



A MITEL
PRODUCT
GUIDE

MiContact Center Enterprise

Installation Instructions

Release 9.6
Document Version 1.0

September 2022

Notices

The information contained in this document is believed to be accurate in all respects but is not warranted by **Mitel Networks™ Corporation (MITEL®)**. 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 for additional information. For a list of the worldwide Mitel Networks Corporation registered trademarks, please refer to the website: <http://www.mitel.com/trademarks>.

®,™ Trademark of Mitel Networks Corporation

© Copyright 2022, Mitel Networks Corporation All rights reserved

INTRODUCTION

Before you install MiCC Enterprise, please read through this document and have the *Installation Worksheet* at hand. The installation worksheet asks you to record data that will be used throughout the installation. Filling out the worksheet will ensure that your installation is complete and accurate.

This document contains installation instructions for MiCC Enterprise server and client. The following topics are handled:

- Installation preparations
- Installation outline
- The MiCC Enterprise Installer

INSTALLATION PREPARATIONS

To make sure the appropriate hardware and software for a MiCC Enterprise system have been configured, please read the document *Installation Preparations*. It is recommended that no applications are running when you perform an installation of MiCC Enterprise. It is especially important to close the Event Viewer and any MiCC Enterprise applications (if previously installed).

When having gone through document *Installation Preparations*, make sure to:

1. Be logged on to Windows as a local administrator.

For more information, please refer to the “IT and Security” section in *Troubleshooting*.



Note: To install and run the MiCC Enterprise Web Services, Microsoft IIS must be installed on your Windows Server.



Note: If MiCC Enterprise is installed on a Windows 2012, 2016 or 2019 server, applications must be started using the *Run as Administrator* option. A local administrator account does not have sufficient privileges to run the MiCC Enterprise Registry Configuration (SeCCfg.exe) under a local administrator account.

INSTALLATION OUTLINE

The installation process for MiCC Enterprise depends on the type of installation (e.g. new installation or system upgrade). This section provides a summary of the sequence of actions to perform for each of the following installation examples.



Note: Before running the MiCC Enterprise installation wizard, go through the steps for the type of installation you will be performing, or use these procedures as check lists, to make sure no important parts of the installation is missed.

Installation examples:

- New customer installing MiCC Enterprise.
- Existing MiCC Enterprise customer upgrading to latest version of MiCC Enterprise – using the same MiCC Enterprise Server.
- Existing MiCC Enterprise customer upgrading to latest version of MiCC Enterprise – using a new MiCC Enterprise Server.
- New customer installing Script Manager only.
- Installing a Hot Standby MiCC Enterprise.

NEW CUSTOMER INSTALLING MICC ENTERPRISE

1. Install the Enterprise License Manager Server (if necessary) and add all the required MiCC Enterprise licenses. See the document *Enterprise License Manager* for details.
2. Install MiCC Enterprise. See chapter 3, MiCC Enterprise Installer for details.
 - a) Install MiCC Enterprise services.
Run the desired installation version, **Typical**, **Complete** or **Custom**.
 - b) Reboot the MiCC Enterprise Server PC.
 - c) Install MiCC Enterprise client applications.

On the Broker Service machine, a subdirectory called `Client Installation`, with share name `NextCCClient` is created, containing all the client installation files. To install MiCC Enterprise applications, you can mount to this shared directory from the client machine or run `Setup.exe` from the original DVD.
3. Configure all necessary parameters in Configuration Manager.
4. Copy the system prompts needed from the MiCC Enterprise Installation DVD to the OAS server.
 - a) Select the languages needed from the folder `nextcc`, or the whole folder including all of its sub-folders from `<drive>:\localization\prompts\voice\nextcc`.
 - b) Paste the folder(s) to `<drive>:\Program Files\Mitel\OAS\root_container\voice`.



Note: It is possible to create a specific share point on the OAS Server for the voice prompts. This can be used in a tenanted environment so that the voice prompts will be replicated whenever a new tenant is created. In this case, the prompts should be copied to `\\<hostname>\root_container\Voice`. Please refer to the document *OAS System Prompts*.

EXISTING MiCC ENTERPRISE CUSTOMER UPGRADING TO LATEST VERSION OF MiCC ENTERPRISE - SAME MiCC ENTERPRISE SERVER

1. Make sure Windows Server is installed and that all critical updates are applied.
2. Install or upgrade the Enterprise License Manager Server (if necessary) and add all the required MiCC Enterprise licenses. See document Enterprise License Manager for details.
3. If OAS is already installed on the same machine, set all MiCC Enterprise services to manual start and stop the services. Upgrade OAS. Before installing MiCC Enterprise, run the command `OASShutdown` from a command prompt to stop all OAS services. When MiCC Enterprise is running with multiple OAS systems, all OAS systems must be updated with the same Service Packs before upgrading MiCC Enterprise.
4. Upgrade MiCC Enterprise. MiCC Enterprise may be directly upgraded from existing versions of 7.0 or later.

For information on upgrading the OAS repository and voice prompts, refer to the *OAS Software Configuration* document.

EXISTING MiCC ENTERPRISE CUSTOMER UPGRADING TO LATEST VERSION OF MiCC ENTERPRISE - NEW MiCC ENTERPRISE AND SQL SERVER

1. Make sure Windows Server is installed with all critical updates. Upgrade SQL Server if needed. See *Installation Preparations* for details.
2. Install or upgrade the Enterprise License Manager Server (if necessary) and add all the required MiCC Enterprise licenses and Internet Suite licenses see document *Enterprise License Manager* for details.
3. If OAS will be used on the same server, install OAS before MiCC Enterprise. Before installation of MiCC Enterprise, run the command **OASShutdown** from a command prompt to stop all OAS services.
4. Install MiCC Enterprise on the new PC.
5. During installation, select the option to create a new database.
6. If you have defined any other SQL Server Logins on the previous MiCC Enterprise database server which have `nextccdb` defined as the default database, they need to be created in SQL on the MiCC Enterprise database server.
7. On the previous MiCC Enterprise server, run the Database Maintenance Utility and backup all CDR Data, Campaign Data, Configuration Data, and Monthly Report Data.
8. On the previous MiCC Enterprise server, run the Script Manager Utilities and select Backup Configuration.
9. On the new MiCC Enterprise server, run the Database Maintenance Utility and restore the data that was backed up on the previous server.
10. On the new MiCC Enterprise server, run the Script Manager Utilities and select Restore Configuration to restore the data that was backed up on the previous server.
11. Reboot the new MiCC Enterprise server.

12. Run Configuration Manager and change any call manager information referencing the old server name to the new server name.

For information on upgrading the OAS repository and voice prompts, refer to the *OAS Software Configuration* document.

INSTALLATION OF ADDITIONAL SCRIPT MANAGER NODES

Additional Script Manager nodes may be setup for use with the MiCC Enterprise server. A Script Manager node may not run entirely on its own. A secondary Script Manager node is one that is installed on a computer other than the MiCC Enterprise server.

Select **Script Manager Secondary Node** under **Optional Server Software** from the Package Browser in the MiCC Enterprise Installation DVD. If not using the Package Browser, the Script Manager Installation package must be used.

1. The **Typical** setup type will install all services and applications and the system will be non-tenanted.



Note: If a tenanted MiCC Enterprise server will be connecting to this node, tenanting must be enabled. The **Custom** setup type must be selected to enable tenanting.

2. For the Custom setup type, select the **Script Manager Services** feature.
3. Optionally, select **Script Designer** and **Script Configuration** features.
4. Enable tenanting as required.
5. Follow the installation instructions prompted.
6. Reboot the Script Manager Server PC after installation.
7. Associate the Script Manager node to the MiCC Enterprise system using the MiCC Enterprise Setup Utility on the MiCC Enterprise server.
8. If the system is tenanted, associate the Script Manager node to the desired MiCC Enterprise tenants using the Tenant Properties dialog in Configuration Manager on the MiCC Enterprise server.



Note: Some registry entries that are required to connect back to the MiCC Enterprise server are not maintained on secondary Script Manager nodes. It will be necessary to manually add these registry entries on the secondary Script Manager node. The following entries should be copied from the registry of the MiCC Enterprise server:

Key:

HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Mitel\SeC\Common\Parameters

Values:

WebServer

WebServerPort

UseHttp

UseHttpsForIIS

UseSSLClient

If any options are changed on the Web Server Location page in the MiCC Enterprise Setup Utility running on the MiCC Enterprise server, these registry entries will need to be updated.

HOT STANDBY MiCC ENTERPRISE

This section describes instructions for installation of a hot standby MiCC Enterprise.

PREREQUISITES

- Both the primary and the hot standby MiCC Enterprise should have a dedicated SQL server.
- The OAS server should be separate from the MiCC Enterprise server.
- All Service Access used in the primary server should be set to **Active** and all Service Access used for backup should be set to **Inactive**.
- Make a CDINI for the CTI groups where calls should be diverted to the backup Service Access when the primary MiCC Enterprise server fails.
- For the primary Service Access that uses script A with BVD1, the backup Service Access should be configured to use script B with BVD2.

AT THE PRIMARY MiCC ENTERPRISE SERVER

1. Backup Script Manager configuration data using Script Manager utilities.
2. Backup MiCC Enterprise configuration data in the primary MiCC Enterprise using DBMT.

AT THE HOT STANDBY MiCC ENTERPRISE SERVER

1. Install MiCC Enterprise in the server.
2. Stop all MiCC Enterprise and Script Manager services.
3. Restore Script Manager configuration data from primary MiCC Enterprise server.



Note: Do not restart Script Manager services when prompted after restoring Script Manager configuration.

4. Restore MiCC Enterprise configuration data from primary MiCC Enterprise server.



Note: Do not start MiCC Enterprise or Script Manager services.

5. Enter SQL Enterprise Manager - Service Access table and modify the field status_cd for all the Service Access that is created in the primary server to "0".
6. Start MiCC Enterprise services.
7. Start Script Manager services.
8. Run Configuration Manager and change the BVDRqueue, LOGON and PERSONAL to another BVD that is different from the primary MiCC Enterprise server.
9. Activate the back-up Service Access and make sure that the primary Service Access is inactive.

REPLICATE THE PRIMARY MiCC ENTERPRISE SERVER

For instructions on configuration of replication at the primary MiCC Enterprise server, please see document *Initial Configuration*.

ENABLING MICC ENTERPRISE SERVER WITH FQDN SUPPORT

ENABLING FQDN SUPPORT AFTER INSTALLATION

1. In the Windows Registry, update the Broker location by using, for example, the Regedit tool. In the following registry path, change BrokerServerNode to be a FQDN name:
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Mitel\SeC\Common\Parameters
2. In the following registry path, update the setting of BrokerServerNode:
HKEY_LOCAL_MACHINE\System\CurrentControlSet\services*<name of service, see list>*\Parameters

This must be done for the following services:

- CCAgent
 - CCArchive
 - CCSolidusAgent
 - CCCallControl
 - CCCampaign
 - CCConfiguration
 - CCDBMT
 - CCEvent
 - CCNetworkMonitor
 - CCReport
 - CCRouter
 - CCOpenMedia
 - CCEmail
 - CCChat
3. Change all computer name values under the following path to be FQDN

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\CCBroker\StaticDB

Example: **<servername>.myorg.company.com** where myorg.company.com is an example of an FQDN.
 4. Restart the MiCC Enterprise Server.

ENABLING FQDN SUPPORT DURING INSTALLATION

FQDN support may be enabled during the MiCC Enterprise Installation using a specific command line option. To enable FQDN support, start the MiCC Enterprise Installation using the following command line option:

Setup.exe /z"/FQDN"

FORCING BROKER SERVICE TO APPEND A DOMAIN NAME

An alternative to the above changes to support FQDN, and Windows Registry key setting can be done so that a domain name will be appended to all returned service locations, if not already included.

By setting HKLM/SYSTEM/CurrentControlSet/Services/CCBroker/Parameters/ForceFQDN to, e.g. **myorg.company.com**, then the Broker will append this to the registered service name before returning the value to the client. It is then necessary that this server address can be resolved either via DNS lookup or a local HOSTS file on the clients.

MICC ENTERPRISE INSTALLER

The MiCC Enterprise Installer offers the following three types of installation for MiCC Enterprise services.

Typical

The most common options will be selected during installation.

Complete

All MiCC Enterprise services and applications will be installed.

Custom

You will be able to select the MiCC Enterprise services and applications that are to be installed.

TYPICAL INSTALLATION

1. Launch the MiCC Enterprise installation.
2. The **Welcome** dialog for MiCC Enterprise appears.
3. Click **Next**.
The **License Agreement** dialog box appears.
4. Accept the license agreement and click **Next**.
The **Customer Information** dialog box appears.
5. Enter the required information and click **Next**.
The **Setup Type** dialog box will appear.
6. In the **Setup** dialog box, select **Typical** and click **Next**.
The **SQL Location** dialog box appears.
7. In the **Location\Instance name** text box, enter the name of the machine that runs the SQL Server. The SQL Server must reside in the same domain as the MiCC Enterprise applications or a domain that has a trust relationship set with the domain in which the MiCC Enterprise services/applications are running. Simply enter the name of the machine; **do not** enter the domain name. If an instance of SQL Server is used, enter the instance name after the server name. Select the type of authentication to use while creating the MiCC Enterprise database. If SQL authentication is used, enter the name of login and password of the SQL account.

During installation, the SQL Browser service is contacted to determine the Tcp/Ip listening port of the SQL Server. If this service is not available, it may not be possible to contact the SQL Server when using a named instance or the SQL Server is listening on a custom port. If the server cannot be contacted, it may be necessary to specify the port along with the location\instance. The port can be specified by adding a comma along with the port at the end of the location. For example:

```
LOCATION,1234  
LOCATION\INSTANCE,1234
```

The instance is not important in this case, but it may be specified.

The account used to create the MiCC Enterprise database must have a minimum set of privileges. Refer to section Database Setup Permissions.



Note: The MiCC Enterprise database will be created during installation of the Broker Service.

8. Click **Next**.

The **Administrator Password** dialog appears.

9. Enter the password to be used for the built-in MiCC Enterprise Admin user ID.



Note: This user account has full privileges for all the MiCC Enterprise applications.

10. Click **Next**.

The **Start Copying Files** dialog box appears.

11. Verify the information in the **Current Settings** list box. If you wish to change any of the information entered, press the **Back** button to return to the appropriate dialog box. If all of the information is correct, click **Next** and the installation starts.

When installation is complete, the **Installation Complete** dialog box appears.

COMPLETE INSTALLATION

1. Launch the MiCC Enterprise installation.
2. The **Welcome** dialog for MiCC Enterprise appears.
3. Click **Next**.

The **License Agreement** dialog box appears.

4. Accept the license agreement and click **Next**.

The **Customer Information** dialog box appears.

5. Enter the required information and click **Next**.

The **Setup Type** dialog box will appear.

6. In the **Setup** dialog box, select **Complete** and click **Next**.

The **SQL Location** dialog box appears.

7. In the **Location\Instance name** text box, enter the name of the machine that runs the SQL Server. The SQL Server must reside in the same domain as the MiCC Enterprise applications or a domain that has a trust relationship set with the domain in which the MiCC Enterprise services/applications are running. Simply enter the name of the machine; **do not** enter the domain name. If an instance of SQL Server is used, enter the instance name after the server name. Select the type of authentication to use while creating the MiCC Enterprise database. If SQL authentication is used, enter the name of login and password of the SQL account.

During installation, the SQL Browser service is contacted to determine the Tcp/Ip listening port of the SQL Server. If this service is not available, it may not be possible to contact the SQL Server when using a named instance or the SQL Server is listening on a custom

port. If the server cannot be contacted, it may be necessary to specify the port along with the location\instance. The port can be specified by adding a comma along with the port at the end of the location. For example:

```
LOCATION,1234  
LOCATION\INSTANCE,1234
```

The instance is not important in this case, but it may be specified.

The account used to create the MiCC Enterprise database must have a minimum set of privileges. Refer to section Database Setup Permissions.



Note: The MiCC Enterprise database will be created during installation of the Broker Service.

8. Click Next.

The **Database Device** dialog will appear.

- 9.** In the **Database Device** dialog box, enter the size and location of the MiCC Enterprise database. The database size must be at least 100 MB or 0 may be entered indicating an unrestricted size. The location must be a valid directory on the SQL Server machine or blank indicating to use the default SQL data file location.

10. Click Next.

The **Call Manage Integration Type** dialog appears.

- 11.** Select the type of call manager to use.

The **SMS Gateway Service Location** dialog appears.

- 12.** Enter the location of the SMS Gateway Service if MiCC Enterprise is integrated with SMS. Otherwise, leave the location field empty.

13. Click Next.

The **Administrator Password** dialog appears.

- 14.** Enter the password to be used for the built-in MiCC Enterprise Admin user ID.



Note: This user account has full privileges for all the MiCC Enterprise applications.

15. Click Next.

The **Tenancing** dialog appears.

- 16.** Select to **Enable** or **Disable** tenancing for the MiCC Enterprise system. If tenancing is enabled, all client applications will restrict data to only the data associated with the logged on user's tenant. The Admin user will be able to view and administer data for all tenants. Enter the name of the tenant to be created. Additional tenants may be added after installation of MiCC Enterprise is complete by Configuration Manager, when logged on as the Admin user.



Note: If selecting to disable tenancing, it is possible to convert the installation into a tenanted installation later on. For more information, see document *Tenancing*.

17. Click Next.

The **Enterprise License Manager Location** dialog box will appear if it is not installed on the local machine. If it is displayed, enter the location of the server and click **Next**.

The **Localization Files Location** dialog box appears.

18. If you wish to install localization files, select **Install Localization Files** and enter the location of the files. Click **Next**.

The **Client Installation** dialog box appears.

19. In the Client Installation dialog box, do the following:

- a) Enter the **User Name** and the **Password** of the account that will be used during client installations.

Note: The account must have local administrator rights on the client machines and also have access to any necessary network resource. If this account is not entered, the account of the user currently logged onto the client machines will be used during the client installation.

- b) Select the features you wish to install at client installations, by ticking the check boxes in the **Default Features** list.

For a description of setting up client installations, refer to *Installing MiCC Enterprise Client*.

Click **Next**. The **Options** dialog box appears.

20. Select if to install Quick Launch Shortcuts, and click **Next**.

The **Start Copying Files** dialog box appears.

21. Verify the information in the **Current Settings** list box. If you wish to change any of the information entered, press the **Back** button to return to the appropriate dialog box. If all of the information is correct, click **Next** and the installation starts.

When installation is complete, the **Installation Complete** dialog box appears.

CUSTOM INSTALLATION

1. Launch the MiCC Enterprise installation.
2. The **Welcome** dialog for MiCC Enterprise appears.
3. Click **Next**.

The **License Agreement** dialog box appears.

4. Accept the license agreement and click **Next**.

The **Customer Information** dialog box appears.

5. Enter the required information and click **Next**.

The **Setup Type** dialog box will appear.

6. In the **Setup** dialog box, select **Complete** and click **Next**.

The **Select Features** dialog box appears.

7. Select the desired features to install and click **Next**. Depending on the features selected, a variety of dialog boxes appears. For details on these dialog boxes, see section 3.1 Complete Installation.

DIALOG BOX	DESCRIPTION
Broker Location dialog box	This dialog will only appear if the Broker Service has not been selected for installation.
Client Tenanting dialog box	This dialog will only appear for if the Broker Service has not been selected for installation and the MiCC Enterprise server has been configured for tenanting.
Web Server Location dialog box	This dialog will only appear if Web Services has not been selected for installation.
RTI Service Location dialog box	This dialog will only appear if the RTI Service has not been selected for installation and the RTI Configuration application has been selected.
SQL Location dialog box	This dialog will only appear if the Broker Service has been selected for installation.
SQL Port dialog box	This dialog will only appear if the Broker Service has been selected for installation and the SQL port cannot be determined automatically.
MiCC Enterprise Database Existence dialog box	This dialog will only appear if the specified SQL Server already contains a MiCC Enterprise database.
SQL Permissions dialog box	This dialog will only appear if there is insufficient permission to create the MiCC Enterprise database.
Database Device dialog box	This dialog will only appear if the Broker Service has been selected for installation.
Call Manager Type dialog box	This dialog will only appear if the Broker Service has been selected for installation.
Script Manager Services Location dialog box	This dialog will appear only if Script Manager Services has not been selected and one or more of Configuration Manager , Script Designer , Script Manager Configuration , or Script Manager Development Tools are selected.
SMS Gateway Service Location dialog box	This dialog will only appear if SMS Gateway Service has not been selected and one or more of the following features have been selected: Router Service or Script Manager Services .
Administrator Password dialog box	This dialog will only appear if the Broker Service has been selected for installation.
Tenanting dialog box	This dialog will only appear if the Broker Service has been selected for installation.
Enterprise License Manager Location dialog box	This dialog will only appear if the Enterprise License Manager Server is not installed on the local machine.
Localization Files Location dialog box	This dialog will only appear if localizable applications have been selected for installation.
Client Installation Account dialog box	This dialog will only appear if the Broker Service has been selected for installation.
Options dialog box	This dialog will only appear if applications with additional options have been selected for installation.
Start Copying Files dialog box	This dialog will always appear.

UPGRADE INSTALLATION

1. If MiCC Enterprise is already installed on the machine, the installation will proceed in upgrade mode.

The **Upgrade Welcome** dialog box appears.

2. During the upgrade, MiCC Enterprise will be installed to the same location as the previous installation and all installed features will be upgraded.
3. A dialog box informs when installation is complete.

INSTALLATION OF ADDITIONAL COMPONENTS AND UNINSTALLATION

1. When MiCC Enterprise is installed, it is possible to modify the installed features or uninstall the product by opening the **Add/Remove Programs** applet from the **Control Panel**. Select the MiCC Enterprise entry and click the **Change/Remove** button.

2. The installation will proceed in maintenance mode.

The **Maintenance Welcome** dialog box will appear.

3. To add or remove installed features, select **Modify** and click **Next**. To change the Admin user password, select **Administrator Password** and click **Next**.
4. To uninstall the entire product, select **Remove** and click **Next**.
5. When modifying features, the **Select Features** dialog appears with the currently installed features selected. Depending on the features installed, the installation will prompt for various installation options.
6. If the entire product or the **Broker** Service is being uninstalled, the MiCC Enterprise database is no longer required.

The MiCC Enterprise Database Removal dialog appears.

7. Select **Retain Database** if you wish to leave the MiCC Enterprise database on the database server, for example if you are uninstalling the product and reinstalling on a different machine, and wish to use it during the new installation. If you no longer need the data stored in the database, select **Remove Database** and enter the account information to use during removal of the database on the SQL Server.

If you choose to remove the database, the MiCC Enterprise data will be deleted and cannot be recovered.

When installation or uninstallation is complete, the **Installation Complete** dialog box appears.

VERIFICATION OF HARDWARE CONNECTIONS

When installation is complete, verify printer connections, set default printer and verify wall display connection.

PRINTER CONNECTION

1. Launch the Report Manager application.
2. On the **File** menu, click **Print Setup**. The standard Microsoft[®] default **Print Setup** dialog box appears.
3. In the **Print Setup** dialog box, verify the name of the default printer that was set up via Windows Print Manager before installation of the MiCC Enterprise.

SETTING DEFAULT PRINTER

The default printer to be used by Report Manager is set via Windows Printer Settings.

1. In **Printer Settings**, all connected printer(s) will be displayed in the Printers window.
2. If no printer is connected, click the **Add Printer** icon to connect the desired printer.
3. If there are printers connected, but you would like to change the default printer, click the icon for the desired printer, and select **Set as Default** from the **File** menu.

VERIFY WALL DISPLAY CONNECTION

1. Launch the Information Manager application.
2. From the Options menu, select Wall Display. The Virtual Wall Display Configuration dialog appears.
3. Select the **Spectrum** tab. Select the communication port and baud rate settings. Press **Add** to add a new Spectrum board. Verify the **Address** and **Model**. Enter a test message and click **Test** to display the message on the connected wall displays with the specified address.

DATABASE SETUP PERMISSIONS

During installation or uninstallation of MiCC Enterprise, the SQL database may need to be created or deleted. A minimum set of permissions has been defined to perform these steps. To fully create or delete the database, the account used should have SYADMIN rights. Some parts of the database are not fully required to use MiCC Enterprise. The permissions needed for these parts are listed as optional.

The following actions are performed while creating or deleting the database.

CLR INTEGRATION

REQUIRED during installation and operation of MiCC Enterprise.

CLR Integration must be enabled on the SQL Server. If CLR Integration is not enabled, the installation may enable it if the account has the following permissions.

ALTER SETTINGS permission on the server or be a member of the SERVERADMIN role.

CLR Integration may be enabled by a SYADMIN by issuing the following SQL command:

```
EXEC sp_configure 'clr enabled' 1
```

CLR STRICT SECURITY

If the configuration option 'clr strict security' is enabled on the SQL Server, SYSADMIN rights are required during installation.

CREATE DATABASE

REQUIRED during installation.

Requires CREATE ANY DATABASE or ALTER ANY DATABASE permission on the server or must be a member of the DBCREATOR server role.

DROP DATABASE

REQUIRED during installation if recreating the database or during uninstallation.

Requires CONTROL permission on the nextccdb database.

During installation of the database, the account used to create the database is given this permission automatically so the same account can be used.

CREATE LOGIN

REQUIRED during installation.

Necessary for creating the nextccuser and nccguest login accounts.

Requires ALTER ANY LOGIN permission on the server or must be a member of the SECURITYADMIN server role.

DROP LOGIN

REQUIRED during installation if recreating the database or during uninstallation.

Requires ALTER ANY LOGIN permission on the server or must be a member of the SECURITYADMIN server role.

SQL AGENT JOBS

OPTIONAL during installation and uninstallation.

SQL Agent Jobs are created to update statistical information on the nextccdb database. Running MiCC Enterprise without these jobs will have a minimal impact.

Requires membership in the SQLAgentUserRole, SQLAgentReaderRole or SQLAgentOperatorRole database role on the MSDB database.

During uninstallation, the SQL Agent Jobs will be retained if the required permissions do not exist. The jobs may be later removed by a SYADMIN

SQL SERVER MESSAGES

OPTIONAL during installation and uninstallation.

Messages are added to SQL Server for use in SQL Agent alerts. Running MiCC Enterprise without these messages will have a minimal impact.

Requires membership in the SERVERADMIN server role.

During uninstallation, the SQL Agent Messages will be retained if the required permissions do not exist. The messages may be later removed by a SYADMIN or SERVERADMIN.

INSTALLING MiCC ENTERPRISE CLIENT

In this section the following topics are discussed in detail.

- Setting MiCC Enterprise Server information to prepare for client installations
- Configuring ClientSetup.ini
- Installing on Client Computers
- `ClientSetup.exe` Command Line Parameters

During the installation of the MiCC Enterprise server a folder and share point are setup on the MiCC Enterprise server allowing clients to install the software. The client installation may be setup to run requiring user input or may be setup with default features for unattended installations. Clients may also be installed from the Web by accessing the computer running the MiCC Enterprise Web Services.

All user settings will be preserved during client upgrades.

SERVER INFORMATION

When installing the MiCC Enterprise server and the Broker service is selected for installation, the folder `Client Installation` is created under the MiCC Enterprise installation folder. This folder contains all of the necessary files for client installations. The folder is also shared for network access using the share name `NextCCClient`. During server installation, you will be prompted for a user account and password for client installations. Client installations will run using this account giving the installation the necessary privileges to install the software. The account must have local administrator privileges on any computer that the client installation will run as well as access to network resources. The account information is encrypted and stored in the `ClientSetup.ini` file located in the Client Installation folder. This file also contains additional settings used for the client installations, which will be explained in the next section.

If Web Services are also installed on the MiCC Enterprise server, a virtual directory is also setup for installing clients from the Web.

CONFIGURING CLIENTSETUP.INI

The `ClientSetup.ini` file located in the Client Installation folder contains all the necessary settings for client installations. Most of the settings in this file must be configured manually using a text editor. The only exceptions to this are the account that the client installations will run under, the default features to install, the Customer ID, Tenant ID and client connection protocols. This account must be configured during the MiCC Enterprise server installation or may be changed later using the MiCC Enterprise Setup Utility.

To configure the file, open the `ClientSetup.ini` file from the Client Installation folder using a text editor such as Notepad.



Note: Client installations always use the settings contained in the `ClientSetup.ini` file. If settings have been changed on the clients without being reflected in the `ClientSetup.ini` file, those changes will be lost.

Note: Any alternate `ClientSetup.ini` files in use will not be updated during upgrades. The current version is stored in the **Version** element and must be updated manually to reflect the currently installed version. This includes any files residing on the MiCC Enterprise server as well as any files on the client's local network.

SECTION: [INSTALL]

ValueName:ForceInstall

Value: [Y|N]

Default: N

Normally, a version check is performed during client installations to see if an updated version exists on this server. If a newer version exists on the server, the client installation is performed. Setting this value to Y will bypass the version check and force the installation.



Note: If the same version already exists on the client, the installation will run in maintenance mode and will not be unattended regardless of the Interactive setting.

ValueName:**ForceInstall**

Value: [Y|N]

Default: N

If set to Y, client installations will be forced to run regardless of the version check.



Note: This only applies if the client installations are run using the `ClientSetup.exe` application.

ValueName: **Version**

Value: X.X.X.X

Default: Set by server installation.

This value is set by the server installation and is used to compare the version of an existing client installation against the version installed on the server to determine if the client software should be upgraded. This setting should not be modified.

ValueName: **CustomerID**

Value: [CustomerID]

Default: Default

This value is applied to the client installation and is used during update operations. It determines the URL used in retrieving updated installation packages.

ValueName: **NetworkOperationsCenter**

Value: [Y|N]

Default: Set by server installation.

Specifies type of installed MiCC Enterprise server. Set by server installation. Do not modify.

ValueName: **Interactive**

Value: [Y|N]

Default: Y

This value determines if the client installation will run unattended or will require user input. If this value is set to Y, the installation will run unattended.



Note: This only applies if the client installations are run using the `ClientSetup.exe` application. Installations run using `Setup.exe` will always require user input.

ValueName: **CompleteAction**

Value: [Action]

Default: Prompt

Indicates the action to perform on successful installation.

Actions:

Prompt: Displays a status message indicating completion.

Reboot: Reboots the computer.

None: No action is performed.



Note: This setting is only applicable if `Interactive=N`

ValueName: **UserName**

Value: [Domain\UserName]

Default: None

This value specifies the user account that will be used when running client installations. The account must have local administrator privileges on the client computers as well as access to network resources. The UserName should contain the domain and user name in the form of DOMAIN\UserName. This value is normally set during the MiCC Enterprise server installation or modified using the MiCC Enterprise Setup Utility, but it may be modified manually if necessary.

ValueName: **Password**

Value: [Password]

Default: None

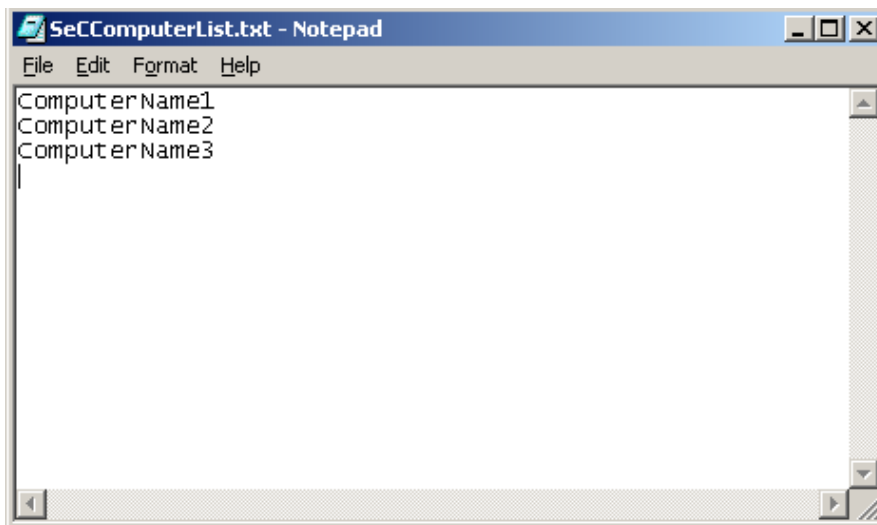
This value contains the password of the account specified in UserName. This value cannot be modified manually as it is encrypted. The value is set during the MiCC Enterprise server installation or modified using the MiCC Enterprise Setup Utility.

ValueName: ComputerList

Value: [ComputerList File Name]

Default: None

When setting up automatic installations on the client computers using login scripts, the login scripts are normally invoked when a user logs onto the computer. This means that the software will be installed on any computer that the user logs onto. You may further restrict which computers the software will be installed on by specifying a file containing a list of computer names. The file can be created using a text editor such as Notepad. Each computer name should be specified on a separate line in the file.



Then, specify the full path to the file name using UNC format in the

ComputerList entry. For example:

ComputerList=\\SECCOMPUTER\MyShareName\SeCComputer- List.txt

It is recommended that the file be located in a folder other than the Client

Installation folder because the contents of the Client Installation folder are deleted each time the MiCC Enterprise is upgraded or individual feature are installed or uninstalled.

ValueName: **SMInstallLocation**

Value: [InstallDir]

Default: \\<BrokerLocation>\ScriptManager

Allows the location of the Script Manager client installation source files to be overridden. Typically, this would only be used in debug scenarios.

SECTION: [SETTINGS]

ValueName: **InstallDir**

Value: [InstallDir]

Default: None.

This value specifies the default installation folder.

ValueName: **BrokerLocation**

Value: [Broker Location]

Default: Set by server installation.

This value specifies the location of the Broker service that the client will connect to.

ValueName: **SMServiceLocation**

Value: [Script Manager Server Location]

Default: Set by server installation.

This value specifies the location of the Script Manager services that the client will connect to.

ValueName: **RTIServiceLocation**

Value: [RTI Service Location]

Default: Set by server installation.

This value specifies the location of the Real Time Interface service that the client will connect to.

ValueName: **TenantID**

Value: [TenantID]

Default: Set by server installation.

This value specifies the ID of the tenant to be used for client applications. Clients will only be able to logon to the tenant specified. For a list of defined tenant IDs, run `SecSetup.exe`, and view Defined Tenants. For non-tenanting installations, the value is -1.

ValueName: **WebServerLocation**

Value: [WebServerLocation]

Default: Set by server installation.

This value specifies the location of MiCC Enterprise web server.

ValueName: **WebServerPort**

Value: [Port]

Default: Set by server installation.

This value specifies the port number used to connect to the MiCC Enterprise web server.

ValueName: **QuickLaunchShortcuts**

Value: [Y/N]

Default: N.

This value indicates whether Quick Launch shortcuts should be created for the installed applications.

ValueName: **UseHttp**

Value: [Y/N]

Default: N.

This value indicates whether the HTTP protocol should be used instead of TCP/IP when connecting to MiCC Enterprise services that support HTTP.

SECTION: [FEATURES]

This section contains entries that specify which features are to be installed on the client computers. If the client installation is run in unattended mode, the features specified will be installed. If the installation is run in interactive mode, the specified features will be selected by default, but the user will be able to modify them.



Note: If an existing client installation has features already installed that are not specified in this section, the installed features will be upgraded as well as installing the features specified.

Each value can contain Y to install the feature or N to not install the feature.

ValueName: **ConfigurationManager**

Feature: Configuration Manager

Default: N

ValueName: **InformationManager**

Feature: Information Manager

Default: N

ValueName: **Agent**

Feature: MiContact Center Agent

Default: Y

ValueName: **ReportManager**

Feature: Report Manager

Default: N

ValueName: **DBMT**

Feature: Database Maintenance Tool

Default: N

ValueName: **RTConfiguration**

Feature: Real Time Interface Configuration

Default: N

ValueName: **SMDesigner**

Feature: Script Designer

Default: N

ValueName: **SMConfiguration**

Feature: Script Manager Configuration

Default: N

ValueName: **SMDevTools**

Feature: Script Manager Development Tools

Default: N

SECTION: [LOCALIZATION]

ValueName: **InstallLocalization**

Value: [Y|N]

Default: N

If set to Y, localization files will be installed on the client computers.

ValueName: **Location**

Value: \\<servername>\NextCCLocalizationFiles

Default: Set by server installation

Specifies the folder containing the localization files to be copied to the client computers. The folder name should be specified in UNC format and must be accessible from each client computer.



Note: <servername> is the name of the server where the installation is located.

INSTALLING ON CLIENT COMPUTERS

Once the MiCC Enterprise server is installed and `ClientSetup.ini` has been configured, the installation may begin on the client computers. The installation may be invoked manually by the user of the client computer or by a login script that has been setup that will launch the installation automatically the next time the user logs onto the computer.

You can use one of the procedures below for a Service Pack update on client applications.

INSTALLING WITH SUPPORT FOR FQDN FOR MICC ENTERPRISE CLIENTS

If MiCC Enterprise client is already installed on the client machine, perform the following on each client machine:

1. Run MiCC Enterprise Setup
2. Update Broker Location to <servername>.myorg.company.com
3. Update Web Server Location to **<servername>.myorg.company.com**

To install new MiCC Enterprise clients with FQDN support, please use the following procedure before installation using `clientsetup.exe`:

1. Using Notepad or a similar text editor, edit the `ClientSetup.ini` file in the `NextCCClient` folder.
2. Update the `BrokerLocation` setting in the Settings area to **`BrokerLocation=<servername>.myorg.company.com`**

3. Update the Web ServerLocation sections in the Settings area to **Web ServerLocation=<server_name>.myorg.company.com**

Example: **<servername>.myorg.company.com** where myorg.company.com is an example of an FQDN.

MANUALLY STARTING THE INSTALLATION FROM THE NEXTCCCLIENT SHARE

The installation may be started manually by opening Windows Explorer and navigating to the **NextCCClient** share point on the MiCC Enterprise Server computer. There are two applications that may be used to launch the installation.

- ClientSetup.exe

This is the preferred method to launch the installation. The program will perform a version check and only install the software if necessary. It will also use all of the settings specified in the `ClientSetup.ini` file.

- Setup.exe

The installation can also be launched using `Setup.exe`. This will bypass the version check and launch the installation immediately. The installation will run in interactive mode with a wizard taking you through the steps.

STARTING THE INSTALLATION USING LOGIN SCRIPTS

The client computers may be configured to install the software automatically whenever a user logs onto the machine. This is accomplished by invoking `ClientSetup.exe` from a login script configured for each user that will log onto the computer. If a login script is already defined, you may simply add the command to the existing script. For example, if you already have a batch file script called `SeCUserLoginScript.bat`, you could add the following line to the file:

[\\SECCOMPUTER\NextCCClient\ClientSetup.exe](#)

Where: **SECCOMPUTER** is the computer name of the MiCC Enterprise server. The name should be specified in UNC format. Additional parameters may be specified on the command line. For example, to specify a different `ClientSetup.ini` file, you could have the following command:

```
/C:"C:\MyCustomIni.ini"
```

If you do not have a login script already setup for each MiCC Enterprise user, refer to your IT Administrator for further information.

INSTALLING FROM THE WEB

Clients may be installed from the Web by accessing the MiCC Enterprise Download page from the MiCC Enterprise Web Server. The URL for accessing the page is in the following format:

[http://SECWEBSERVER/MiCCEInstallation/install/\[CustomerID\]](http://SECWEBSERVER/MiCCEInstallation/install/[CustomerID])

Where: **SECWEBSERVER** is the computer running the MiCC Enterprise Web Services and **CustomerID** specifies the subfolder of the configuration repository containing the configuration information for the customer. CustomerID may be omitted in which Default is assumed. The configuration repository is located on the MiCC Enterprise server in the following location:

```
<InstallDir>\WebDeployment
```

Therefore, the folder containing the configuration information for the Default customer would be:

```
<InstallDir>\WebDeployment\Default
```

Refer to the section on Customer Configurations for Web Installation and Client Updates in the document **3_1543-LXA119154 – Advanced Configurations** for a complete description of setup of the configuration repository.

After accessing the MiCC Enterprise Download page, select the Download link to download the Web installer, `MiCCWebSetup.X.X.X.exe`. Save the file to the local computer and run it. Follow the steps in the MiCC Enterprise Web Installer. The downloaded Web installer is generated specifically for use with the CustomerID on the MiCC Enterprise Web Server in which it was downloaded and cannot be used with any other MiCC Enterprise servers.

CLIENTSETUP.EXE COMMAND LINE PARAMETERS

Additional parameters may be specified on the `ClientSetup.exe` command line. The format of the command line is:

```
ClientSetup.exe [/I] [/Q] [/F] [/U] [/N] [/C:<Ini File>]
```

/I Specifies that the installation should run in interactive mode. This setting overrides the Interactive setting in `ClientSetup.ini`.

/Q Specifies that `ClientSetup.exe` should not display any messages.

/F Bypasses the version check and forces installation of the software.

/U Specifies that the installation should run under the current account that is logged onto the computer rather than the account specified in `ClientSetup.ini`.

/N Specifies that `ClientSetup.exe` should not wait for the installation to finish and exit immediately after launching the installation.

/C Specifies an alternate `ClientSetup.ini` file to use. If this parameter is omitted, `ClientSetup.ini` in the same directory as `ClientSetup.exe` is used. If the specified file does not contain an absolute path, it is assumed to be relative to the location of `ClientSetup.exe`. If the file name contains spaces, it should be enclosed in quotation marks, for example:

```
/C:"C:\MyCustomIni.ini"
```

UNINSTALLING MICC ENTERPRISE

MiCC Enterprise may be uninstalled interactively using one of the following methods:

- Select the Uninstall option from the Add/Remove Programs applet of the Control Panel. Select the Remove option when presented with the Maintenance Mode Welcome dialog.
- Rerun the installation Setup.exe from the MiCC Enterprise Installation folder of the original installation media. Select the Remove option when presented with the Maintenance Mode Welcome dialog.

MiCC Enterprise may be uninstalled without any user input by running Setup.exe from the MiCC Enterprise Installation folder of the original installation media by specifying additional command line parameters. To do so, open a Windows CMD prompt in the folder and execute Setup.exe using the following command line:

```
Setup.exe /s /v"/qn" /z"/UNINST"
```

INSTALLATION LOG FILES

The installation log files are stored in: <drive>\Documents & Settings\<>User>\Local Settings\Application Data\Mitel\InstallLogs where user is the account under which the installation is running.



mitel.com

© Copyright 2020, Mitel Networks Corporation. All Rights Reserved. The Mitel word and logo are trademarks of Mitel Networks Corporation, including itself and subsidiaries and authorized entities. Any reference to third party trademarks are for reference only and Mitel makes no representation of ownership of these marks.