

Table 7. DMZ ports

Port	Purpose
80	Primary HTTP port for the MiCollab AM Mobile Service site  <b>NOTE</b> If you specified a different HTTP port when you installed the web server, substitute port 80 with the port number you specified.
443	Secure HTTP (HTTPS) port
18277	Secure Soap port

## DMZ to Internet ports

Table 8. DMZ ports

Port	Purpose
80	<a href="http://www.mitel.com">www.mitel.com</a>
443	<a href="https://android.apis.google.com/c2dm/send">https://android.apis.google.com/c2dm/send</a> <a href="https://www.google.com/accounts/ClientLogin">https://www.google.com/accounts/ClientLogin</a> <a href="http://www.mitel.com">www.mitel.com</a> <a href="https://android.googleapis.com/gcm/send">https://android.googleapis.com/gcm/send</a>
2195	<a href="https://gateway.push.apple.com:2195">ssl://gateway.push.apple.com:2195</a>

**IMPORTANT** If you are installing MiCollab AM Mobile Service on an IIS server, you must go back to IIS Administration and start the *MiCollab AM Mobile Service* web site now.

## Configuring Firewall for MiCollab AM Mobile Service

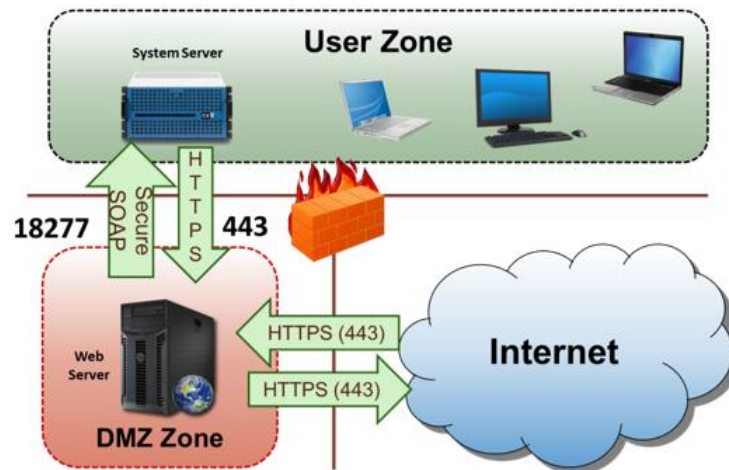


Figure 2. Firewall Configuration

# Setting Up Apple Push Notifications

You do not need to register for Apple push notifications. In order to use Apple push notifications, download and install the certificate hosted by Mitel. This procedure is detailed in section entitled [Configuring MiCollab AM Mobile Service](#).

# Registering for Google Push Notifications

**NOTE** As of June 26, 2012, Google has deprecated the Cloud to Device Messaging (C2DM) service. The service has been replaced by Google Cloud Messaging (GCM) for Android. Deployments of MiCollab AM Mobile Service which currently use C2DM for push notifications to Android devices should migrate to GCM as soon as possible. Google has stated that the C2DM service will continue to operate for an unspecified period of time so that existing deployments will not lose service.

**NOTE** Apple service does not require registration like Google Push Notification services. Instructions for configuring MiCollab AM for iPhone are in the section Configuring MiCollab AM for iPhone.

MiCollab AM Mobile Service requires Google Cloud Messaging (GCM) to provide push notification services to Android device. The following sections instruct you how to setup a Google API project and enable GCM.

## Obtain Google Cloud Messaging Sender ID and Token

1. Create a Google account that will be dedicated to this function. Do not use a personal account.
2. Log in to your Google account.
3. Open the Firebase Console page at <https://console.firebase.google.com>.
4. Click **Create New Project** and provide a project name.
5. Click the **Settings** button (left-menu, top-right – the gear icon), then click **Project settings**.
6. Click the **Cloud Messaging** tab.
7. Copy and paste the **Sender ID** to **CX Mobile Service Admin > Project ID**.
8. Copy and paste **Server Key** to **CX Mobile Service Admin > API Key**.

**NOTE:** After updating the Project ID and API Key, you must log out of the Android app then log back in. Also, it may take a few minutes before the key is active in Firebase.

## Incoming Call Notification

MiCollab AM Mobile Service is able to notify a subscriber's Android device of an incoming call. With incoming call notification, MiCollab AM Mobile Service sends an incoming call notification to devices able to receive incoming call notifications. If mobile notifications are not enabled for a device, MiCollab AM Mobile Service will not send an incoming call notification and will execute any call processing logic in the subscriber's account.

## Badge Notification

MiCollab AM Mobile Service is able to notify a subscriber's mobile devices when a Message or Call Record changes. If the mobile device is enabled to receive mobile notifications, MiCollab AM will notify the subscriber when a voice or fax message is created, deleted, or set to either read or unread. In addition, the subscriber will receive a notification when a record is either in new-missed-call state or changes from that state to simply missed call state.

# Installing MiCollab AM Mobile Service

Because Mitel has designed MiCollab AM Mobile Service to run on two different web server platforms and two different operating systems, MiCollab AM Mobile Service is supplied on the MiCollab AM Installation Media without a specific installation program. Instead, the files and directories that make up MiCollab AM Mobile Service are included on the installation media exactly as they must be installed on a web server.

## To install MiCollab AM Mobile Service on the web server platform:

- 1 Log on to the platform using a Windows Administrator account.
- 2 Insert the MiCollab AM Installation Media into the appropriate drive.
- 3 Do one of the following:

If autorun is...	Then...
Enabled	The MiCollab AM Installation menu displays. In the MiCollab AM Server Components area, click <b>Browse this disc</b> , and then open the <b>Server Installs folder</b> on the media.
Not Enabled	Open the <b>Server Installs folder</b> on the media.

- 4 Copy the contents of the **Server Installs\CXMS** folder, including all subfolders, to the MiCollab AM Mobile Service site directory on the web server.

**IMPORTANT** Be sure to preserve and restore the original directory structure stored in the **Server Installs\CXMS** folder on the MiCollab AM Installation Media.



# Changing the Permissions of the Certificates Directory

**NOTE** The certificate folder is only used by the iPhone components of MiCollab AM mobile.

Upon initial configuration of your MiCollab AM Mobile Service server, you must make the *certificates* directory on your web server writable to the web server's guest account. As such, you need to update the permissions of the *certificates* folder to give full control to either the Internet Guest Account (if you are using IIS) or to the default web user (if you are using the Apache web server).

To ensure that the directories are available for certain notification certificate update processes, check and adjust the folders access permissions as shown in the following table.

Table 9. Changing Permissions

If your web server runs...	Then...
Windows 2016 IIS 10.x	Grant Full Control permissions to the default Internet Guest Account on the web server platform (USER_ <i>platformname</i> )
Windows 2012 R2 IIS 8.x	Grant Full Control permissions to the default Internet Guest Account on the web server platform (USER_ <i>platformname</i> )
Windows 2008 R2 IIS 7.x	Grant Full Control permissions to the default Internet Guest Account on the web server platform (USER_ <i>platformname</i> )
Linux	Use the <b>chmod</b> and <b>chown</b> commands to give the default <i>web user</i> account ownership and read, write, and file execute (but <b>not</b> directory execute) privileges for the folders.

# Configuring MiCollab AM Mobile Service

Once you have installed MiCollab AM Mobile Service, you must define certain functions, like the MiCollab AM Servers, and mobile push settings.

## To configure MiCollab AM Mobile Service:

- 1 Launch your web browser.
- 2 Access the admin.php file for MiCollab AM Mobile Service by typing the following into the address field on your web browser:

**http://servername/admin.php** or **https://servername/admin.php**, depending on whether you have SSL installed and configured

Enter your administrative credentials to access the server configuration page and click **Login**. The Mobile Data Service Settings page appears.

### NOTES

- The default administrator logon is administrator with the password field left blank. However, any administrator account will work, as long as the account is a MiCollab AM administrator.
- If this is a new installation, the MiCollab AM Admin screen will first ask for the address of the MiCollab AM server. Click **Add New** to add the server address.

The screenshot displays the 'Mobile Service Settings' page, which is organized into several sections:

- Configuration Validation:** Shows the status of various system components, all of which are marked as 'PASS' in green. These include Config directory writable, Certificates directory writable, OpenSSL Module loaded, SOAP Module loaded, cURL Module loaded, File upload enabled, File upload directory writable, and Max upload file size at least 10 MB.
- Application Settings:** Includes a 'Default Language' dropdown set to 'en'. Below this is a 'Servers' section with an 'Encryption Type' dropdown set to 'SSL'. It features a table for adding servers with columns for 'Server Display Name', 'Server Address', and 'Tenant Name'. One server is listed with the display name '1', address 'ServerAddress', and tenant 'Tenant1'. An 'Add New' button is present at the bottom right of the table.
- Mobile Push Notification Settings:**
  - Host Web Server Settings:** Contains fields for 'Use SSL' (checked), 'Server Address' (set to 'ServerAddress'), 'URL Path' (set to '/cxmns.php'), and 'Complete URL' (set to 'https://ServerAddress/cxmns.php').
  - System Server Notification Processing:** Includes a 'System Server Network Address' field and a 'Connection Test' button, which shows a 'PASS' status. Below this is a 'Notification Loop Test' section showing a 'Success' message dated 'Thu, 01 Jun 2017 14:42:33 -0700'.
- Push Provider Settings:**
  - Apple:** Shows 'Apple Platform Version 1' and a 'Certificate' field with an expiration date of '2018-09-09T00:00:00Z'. An 'Update' button is located below the certificate field.
  - Google:** Includes fields for 'Project ID' and 'API Key'.

- 3 Set the default language for the administration page in the **Default Language** drop-down list.
- 4 Define your MiCollab AM System Servers in the **MiCollab AM Servers** section.
  - a If you are using SSL to encrypt communication between the MiCollab AM servers and the MiCollab AM Mobile Service server, set the **Encryption Type** to SSL.
  - b Enter an end-user friendly name for the System Server in the **Server Display Name** field. This name will be displayed during the mobile application logon process.
  - c Enter the addresses of the MiCollab AM System Servers in the **Server Address** field. These addresses may be fully qualified domain names or IP addresses.
  - d Enter the name of the Tenant in the **Tenant Name** field. If the same MiCollab AM server hosts multiple tenants, you can create multiple entries for the same server with different Tenant Names. For either a single-tenant or a multi-tenanted system, the **Tenant Name** field is mandatory and a Tenant Name must be entered.
- 5 Define the address of the MiCollab AM Mobile Service web server in the **Host Web Server Settings** section.
  - a Check the **Use SSL** box if MiCollab AM Mobile Service is configured to use SSL.
  - b Enter the hostname or address of the MiCollab AM Mobile Service installation in the **Server Address** box.
  - c Enter the path to the MiCollab AM Mobile Service installation in the **URL Path** box. That path should end in the file **cxmns.php**. If the value entered in the Server Address box points to the MiCollab AM Mobile Service folder on the file system then you should enter **/cxmns.php** for this field. If MiCollab AM Mobile Service is located in a subfolder, then you should prefix that folder name to this value such as **/FOLDER\_NAME/cxmns.php**.
- 6 In the **Push Provider Settings** section for Apple, click **Update** button to get the latest push notification certificate from Mitel. By default, no certificate ships with the software so this task must be performed at least once to complete the installation. After the certificate is registered, its name and expiration date will be shown on the web page. MiCollab AM will automatically renew this certificate once it is installed. An administrator can manually update the certificate by clicking the **Update** button at any time.

**NOTE** Apple service does not require registration like Google Push Notification services. Instructions for configuring MiCollab AM for iPhone are in the section Configuring MiCollab AM for iPhone.
- 7 In the Push Provider Settings section for Google, check the **Use Google Cloud Messaging** checkbox then enter your **Project Number** and **API Key** in their respective fields. These values are from the Google API Console that you took note of in the proceeding steps. Support for concurrent use of GCM and C2DM is supported, but all deployments currently using C2DM should be switched to GCM as soon as possible. C2DM should not be used for new installations and as such the installation procedure for this service is no longer documented.

# Configuring MiCollab AM Mobile for Android Clients

MiCollab AM Mobile for Android requires very little setup. However, before setting up the client, you must download it from the Google Play Store. Each handset must meet the following system requirements:

- Android 2.3 or later.
- The Google Play Store application must be installed on the device.
- A Google Gmail account configured on the device.

## To download the MiCollab AM Mobile for Android application:

- 1 Open the Google Play Store application on your handset. Although the exact procedure will vary slightly, depending on handset and phone skinning, open the application drawer by pressing the on-screen button or icon and browse for the Google Play Store.
- 2 Search the Google Play Store for "**MiCollab AM Mobile**". Different versions of the Google Play Store might have slightly different search procedures.
- 3 An application called **MiCollab AM Mobile** will appear in the list. Open the application listing by touching the entry.
- 4 On the application page, install the application by pressing the **Install** button on your handset screen.
- 5 Press **OK** to accept the application's permissions.
- 6 The application will install.

## To configure the MiCollab AM Mobile for Android application:

- 1 Open your application drawer and find the MiCollab AM Mobile application.
- 2 Touch the icon to open the application. It will open to the logon screen.
- 3 Enter your user ID in the **User ID** field.
- 4 Enter your security code in the **Security Code** field.
- 5 Enter the phone number for the *mobile handset* in the Phone Number field. This phone number must be configured as a mobile number in MiCollab AM.
- 6 Enter the External MiCollab AM Mobile Service host name in the Mobile Server field. This address will be provided by your system administrator.
- 7 Check the **Requires Secure Connection** box if an SSL certificate was installed on the MiCollab AM Mobile Service website.
- 8 Click **Login**.

- 9 If more than one MiCollab AM server is available, a select server popup dialog will appear to the user. The user should select the system server appropriate to their account.
- 10 Decide if you would like your handset to receive mobile notifications. Mobile notifications include notifications of incoming calls, new messages, and missed calls.
  - a Press **Activate** to enable mobile notifications. If you later wish to disable mobile notifications, go to the Notifications section of the Settings menu.
  - b Press **Later** to not enable mobile notifications.
- 11 The MiCollab AM Mobile application is configured and active on your handset. Help is available by opening the Navigation menu and selecting **Help**.

# Configuring MiCollab AM Mobile for iPhone Clients

MiCollab AM Mobile for iPhone requires very little setup. However, before setting up the client, you must install it via iTunes or the Apple App Store(SM).

## To download the MiCollab AM Mobile for iPhone application:

- 1 Open iTunes or the Apple App Store depending on your version of iOS and search for “**MiCollab AM Mobile**”.
- 2 An application called **MiCollab AM Mobile** will appear in the list.
- 3 Install the application.

## To configure the MiCollab AM Mobile for iPhone application:

- 1 Start the application by touching the icon. It will open to the logon screen.
- 2 Enter your user ID in the **User ID** field.
- 3 Enter your security code in the Security Code field.
- 4 Enter the phone number *for the mobile handset* in the Phone Number field. This phone number must be configured as a mobile number in MiCollab AM.
- 5 Enter the External MiCollab AM Mobile Service host name in the Mobile Server field. This address will be provided by your system administrator.
- 6 Click **Login**.
- 7 If more than one MiCollab AM server is available, a select server popup dialog will appear to the user. The user should select the system server appropriate to their account.
- 8 The MiCollab AM Mobile application is configured and active on your handset. Help is available by opening the Navigation menu and selecting **Help**.

# Configuring MiCollab AM Subscriber Mailboxes

In order for MiCollab AM Mobile client to properly connect to the MiCollab AM System Server, the mobile device on which MiCollab AM Mobile client will be configured must be in the user's account. To configure a user account for MiCollab AM Mobile, do the following:

## To configure a user account for MiCollab AM Mobile:

- 1 On the MiCollab AM user account configuration screen, click the **Devices** tab.
- 2 Using the **Category** dropdown menu, configure an existing or new mobile device. This device must be a "mobile" device, either company or personal.
- 3 Check the **Enable Notifications** box.
- 4 Click **OK**.

The screenshot shows the 'Subscriber Mailbox - DemoSystem - 1888 SUBSCRIBER EXAMPLE' window. The 'Devices' tab is selected, showing a 'Device List' with 'Company Mobile' highlighted. The configuration panel for this device includes the following fields and settings:

- Properties:**
  - Number: 2065551111
  - Type/Capabilities: Phone: logon, can receive calls
  - Category: Company Mobile
  - ☒ Category Default
  - Mailboxes Sharing this Number: (empty)
  - Extension Properties:**
    - ☐ MWI
    - Switch Section: (empty)
    - Direct Dial: (empty)
    - SMDI Prefix: (empty)
    - ☐ Enable Fax Tone Detection
- Mobile Device Client Properties:**
  - ☐ Primary Device
  - ☒ Primary Mobile Device
  - Ring Timeout (sec): 20
  - ☒ Active
  - Barge In Sensitivity: -3 0 +5 (slider at 0)
  - ☒ Enable Notifications
  - Call Alert Type: Accept, Reject, Acknowledge, Transfer, Record Dialog
  - Response Timeout (sec): 15
  - Alert Expiration (sec): 60
  - Platform Name: Android
  - Platform Version: 2
  - Client Version: 151
  - Last Logon: Wed Feb 10 02:32:35 2016
  - Client Active: ☒
  - Model: evita
  - Token: APA91bGFrgXgHbHMD-XwtZY-6ts51wWAPA91bGFrgXgHbHMD-X

Figure 3. Subscriber Mailboxes

If subscribers are to be allowed to call out via MiCollab AM using a mobile handset, several things must be configured in MiCollab AM. In addition, a Personal Assistant (PA) license is required to log on to the application.

## Long Distance Enabled

In many urban areas with multiple area codes, a subscriber may need to have long distance enabled for MiCollab AM to be able to connect the desired call to the mobile handset. Long distance for a particular subscriber is enabled and set under the **Features** tab of the Subscriber Mailbox.

## Dialing Plan Setup

In addition to having long distance enabled in the subscriber account, the dialing plan must be configured in such a way as to allow MiCollab AM to reach a subscriber's mobile phone. The specifics of how this is set up will vary, depending on site requirements.

## Trunk to Trunk Reply

Because MiCollab AM connects outgoing telephone calls using two ports, users must have trunk to trunk enabled in their subscriber mailbox.

**To enable trunk to trunk, do the following:**

- 1 Open MiCollab AM Admin.
- 2 Access the subscriber mailbox.
- 3 Ensure that **Allow trunk to trunk reply** is checked in the **Features** tab.

Lastly, users must have their long distance settings and dialing plan configured in such a way as to allow MiCollab AM to call out to a user's mobile phone to connect the outgoing call.



# Upgrading MiCollab AM Mobile Service

Upgrading MiCollab AM Mobile Service entails copying the files from the installation media and overwriting the files on the web server. However, it is important to back up your original files, especially the original `config.xml` file. This will ensure that you can revert back to the original configuration, if required.

**WARNING** Any customizations to MiCollab AM Mobile Service that you have made will be lost as part of this upgrade. Any customizations must be manually applied after the upgrade.

## To upgrade your MiCollab AM Mobile Service system:

- 1 Browse to your MiCollab AM Mobile Service files on your existing system.
- 2 Make a backup copy of the entire web directory structure.
- 3 Browse to the certificate folder, if using iPhone mobile apps.
- 4 Make a backup copy of the certificate folder.
- 5 Locate the file `config.xml` and ensure that it is contained in the backup. If using a compressed archive for backup, retain a copy of this file outside of the archive.
- 6 Copy the directory structure of the MiCollab AM Mobile Service directories to the existing web folders, overwriting any existing files.
- 7 Copy the `config.xml` file retained above to the config folder and overwrite the existing file.
- 8 Copy the backed up copy of the certificates folder to the upgraded directory structure.
- 9 Configure MiCollab AM Mobile Service. Settings configured in the previous version will be retained via `config.xml`. However, you will need to configure any features not available in the previous version.