



A MITEL
PRODUCT
GUIDE

MiContact Center Enterprise

Security Considerations

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INTRODUCTION

This document describes how the MiCC Enterprise contact center system can be configured to secure access to the system and how data in transit can be protected via encryption.

SCOPE

MiCC Enterprise is a very open, flexible and highly customizable platform, and is in many instances integrated to Case Management, CRM/ERP and/or recording systems. This document will limit the scope to the MiCC Enterprise system itself.

ACCESS TO THE SYSTEM

MiContact Center Enterprise consists of services and clients that run on the Microsoft Windows platform as well as some Web applications that runs in standard browsers such as Chrome and Firefox.

It is up to the customer's IT department to secure the access to the server using the standard tools and procedures. Documentation in the MiCC Enterprise documentation library specifies the port numbers that need to be opened up in the Windows firewall in order to allow communication to and from these server(s).

ACCESS TO MICC ENTERPRISE APPLICATIONS

There are two different ways to manage user's access to the MiCC Enterprise applications. The MiCC Enterprise system can be integrated with Active Directory, both on prem and Azure hosted) or the system will use its own integrated user and password management functions

Active Directory based user management

The MiCC Enterprise system can be configured to synchronize users with Active Directory (AD). This is achieved by creating a Group in AD and then when users are added or removed from this Group they are added or removed from being a user in MiCC Enterprise.

For detailed information on how to configure AD synchronization refer to the document "Advanced Configurations" in the user documentation library.

Single Sign On

Single Sign ON (SSO) can be enabled by integrating the MiCC Enterprise system with an external Identity Provider (IDP). Typically, this would be enabled when the system is configured to use Azure or on prem AD user management, but any IDP supporting Open ID Connect can be used.

For detailed information on how to configure Single Sign On refer to the document "Advanced Configurations" in the user documentation library.

Integrated User and Password Management

Access to all MiCC Enterprise applications is restricted by a common logon function using the User ID and Password fields. During installation of the main server the installer is asked to provide a password for the Administrator account. This password consists of up to 20 alpha numerical characters.

Using this account, other user types can be configured. The user type specifies which applications, and the specific features within these applications, users of this user type are permitted to access.

Users are defined with a User ID and password as well as tagged with a specific User Type restricting access to clients and features.

Users can change their password from their logon screen at any time. The system can also be configured to expire passwords after a configurable number of days. It can also be configured to provide a warning message when a configurable number of days remain until the password expires.

To control password updates, the number of previous passwords that cannot be reused can be configured.

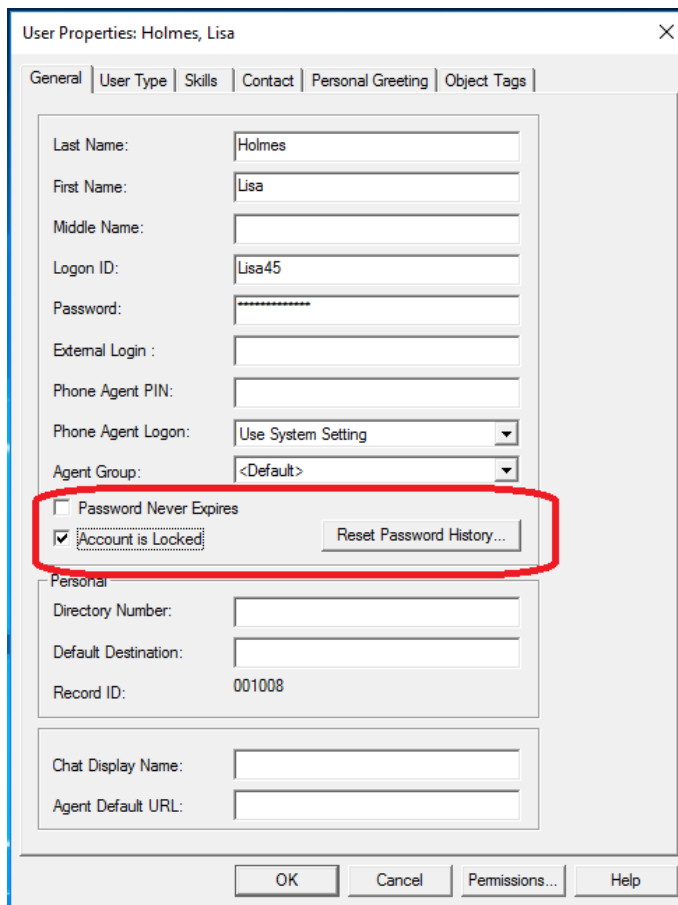
It is also possible to configure how many failed logon attempts are permitted before the user is locked out from the system.

The screenshot shows the 'Contact Center System Properties' dialog box with the 'Authentication' tab selected. The 'Password Management' section is highlighted with a red box and contains the following settings:

- Lockout Account After: 3 Failed Logon Attempts
- Cannot Reuse Last: 10 Passwords
- Password Expires After: 90 Days
- Warn Password Expiring When: 3 Days Remaining

At the bottom of the dialog box are buttons for 'OK', 'Cancel', 'Advanced...', and 'Help'.

If a lock-out occurs, only an administrator can re-open the account again.



The screenshot shows the 'User Properties: Holmes, Lisa' dialog box. The 'General' tab is selected. The 'Account is Locked' checkbox is checked and highlighted with a red rectangle. The 'Password Never Expires' checkbox is unchecked. The 'Reset Password History...' button is visible next to the 'Account is Locked' checkbox. The 'Agent Group' is set to '<Default>'. The 'Record ID' is 001008.

PROTECTION OF DATA IN TRANSIT

WEB SERVICES

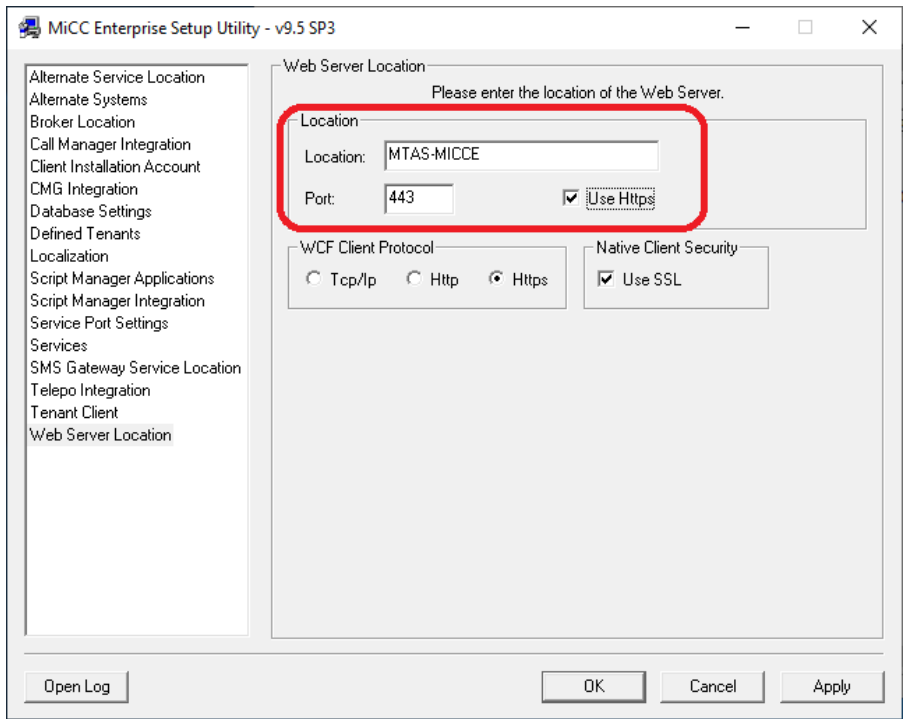
All MiCC Enterprise web services support encryption. HTTPS can be enabled in IIS and all WCF based services can be configured to use HTTPS. This will protect chat, email and open media session information between customers and agents, including all data sent to and from agents using the Web Agent application as well as all communication between the MiCC Enterprise server and agents using the MiCC Agent desktop application. All communication between Information and Report Manager applications and the IIS are also encrypted.

Enable HTTPS in IIS

Here is a description from Microsoft of how to enable HTTPS on IIS and how to generate a Certificate:

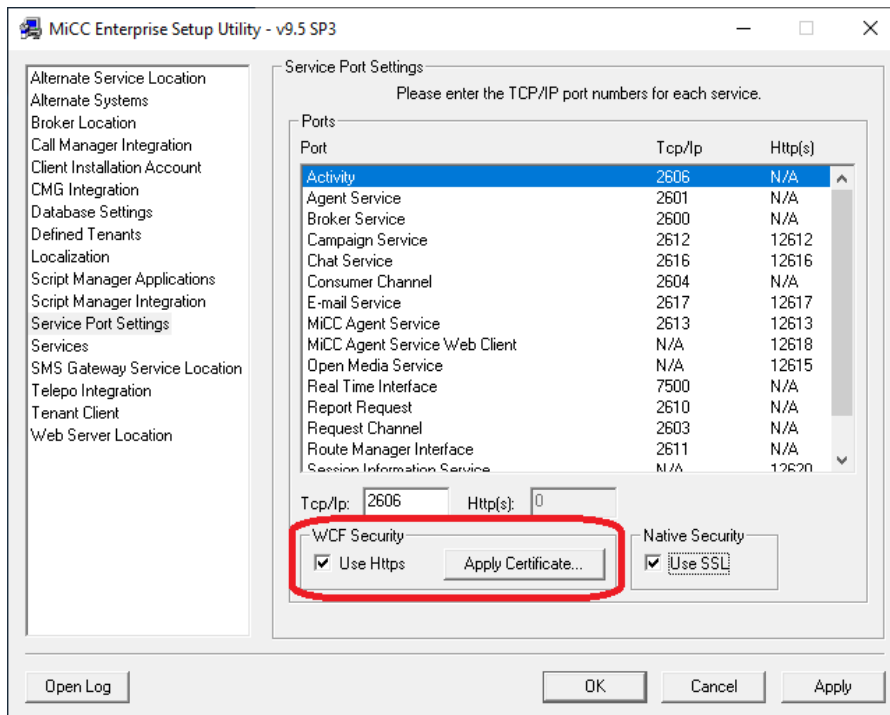
<https://support.microsoft.com/en-us/help/324069/how-to-set-up-an-https-service-in-iis>

In MiCC Enterprise, HTTPS is enabled using the MiCC Enterprise Setup Utility:

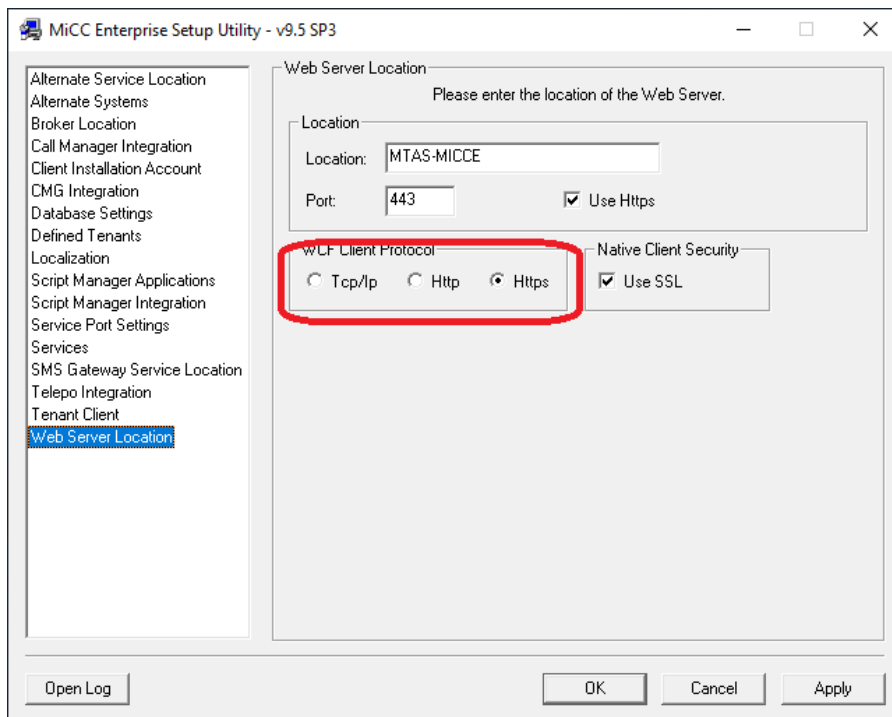


Enable HTTPS on WCF Web Services

On the server:



On clients (Agent, Report Manager and Information Manager, or remote server components):



TLS VERSION

MiContact Center Enterprise starts the negotiation with TLS 1.3 and works its way down to what is supported on both sides of the connection. The encryption algorithm is also left up to the settings in Windows OS (the default is AES256).

The following ciphers are supported by MiCCE and TAS:

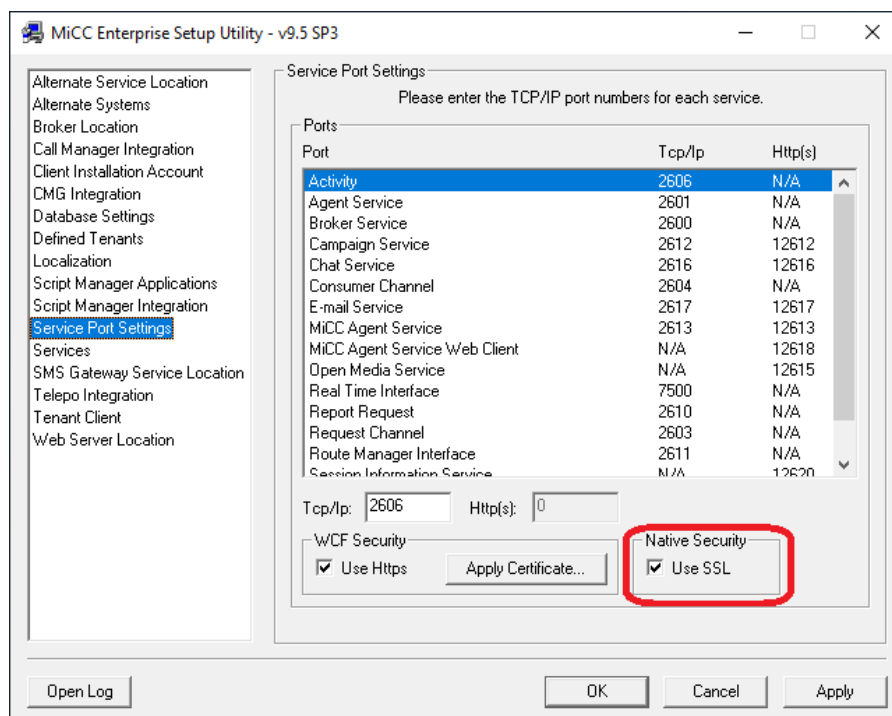
- AES_256_CM_HMAC_SHA1_80
- AES_256_CM_HMAC_SHA1_32
- AES_192_CM_HMAC_SHA1_80
- AES_192_CM_HMAC_SHA1_32
- AES_CM_128_HMAC_SHA1_80
- AES_CM_128_HMAC_SHA1_32

For TLS 1.3 to be used the MiCC Enterprise server needs to be running on Windows Server 2022 and connecting clients must be running on Windows 11.

TAS has support for TLS 1.3 as well. When TAS is connected to an MX-ONE 7.5 call manager (or higher) then TLS 1.3 can be configured both for the CSTA connection and the SIP trunk.

CLIENT/SERVER AND SERVER/SERVER COMMUNICATION

Using the MiCC Enterprise Setup program the system administrator can enable SSL on all socket communication between server components as well as Configuration Manager clients and the server.



DATABASE

MiCC Enterprise uses Microsoft SQL to store configuration and historical data. Enabling encryption on the communication to/from the database is described on the following web page:

<https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/enable-encrypted-connections-to-the-database-engine?view=sql-server-ver15>

This is all handled internally by SQL so nothing further needs to be configured in the MiCC Enterprise system.

INTERNET INFORMATION SERVICES (IIS)

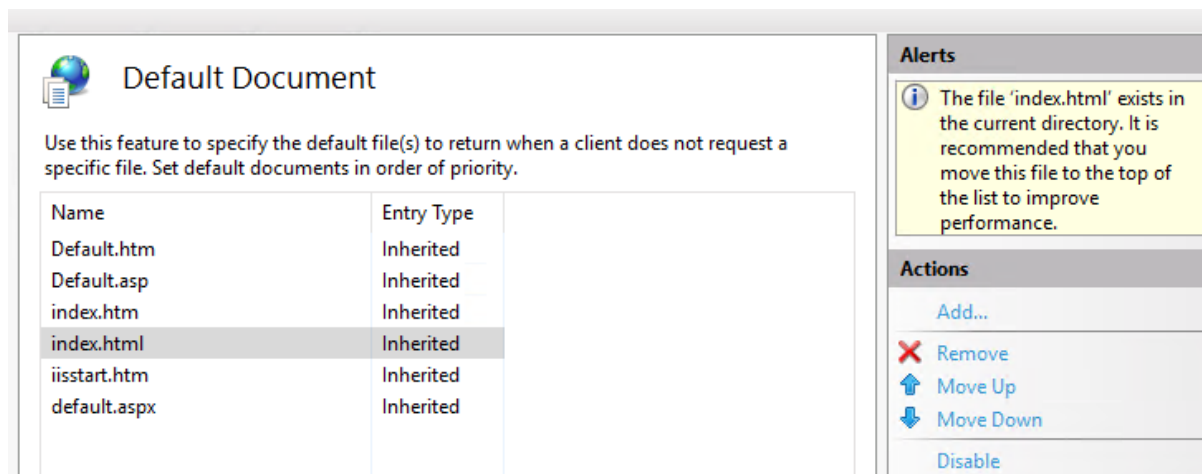
CLICKJACKING

To limit exposure to clickjacking it is recommended that the following procedure is performed on the IIS server hosting the MiCC-E web services:

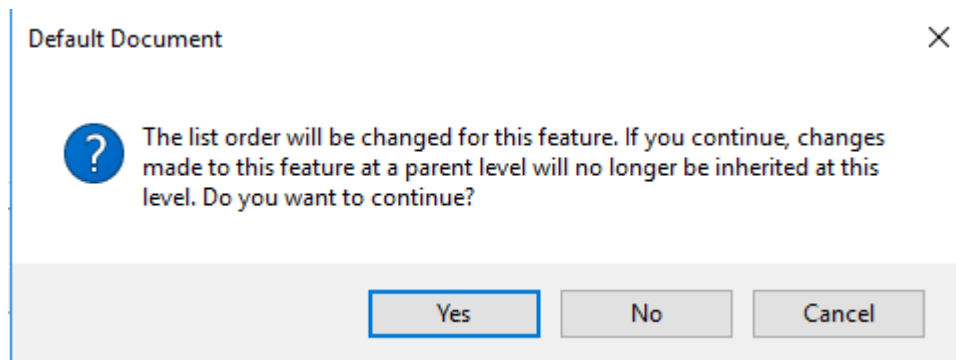
- In Run (Win+R), type "inetmgr". This will open the IIS Manager.
- Go to Sites | Default Web Site and select Default Document property.

- Double click on Default Document property. This will open Default document pages.
- Right click on Default.htm page and click on disable.
- This setting will be inherited by all the projects. For the WebAgent project we need to enable the index.html page again.
- Click on WebAgent project and open the Default Document Property.
- Right click on index.html of WebAgent and click on enable.

After enabling the following information is seen about performance improvement.



Clicking the 'Move Up' option will result in the following caution.



Answer 'Yes' and move to the top of the list.

EMAIL INTEGRATION

OFFICE 365

Due to Microsoft deprecating the Basic Authentication option when accessing Exchange Online the email service of MiCC Enterprise is as of release 9.5 Service Pack 3 using the Graph API and OAuth 2.0 when connecting to Office 365.

In order to use Office 365 you must [register](#) MiCC Enterprise with Azure Active Directory, [receive](#) an access token and configure the settings in MiCC Enterprise System Properties:

The screenshot shows the 'Office 365 using Microsoft Graph' configuration panel. It includes the following fields and options:

- Office 365 using Microsoft Graph
- Client ID:
- Client Secret:
- Tenant ID:
- User Name:
- Outbound Only

IMAP/SMTP

For integration to other Email services then IMAP and SMTP is used. These can be configured to use SSL:

The screenshot shows the 'IMAP/SMTP' configuration panel, divided into 'Incoming' and 'Outgoing' sections. The 'Incoming' section includes:

- Server:
- Port: Use SSL
- User Name:
- Password:

The 'Outgoing' section includes:

- Server:
- Port: Use SSL
- User Name:
- Password:

PRODUCT SECURITY INFORMATION

MITEL PRODUCT SECURITY VULNERABILITIES

The Product Security Policy discusses how Mitel assesses security risks, resolves confirmed security vulnerabilities, and how the reporting of security vulnerabilities is performed.

Mitel's Product Security Policy is available at:

www.mitel.com/mitel-product-security-policy

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