A MITEL
PRODUCT
GUIDE

MiCloud Flex

Deployment Guide

Document Version 1.0

April 2022

Mitel
Powering connections

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Contents

What's New in this Document 1

This section describes the changes in this document due to new and changed functionality in the latest release of MiCloud Flex.

Table 1: Document Version 1.0

Feature/Enhancements	Update	Location	Publish Date
Creating a MiVoice Business account to add Tollring	Procedure for creating an MiVB account to add Tollring	Creating MiVoice Business account for Tollring on page 43	April 2022

Introduction 2

This chapter contains the following sections:

2.1 Purpose

This guide is designed to give you an overview of Mitel's MiCloud Flex solution, its architecture, management components, and topology.

This guide also provides you with an overview of the deployment of the MiCloud Flex solution.

2.2 Audience

This guide is for the Mitel partners, solution architects, and network administrators who use the MiCloud Flex solution.

2.3 About MiCloud Flex Documentation

The documentation set consists of guides in PDF format and online help systems that are integrated with the various management applications. The following documents are the main source of information for the MiCloud Flex solution:

- MiCloud Flex General Information Guide
- MiCloud Flex Solution and Engineering Guidelines
- MiCloud Flex Deployment Guide

Additional guides and help systems are available that provide instructions on how to configure and use the individual Mitel applications that are supported on MiCloud Flex. The complete documentation set is listed in the Appendix on page 51.

To access the MiCloud Flex product documentation set:

1. Access Mitel Document Center (URL: http://www.mitel.com/document-center).

2. From Document Center you can either:

- Navigate to the respective document.
- Use the search functionality to search for the document that you want to access.

> **Note**:
> Ensure that you select Document Center as the search repository before clicking the search icon.

Overview 3

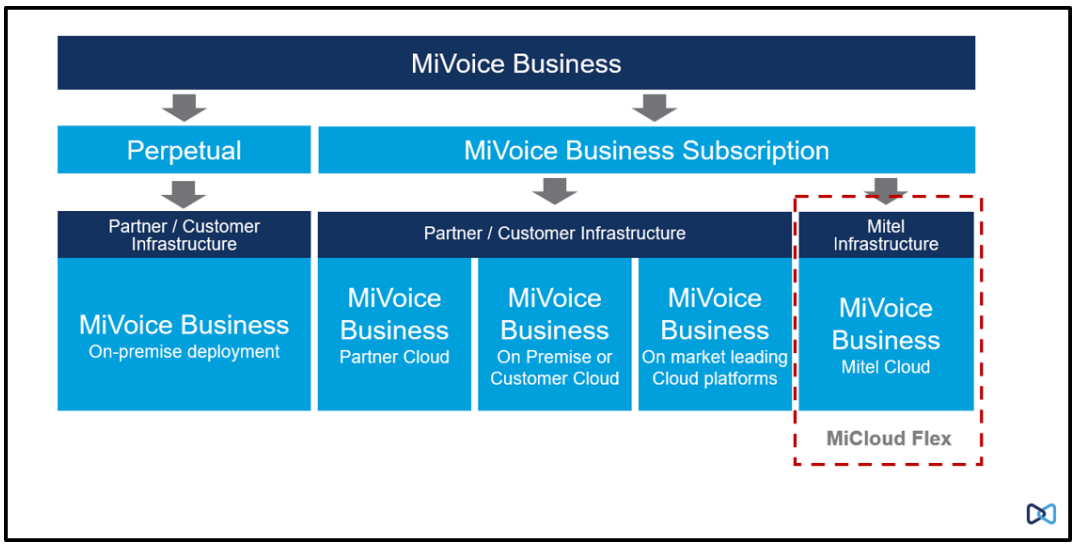
This chapter contains the following sections:

This chapter provides an introduction and overview of MiCloud Flex.

3.1 MiCloud Flex – Mitel Hosted Business Communications Solution

MiCloud Flex is a Mitel Unified Communications (UC), Collaboration, and Customer Interaction solution available for Mid-Market and Large Enterprise businesses. It is hosted by Mitel using industry-leading Tier3 (*Tier 3+ for Singapore*) Data Centers. The solution is available to the market via Mitel's Authorized Partner community, where the MiCloud Flex communication applications are managed and maintained by the Authorized Partner as a managed service offering.

MiCloud Flex is one of several deployment options that Mitel Authorized Partners can leverage to offer MiVoice Business-centric UC solutions as a subscription service. With MiCloud Flex, Mitel provides the hosting services instead of the partner hosting the solution themselves in their private cloud, a public cloud, or at the customer site. The following image gives an overview of the MiVoice Business Subscription and MiCloud Flex solutions.



3.2 Rich and Comprehensive Communications

MiCloud Flex offers industry-leading business communications that provide customers with

- Rich voice communications.
- Full and immersive multimedia collaboration.
- Comprehensive customer interaction contact center solutions with omni-channel interaction, IVR, and advanced agent AI capabilities.
- Workforce Optimization with Interaction Recording and Workforce Management solutions.
- Business Analytics.
- Available desk phone, wireless device, and local survivable gateway equipment rental.

> **Note**:
> Hardware rental is currently not available for Singapore Data Center.

For a complete list of applications available on MiCloud Flex, see the Applications Supported on MiCloud Flex on page 8.

3.3 Dedicated, Flexible, and Customizable

Unlike many other Unified Communications as a Service (UCaaS) offers, which are strictly multi-tenanted solutions, the MiCloud Flex solution is a hybrid solution utilizing

both multi-instance and multi-tenant deployments. It provides the capability to scale and customize the deployment to meet customer requirements, rather than being a one-size fit-all methodology. It can offer both Over-the-Top (OTT) connectivity and private networking.

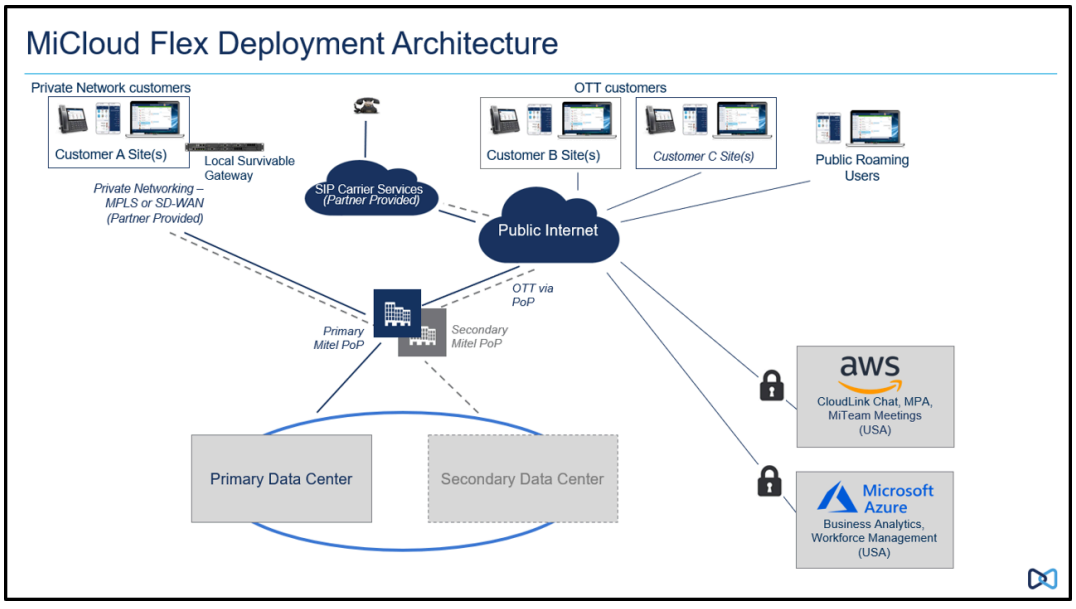
3.4 Availability

MiCloud Flex is available to be deployed in a dual data center configuration providing 5 9's reliability for core voice services. This can be augmented with additional Disaster Recovery and Business Continuity options to protect and recover a customer's full business communications suite if the primary data center suffers a catastrophic outage. Alternatively, MiCloud Flex can also be deployed as a single data center highly available 4 9's solution where the full benefits of a dual data center are not necessarily required.

In addition to providing options for hosted data center deployment, MiCloud Flex in a private network customer interconnect can be deployed with onsite survivable gateways that can provide for local site failover, support for local analog extensions (such as pagers and door alarms), and local PRI or SIP trunking ensuring local availability of carrier services.

3.5 Customer Network Interconnect Flexibility

MPLS or SD-WAN can be used to provide secure connectivity with QoS delivery. Alternatively, MiCloud Flex is capable of inter-connectivity with customer sites using the Public Internet in an Over-the-Top (OTT) fashion. In certain markets, Mitel's MiCloud Edge product can be deployed to provide QoS and private networking expressly for MiCloud Flex applications in place of customer-supplied private networking.

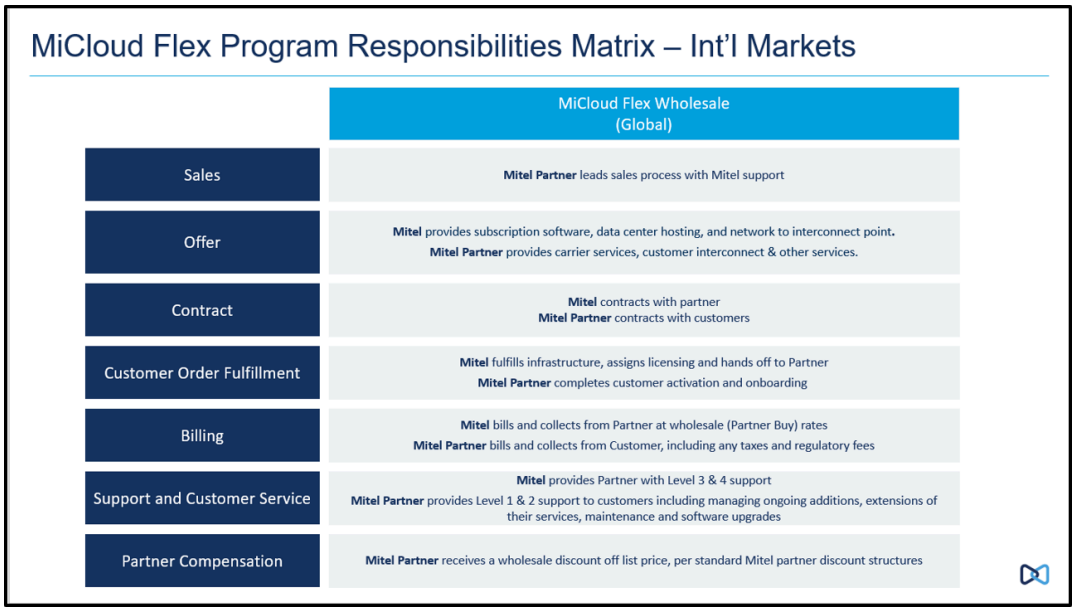


3.6 Partner Expectations and Requirements

With MiCloud Flex, Authorized Partners play a critical role in delivering the service to the customer. MiCloud Flex is available to partners in one of two go-to-market motions:

- Wholesale.
- Partner Delivered (US Only).

Partner responsibilities are broadly outlined in the following chart. For more information, see the *Partner Guides* available in the *MiAccess potal* > *InfoChannel*.



Before deploying a MiCloud Flex solution, Authorized Partners are expected to:

- Complete the necessary MiCloud Flex Sales Acadamy certification
- Complete the necessary MiCloud Flex Technical Training certification and product pre-requisites.
- Familiarize themselves with the MiCloud Flex General Information Guide, Solution Engineering Guide, and this Deployment Guide.

Applications Supported on MiCloud Flex

4

This chapter contains the following sections:

4.1 Supported Applications

The MiCloud Flex solution provides a rich feature set encompassing core voice capabilities with an extensive telephony feature set, and a customizable UC feature set including mobility capabilities. The solution architectures rely on several common product and application portfolio elements to deliver this functionality.

The following table lists the applications that are supported with this release of the MiCloud Flex solution. Based on the requirements, Mitel can recommend a package, a combination of one or more of these applications, that is best suited for your customer.

Application name	Classification	Link to Documentation
MiVoice Business	Call Manager/PBX	https://www.mitel.com/document-center/business-phone-systems/mivoice-business/mivoice-business
MiCollab	Collaboration Application	https://www.mitel.com/document-center/

Application name	Classification	Link to Documentation
		applications/collaboration/micollab
MiVoice Border Gateway	Session Border Controller	https://www.mitel.com/document-center/applications/mivoice-border-gateway
MiContact Center Business	Contact Center Application	https://www.mitel.com/document-center/applications/contact-center/micontact-center-business/micontact-center-business-for-mivb
Mitel Interaction Recording (Powered by ASC)	Call Recording Application	https://www.mitel.com/document-center/applications/contact-center/call-recording/mitel-interaction-recording-powered-by-asc
Mitel Workforce Management (WFM)	Workforce Engagement Management Suite	https://www.mitel.com/document-center/applications/contact-center/workforce-management
Mitel Business Analytics	Business Analytics Application	Accessible from the application user interface
Mitel Performance Analytics	Performance Analytics Application	https://www.mitel.com/document-center/applications/analytics/mitel-performance-analytics

4.2 MiVoice Business

MiVoice Business includes an extensive number of applications and system features that enable effective and efficient communications. These applications enhance communication, productivity, accessibility, and mobility, and support the specialized site requirements of businesses and institutions such as hotels, hospitals, schools, military sites, and contact centers.

Call control

The MiVoice Business call control engine provides sophisticated call management, applications, and desktop solutions to businesses. MiVoice Business is a proven, highly scalable, resilient, and robust call control engine.

The MiVoice Business architecture uses the IP network to connect IP telephony devices together.

If support for TDM telephony is required, install an onsite gateway supported through SD-WAN or MPLS deployments. For details of TDM Telephony support, see the MiVoice Business document available in the Document Center.

4.3 MiCollab

MiCollab unifies Mitel applications into an easy to use, cost-effective communications solution. The MiCollab applications include:

- MiCollab Client (including Visual Voicemail integration with NuPoint Messaging) – provides contact management, dynamic status, instant messaging, and audio conferencing
- MiCollab Audio, Web, and Video Conferencing – provides web conferencing, supporting audio, video, chat (text) and presentations
- MiCollab Suite Application Services – provides user services provisioning, centralized management of shared system resources and license management. It also offers the administrator and My Unified Communications portals
- MiTeam Meetings – provides MiCollab users with the ability to initiate Mitel Meetings from their MiCollab Client
- Persistent Chat – provides comprehensive Instant Messaging features from any device (Web, desktop applications, mobile applications)

MiCollab Audio, Web, and Video Conferencing

MiCollab Audio, Web, and Video Conferencing allow users to schedule and hold audio and web conferences. MiCollab Audio, Web, and Video Conferencing supports three types of conferences: Audio and Web, Audio-only, and Web-only.

Audio conferences allow users to:
• upload documents to present to callers during a conference call. • mute, drop, or add participants and place individual participants on hold while the call is in progress.
Web conferences allow users to:
• upload documents, transfer files, record the conference, chat online, and broadcast videos. • share applications or desktop and use whiteboard features.
Users access and manage their conferences using:
• MiCollab Audio, Web, and Video Conferencing Desktop client. Allows users to schedule and join audio and web conferences. The desktop client supports two-way audio participation. • MiCollab Audio, Web, and Video Conferencing Web portal. Allows users to schedule and view conferences with listen-only audio support. The web-based interface is integrated into MiCollab End-User Portal.

Conferences can be initiated immediately or scheduled in advance. MiCollab Audio, Web, and Video Conferencing may be integrated with corporate directories and personal address books from Microsoft Outlook and Lotus Notes. Optionally, conference accessibility requires personal identification for added security. MiCollab Audio, Web, and Video Conferencing support recording conference calls and collaborative sessions for later playback. Call Detail Records (CDRs) provide a log of all calls with dates, times, and call durations for audit and billing purposes.

MiCollab Audio, Web, and Video Conferencing have additional IP network configuration requirements.

MiCollab NuPoint

MiCollab NuPoint provides access to Visual Voice Mail (MiCollab UM voice mail and FAX messages) from the MiCollab Client interfaces.

MiTeam Meetings

MiTeam Meetings application is Mitel's Cloud-based collaboration tool (based on CloudLink infrastructure) that provides MiCollab users with the ability to initiate Mitel Meetings from their MiCollab Client. With MiTeam Meetings you can:

- Manage collaboration meetings
- Hold chat sessions and receive chat notifications
- Store and share files
- Perform audio, video, and web sharing

MiTeam Meetings is supported with the following MiCollab Clients:

- MiCollab for PC Client
- MiCollab for Mac Client
- MiCollab Web Client
- MiCollab for Mobile Client (iOS/Android only)

For information about MiTeam Meetings end-user features, see the *MiCollab Client End-User Online Help* in the Document Center.

CloudLink Chat

CloudLink Chat is a chat engine for MiCollab that is powered by Mitel's CloudLink infrastructure/platform. CloudLink Chat functionality is used by MiCollab and optionally MiContact Center Business is hosted in Amazon Web Services (AWS) cloud. The key capabilities of the CloudLink chat engine are:

- Persistent chat messages are synchronized across all their MiCollab clients – so no longer is the chat history only presented on the client/device where the chat was originated or responded from. Now users can stop the conversation on one device and seamlessly pick it up on another.
- All chat messages collected and made available to the user when they access the client – including those during the period that their MiCollab client was turned off
- The ability to always be available to send chats even when access/connectivity to the MiCollab server is not possible
- The ability to share files
- The ability to share their location details
- The ability to share audio instead of text
- A robust Emoji picker

- To reply to a select post within the chat through text or select emojis
- To provide @Mentions

4.4 MiVoice Border Gateway

MiVoice Border Gateway (MBG) is a platform for the secure deployment of multiple services in a variety of network configurations. MBG provides the following services:

- **Teleworking**- remote MiNET and SIP access (Teleworker) for IP phones connecting to the MiCloud Flex solution over the Internet
- **SIP Trunking**- SIP trunking provided to the MiCloud Flex solution
- **Secure Call Recording**- call recording solution that allows third-party recording equipment to record Mitel encrypted voice streams
- **WebRTC**- gateway to support browser-based voice and video calling
- **Web-proxy** - MBG has a limit on the number of web-proxy connections that can be handled. For deployments with higher number of users and web-proxy connections, use of the MBG with extended web-proxy support is recommended. Post-installation configuration may be required to enable the number of web-proxy connections up to 5000 from the base 500 quantity. See *MBG Installation and Maintenance Guide* for further details. Additional server resources are required to support this extended functionality. See the Server resource definitions in the *Virtual Application Deployment Guidelines* on Mitel Document Center.

4.5 MiContact Center Business

Note:
MiContact Center Business is an optional application that is provided with the MiCloud Flex solution.

MiContact Center Business provides a modular suite of applications for streamlining contact center management and enabling voice and multimedia contact center functionality. The applications included in MiContact Center Business are:

- **Contact Center Management (CCM)** - This is the core application. It provides historical and real-time reporting and forecasting for all agents and queues. CCM

supports customizable notifications and replay of real-time data and is also used to configure, manage, and maintain the contact center configuration and database.

  - **MiVoice Business Reporter** - Allows reporting and monitoring of general business extensions and ring groups, including traffic analysis reports.
  - **MiVoice Call Accounting** - Supports call costing to track the cost of incoming and outgoing calls and adjust costs based on carrier reports. Provides services to track subscribers' use of services, and to adjust prices based on fixed rates.
- **Interactive Contact Center** - Allows supervisory control over agent availability and queue states and agent control over their own availability. It includes an interactive visual queue that enables identifying contacts, along with the capability to manually control the position in queue, and view abandoned calls with the call back option.
- **Messaging and Routing** - Routes calls to the most appropriate group based on caller and call center statistics, such as type of service, agent skills, agent availability, idle time, and queue conditions. MiContact Center Business supports either Messaging and Routing ports or IVR ports, but not both in the same Enterprise server.
- **Contact Center IVR Routing** - Provides intelligent routing of voice calls based on call meta-data, caller menu choices, and call center statistics. It can be configured to collect and verify information with external data sources, enable callers to request callbacks, enable caller self-service capabilities, and run outbound dialing campaigns. Contact Center IVR includes the Visual Workflow Manager tool to facilitate configuration.

  IVR and Advanced Routing helps you to manage callers and their requirements effectively. It provides options for self-service and delivers useful announcements to callers in queue; such as expected wait time and caller's latest position in the queue. An intuitive drag-and-drop graphical user interface allows you to seamlessly build and manage call flows.
- **Multimedia Contact Center** - Provides queuing, inbound and outbound routing, and real-time and historical reporting functionality for email, real-time chats, SMS messages, and open media interactions. Multimedia Contact Center also includes graphical tools to facilitate maintaining workflows. These workflows may include self-servicing and intelligent routing for all media types.
- **Flexible Reporting** - When used with Contact Center Management, allows for the creation and customization of reports based on the contact center data. Reports use a spreadsheet look and feel, allowing a quick learning curve.
- **Speech Recognition and Text to Speech**- Provides Speech-enabled IVR functionality, such as Text-to-Speech and Automatic Speech Recognition, as optional add-ons to IVR Routing. This functionality provides accurate speech recognition, dictation and transcription. Text to Speech offers virtual assistance with life-like voices that sound as fluent as live agents to create intuitive, two-way customer engagement.
- **MiContact Center Outbound** - MiContact Center Outbound (powered by Noetica), delivers agent productivity tools and predictive dialer capability to Mitel customers and partners globally. It is a comprehensive, integrated outbound strategy management suite. MiContact Center Outbound supports all modes of outbound dialing and multi-

channel interactions and includes a wide range of campaign management tools. In addition, it is tightly integrated into a light touch Customer Relationship Management (CRM) system and agent scripting modules to form a complete solution that meets a wide range of outbound contact center requirements. The salient points include:

- **LPD™**- Live Person Detection
  - Safe and Accurate detection of voicemail and all other answering machines using AI techniques.
  - Fully Patented in the US, UK and Europe.
- **SNoDrop™** - 0% Abandoned Calls Predictive Dialing.
  - Fully predictive dialing with a 0% abandoned call rate (ACR).
- **TCPA Compliance** – Predictive Dialing to Cell Phones.
  - The Clicker component redefines the dialer as a non-ATDS.
- **Script Aware Predictive Dialer**
  - Predictive dialing for smaller teams down to 6 agents.
  - Fully Patented Globally.

For more information about the MiCC Outbound application, see the Engineering Guidelines document available in the Document Center.

4.6 Mitel Interaction Recording

Mitel Interaction Recording (powered by ASC) suite captures, saves, and archives multiple communication channels including mobile voice, video, and chat for financial institutions, contact centers, and public safety organizations. The recording suite provides you with communications recording and quality management as a service whereby capacities and features can be added as needed to react quickly and grow in the long-term. The solution offers the following capabilities:

- State-of-the-art recording and analysis for complex infrastructures
- Systematic capture and assessment of customer communications
- Solutions for financial institutions, contact centers, and public safety organizations
- Compliance with the highest security requirements and regulations such as Markets in Financial Instruments Directive (MiFID II); a directive for the harmonized regulation for investment services across the member states of the European Economic Area.

4.7 Mitel Workforce Management (WFM)

Mitel Workforce Management (WFM) is a top Workforce Management solution that encompasses everything needed to plan and successfully manage a contact center, back office, branch, or store. Mitel WFM provides a feature-rich solution that includes tools to manage staff, accurately forecast demand, and automatically schedule, report, and improve a company's operations. Several package options exist to further tailor the WFM to your needs. These include the WFM Advanced and Premium offerings – including multi-skill, multi-site, multichannel support, agent self-service, gamification, full intraday capabilities, and real-time adherence functionalities.

The Connector, included with any purchase of Mitel WFM offering, fully supports voice and multimedia agent data (including all supported media types and open media). This enables the WFM solution to perform forecasting, scheduling, and reporting of MiContact Center Business multimedia agents.

Note:
WFM is hosted in Microsoft Azure cloud.

4.8 Mitel Business Analytics

Mitel Business Analytics is a fully integrated cloud-based multi-tenant call analytics and call reporting service using SMDR as the data source which allows you to monitor business-critical call metrics by accessing reports, configurable dashboards, and visual wallboards.

4.9 Mitel Business Analytics Integration with MiCloud Flex

Mitel Business Analytics is integrated with the MiVoice Business solution to capture the SMDR Logs and provide necessary analytics.

4.10 Open Integration Gateway

The Mitel Open Integration Gateway (Mitel OIG) is a web server that provides OIG-based applications with a single point of access to web services available within MiVoice Business in a MiCloud Flex system.

The Mitel OIG supports the following web services:

- **Session Management Service** – Allows an application to open a communication session with Mitel OIG.
- **Call Control Service** – Allows an application to control and monitor MiVoice Business CTI behavior in a MiCloud Flex system.
- **Data Access Service** – Allows an application to register for MiVoice Business configuration data change notifications and read and write (only a subset of data) MiVoice Business configuration data, in a MiCloud Flex system.

4.11 Onsite Gateway

Customers who connect to MiCloud Flex through private networking (MPLS or SD-WAN) via Point-of-Presence (PoP) may choose to deploy an onsite gateway. This gateway can support local analog extensions as well as local functions such as paging adapter support or Music on Hold. It can also support local PSTN connections via PRI E1, PRI T1, or analog trunks. IP phones located at this site registered with MiCloud Flex can optionally failover to this gateway instead of a controller in a secondary data center. This enables local voice extension calling at the gateway site if the primary controller becomes unavailable.

The onsite gateway is a Mitel MiVoice Business controller running Release 9.1 or later. The onsite gateway can be monitored from the MiCloud Flex MPA.

MiCloud Flex users at this site are registered with the MBGs or with the controller in the MiCloud Flex deployment. They receive their primary voice services from MiCloud Flex. In a failover scenario, if the MiCloud Flex users are programmed to failback to the onsite gateway, they can receive their PSTN services from the onsite gateway. Analog users connected to the onsite gateway and IP set users who are not MiCloud Flex users, receive their PSTN services from the onsite gateway or via the centralized trunk services in the cloud depending upon the configuration and the licensing.

4.11.1 Requirements for Onsite Gateway

- **Controller Hardware** - New customers will purchase or lease an EX or AX to be the onsite gateway. Existing customers with controllers that can be upgraded to MiVoice Business 9.1 and later can be used as MiCloud Flex Onsite Survivable Gateways. For a list of supported controllers, see the *MiVoice Business Migration Guidelines* document, available in the Document Center.
- **IP Set Hardware** - The introduction of an onsite gateway does not alter the list of supported IP phones that can register with MiCloud Flex. The onsite gateway continues to support all the phones that an on-premise MiVoice Business of the same release.

- **Software** - The onsite gateway software must be running release 9.1 or later because FQDN support is required for this solution. In Flex offering, it is recommended that you upgrade the onsite gateway software similar to the MiVoice Business software release supports
- **PSTN Connectivity** - The onsite gateway supports PSTN connectivity via local analog, E1/T1 links, and SIP via MiVoice Border Gateway..
- **Connection to MiCloud Flex** - The connection between the onsite gateway and MiCloud Flex is via Mitel proprietary IP trunks. These trunks need to be enabled at firewalls to allow calls on the local gateway to be routed to other phones that will be registered with MiCloud Flex.
- **MiCollab** - MiCollab resides in the data center as a virtual machine protected by VMware High Availability. You can connect through the MBG or a private SD-WAN connection. Also, depending on the deployment topology, a split DNS may be required. For more information about how to add or modify MiCollab Client Deployment Profile, see MiCollab Client Deployment Web Help > Deployment Profiles > Add or Modify a Profile page available in the Document Center.
- **MiCollab NuPoint** - MiCollab NuPoint is a powerful server-based unified messaging and auto attendant solution. With MiCollab NuPoint residing in the data center as a virtual machine protected by VMware High Availability, users connected to the onsite gateway can connect to the NuPoint provided the connectivity between the gateway and the server is available. For more information, see Nupoint Unified Messaging General Information Guide.

> **Note**:
>
> If the NuPoint application becomes unavailable, the calls must be pre-programmed to reroute to the onsite gateway over the PSTN.

- **Mitel Business Analytics** - Mitel Business Analytics can optionally collect the required SMDR data from the onsite gateway. An MPLS or SD-WAN connection is required for the SMDR data to traverse between the onsite gateway and the data center located collector node.

4.12 Mitel Performance Analytics

Mitel Performance Analytics provides fault, inventory, and performance management for Mitel Networks Unified Communications systems, multiple enterprise VoIP systems, and associated network infrastructure, both for LAN and WAN. Mitel Performance Analytics supports monitoring and remote access both for private networks, such as enterprise LANs and MPLS VPNs, and for public network or Internet-reachable devices, such as access routers.

For more details about Mitel Performance Analytics and its capabilities, refer the *Mitel Performance Analytics Quick Start Guide-On-Premises Users* available in the Document Center.

For more details about Mitel Performance Analytics installations, refer the *Mitel Performance Analytics Engineering Guidelines* available in the Document Center.

4.13 vCloud Director

Each customer deployment provisioned by Mitel on behalf of its partners is hosted within a *Virtual Data Center (VDC)* inside a *Physical Data Center (PDC)*. Partners are granted management access to these VDCs so that they can perform certain administrative functions. The following table summarizes what to expect when you log in to this environment.

The table also includes links to the various MiCloud Flex vCloud Director sites on a global level. The credentials for accessing the sites are provided in the handover document.

Region	Data Center	vCloud Director URL
United Sates of America (USA)	Reston	https://res01.ilandcloud.com/tenant/mitel-micloud-130310350
United Sates of America (USA)	Dallas	https://dal02.ilandcloud.com/tenant/mitel-130310350
United Kingdom	London	https://lon02.ilandcloud.com/tenant/mitel-130310350
United Kingdom	Manchester	https://man01.ilandcloud.com/tenant/mitel-130310350
Australia	Sydney	https://syd02.ilandcloud.com/tenant/mitel-130310350/

Region	Data Center	vCloud Director URL
Australia	Melbourne	https://mel02.ilandcloud.com/tenant/mitel-130310350/
Canada	Toronto	https://tor02.ilandcloud.com/tenant/mitel-130310350
Germany	Amsterdam	https://ams01.ilandcloud.com/tenant/MitelLimited-130310350/vdcs
Singapore	Singapore	https://sin01.ilandcloud.com/tenant/mitel-130310350/

For information about the vCloud Director login, see Accessing vCloud Director on page 46.

4.13.1 MiCollab Advanced Messaging

MiCollab Advanced Messaging (MiCAM) is a Windows-based Unified Messaging service that allows users to manage their messages from a workstation, though a web browser, an e-mail application, or their telephones.

MiCAM integrates next-generation voice applications with the MiCloud Flex communications environment providing Unified Messaging, Transcription, Speech-enabled Directory and Automated Attendant, Secure Voicemail and so on.

The MiCAM solution is an alternative to MiCollab Unified Messaging (also known as NuPoint UM).

The following licensing levels and configuration options are offered by MiCAM:

- Basic: The messages are stored locally with the system server and copies are provided to the e-mail server.
- Advanced: The messages are stored on the e-mail server, which may be local or cloud-based. The files and status are fully synchronized with the e-mail server and the application.

Note:

When MiCAM is deployed in the MiCloud Flex solution, fax services are not supported. MiCloud Flex Fax options must be used as the alternative.

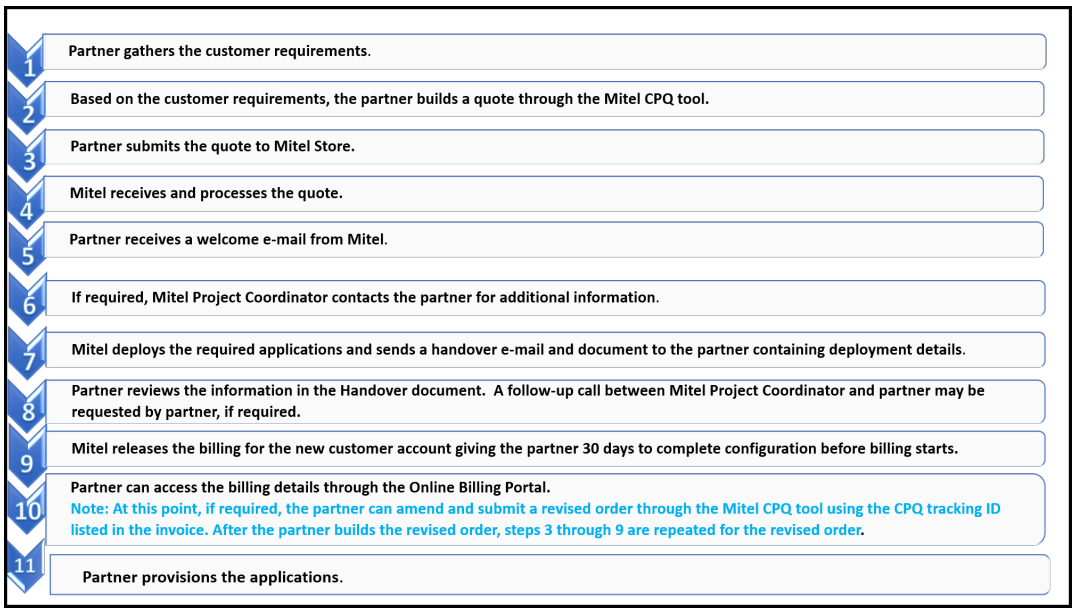
For more information about MiCAM, see the *MiCloud Flex Engineering Guidelines* document available in the Document Center.

MiCloud Flex Deployment 5

This chapter contains the following sections:

5.1 MiCloud Flex Deployment Workflow

The following illustration depicts the end-to-end workflow that needs to be followed to deploy MiCloud Flex.



5.2 Deployment Steps

To deploy MiCloud Flex, you need to complete a series of tasks arranged in a set sequence. The table below lists these tasks (and the sequence) that need to be completed.

	Task	Owner	Description
1.	Collects the information from the customer.	Channel Partner	The partner collects the following information.

	Task	Owner	Description
			• Customer Sites • User Profiles • Agent Profiles • Endpoints • Accessories
2.	Based on the customer requirements, a quote is built through the Mitel CPQ tool.	Channel Partner	For more information about the Virtual machine resources and capabilities, refer to the MiCloud Flex Engineering Guidelines.
3.	Submits the order to Mitel Store.	Channel Partner	The Partner after creating a quote, logs into the Mitel Store and enters the CPQ Tracking ID and submits the order to Mitel Store. The partner receives a confirmation message once the order is submitted.
4.	Receives and processes the order.	Mitel	
5.	A welcome email is sent to the partner.	Mitel	Welcome e-mail contains the end-customer details such as customer account reference number, customer order number.

	Task	Owner	Description
6.	Contacts the partner for additional information, if required.	Mitel	
7.	Deploys the required applications and sends a handover e-mail and handover document.	Mitel	Handover email contains order implementation details and handover document contains the deployment details such as IP addresses of the applications with user names and passwords, and so on.
8.	Reviews the information in the Handover document.	Channel Partner	A follow-up call is arranged between the Mitel Project Coordinator and the partner, if required.
9.	Billing for the new customer account is released, giving the partner 30 days to complete configuration before billing starts.	Mitel	
10.	Can access the billing details through the Online Billing Portal.	Channel Partner	At this point, if required, the partner can amend and submit a revised order through the Mitel CPQ tool using the CPQ tracking

	Task	Owner	Description
			ID listed in the invoice. After the partner builds the revised order, steps 3 through 9 are repeated for the revised order.
11.	Provisions the applications.	Channel Partner	

Getting Started with MiCloud Flex 6

This chapter contains the following sections:

- Prerequisites

The prerequisites required for getting started with the MiCloud Flex solution are described in this chapter.

6.1 Prerequisites

To start using your solution you must have the:

1. **Welcome email** - contains Customer's name, account number, order ID, CPQ Tracking ID. A sample welcome email is shown below for reference.

> **Note**:
>
> You shall receive the welcome email once the order is processed by Mitel.

Dear **"Partner Name"**,

Thank you for the MiCloud Flex Service Order for your customer "**CustomerName"**. The Service Order has now been received and entered in our systems. We are now getting the MiCloud Flex system ready for you!

Your end customer account reference number: "**AccountNumber" – "CustomerName"**

Your end customer order number: **"OrderID"**

Your Mitel CPQ Tracking ID with the Service Order details: **"CPQ Tracking ID"**

Once a Mitel Project Coordinator has been assigned for this customer order, an email will be sent to "**Technical Partner Name"** so that a Project Coordination Meeting can be arranged, and your order fulfillment completed.

Should you have any questions on the status of this Service Order, please contact: **order_admin@mitel.com**

Thank you!

Your Mitel Team

2. **Project Coordinator email** - Mitel, through Project Coordinator will reach out to you for executing certain coordination activities to deliver the solution infrastructure. A sample email from Mitel is shown below for reference.

> **Note**:
>
> You should be receiving the Project Coordinator email after the Welcome email.

Hello "Technical Partner Name",

Thank you for your **Flex - Wholesale** order for "CustomerName". As a reminder for Wholesale Implementations, Mitel *will not* reach out directly to your customer, instead you will work with a designated **Project Coordinator**, "Coordinator Name", to execute specific coordination activities for the delivery of your purchased solutions infrastructure.

This contact will serve as your main point of communication through the **Mitel** onboarding activities. As you are aware, to ensure a smooth and successful project, it is important that you work closely with Mitel to provide all the required information.

To assist you in the success of your project, the following individual has been assigned to support your project:

Title	Contact Information
Project Coordinator	@[Coordinator Name]
Email Address	@[Coordinator Email]

Thank you for your business. We look forward to working with you!

Regards,

Mitel

3. **Handover email** - an acknowledgment email received regarding the order implementation. A sample handover email is shown below for reference.

> **Note**:
>
> Once the applications are deployed by Mitel, you shall receive the handover email.

4. Handover document - contains high level configuration setup information, deployment details such as the IP addresses of the applications with usernames and passwords, and so on.

Note:
The handover document is received along with the handover email.

Next Steps – Accessing and Using MiCloud Flex Applications

7

This chapter contains the following sections:

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

By logging into the AMC with the username and password you are given when you obtain your account, you can view a list of your AMC-enabled products, check their status, and add services to any of them.

Note:

- You need to verify licenses while you log in to the respective application so that customers can use the application without encountering any issues. If you encounter any discrepancies while verifying the licenses, reach out to Mitel.
- For partner delivered MiCloud Flex solution, Mitel owns the ARID.

7.1 Accessing Mitel Performance Analytics

After the installation is complete on the customer network, the login credentials (URL, user name, password, and other details) must be sent to the partner account holders

through email. Also, Mitel Performance Analytics can be used for accessing customer applications remotely.

For more information about organizing Mitel Performance Analytics data, refer the *Mitel Performance Analytics Installation and Maintenance Guide*, available in the Document Center.

7.2 Accessing MiCollab

The MiCollab deployment is set to Integrated mode by default. In this mode, the MiCollab system keeps the Users and Services database and MiCollab Client database synchronized so they function as a single database on the MiCollab server. It allows you to provision MiCollab Client services from the MiCollab Users and Services application and supports flow-through provisioning of the MiCollab Client services on the MiVoice Business platform(s). This is the recommended mode for sites that meet the integration requirements. Integrated Mode is required to support MiCollab Integrated Directory Services (IDS).

7.2.1 Verifying Licenses

To verify MiCollab licenses:

1. Log in to the **MiCollab** application using the details provided in the handover document. The **MiCollab** application opens displaying the **Licensing Information** page.
2. Verify the licenses that have been applied.

> **Note**:
>
> The details to be verified for the MiCollab license is available in the handover document.

3. Provision users and services.

   For more information about the MiCollab application, see the guides available in the Document Center.

7.3 Accessing MiVoice Business

7.3.1 Verifying Licenses

To verify MiVoice Business licenses:

1. Log in to the **Server Manager** using the Server Manager link (such as *<IP or FQDN>/server-manager*) with your admin credentials.
2. Choose **Status** from the navigation pane. The **ServiceLink Status Information** page opens. Next, search for a service account ID number (also called Application Record ID), specified for a particular customer.
3. Enter the service account ID or the Application Record ID number in the given field; leave the IP address field blank.

> **Note**:
>
> The Application Record ID for a specific customer, is given in the handover document.

4. Choose **Activate** and wait until the registration is complete.
5. Later, when the registration is complete, log in to the **MiVoice Business System Administration Tool**, using the details provided in the handover document. The **MiVoice Business System Administration Tool** application opens.
6. Navigate to **System Administration Tool** in the **MiVoice Business System Administration Tool**.
7. Select **Licenses > License and Option Selection** from the navigation pane. The **License and Option Selection** page opens, displaying the licenses that have been applied.

For more information about the Configuring System Administration Tool, see **System Programming** in the *MiVoice Business System Administration Tool Online Help* available with the application or in the Document Center.

7.3.2 Emergency Services – MPA Notification Programming

To program Emergency Services notification for MPA (Mitel Performance Analytics):

1. Ensure that you have completed CESID Programming. See **System Applications > General Business Solutions > Emergency Services > CESID Support > Programming** in the System Administration Tool Online Help.
2. In the **Shared System Options** form:

   a. Ensure that the **Enable ER TRAPS** field is set to **Yes**.
   b. Enter the following:

      i. ***Trap IP Address/FQDN for ER notification**
      ii. ***TRAP Community String**

> **Note**:
> Ensure that you enter the same TRAP community string in the Mitel Performance Analytics (MPA).

7.4 Accessing MiVoice Border Gateway

7.4.1 Verifying Licenses

To verify MBG licenses:

1. Log in to the **MiVoice Border Gateway** application using the details provided in the handover document. The MiVoice Border Gateway administrative interface opens.
2. In the left-hand menu of the server manager, under **Applications**, click **MiVoice Border Gateway**.

   For MBG configuration instructions, click the **Help** icon in the upper right corner of the MBG interface.

   Additionally, if you have an IP Phone installed, you can configure it to work remotely, for accessing the features of your office voice network using the teleworker service of the MiVoice Border Gateway. For step-by-step instructions about configuring teleworker devices, see the *MBG Phone Remote Guide* available in the Document Center.
3. In the **MiVoice Border Gateway** application, scroll down to the **License information** section.
4. Verify that the application displays the number of licenses required for deployment (for example, Teleworker and SIP Trunk licenses).

Note:

The details to be verified for the MiVoice Border Gateway license is available in the handover document.

7.5 Accessing MiContact Center Business

Setting up MiContact Center Business

MiContact Center Business is deployed on a Virtual Machine on MiCloud Flex, there are several settings on MiContact Center Business that you must configure before you can use MiContact Center Business. For more information, see the *MiContact Center Installation and Administration Guide*, available in the Document Center.

If MiContact Center Business has been deployed as part of your solution, you access the application by creating an RDP port rule in MPA for MiCC and use that RDP link to access the virtual windows server as mentioned in the handover document.

7.6 Accessing Mitel Interaction Recording

If Mitel Interaction Recording has been deployed as part of your solution, you access the application by creating an RDP port rule in MPA for Mitel Interaction Recording and use that RDP link to access the virtual windows server from the details provided in the handover document.

7.6.1 Setting up Mitel Interaction Recording

To set up Mitel Interaction Recording to record calls:

1. In the Mitel Interaction Recording GUI, enter the same PSK password that was given in the MBG GUI. To enter the password:

   a. Log in to the Mitel Interaction Recording GUI.
   b. Navigate to **System Configuration > Setup > Integrations > Configure CTI connection data > Add**.
   c. In the **Configure Connection** dialog box, enter information for the following fields:

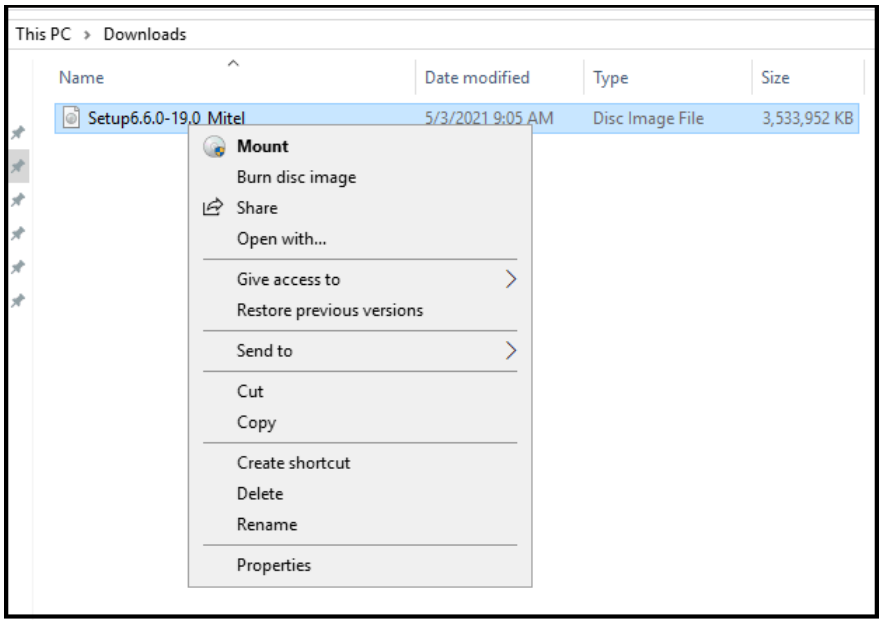
      - **Connection data** - Enter the internal FQDNs of MBG that were created as part of the deployment.
      - **PBX port** - Enter the port for MBG, default 6810.
      - **Activate indirect recording** - Select the check box if you would like to use indirect recording.
      - **Use pre-shared key** - Select the check box as MBG is used in the PSK mode.
      - **Pre-shared key (PSK)** - Enter the pre-shared key that was given in the MBG GUI.

   d. Click **Add**.
2. In the MBG GUI, navigate to **System > Settings**, and from the **Codec support** drop-down, select **Restricted to G.729, G.711 (a-law and µ-law)**.

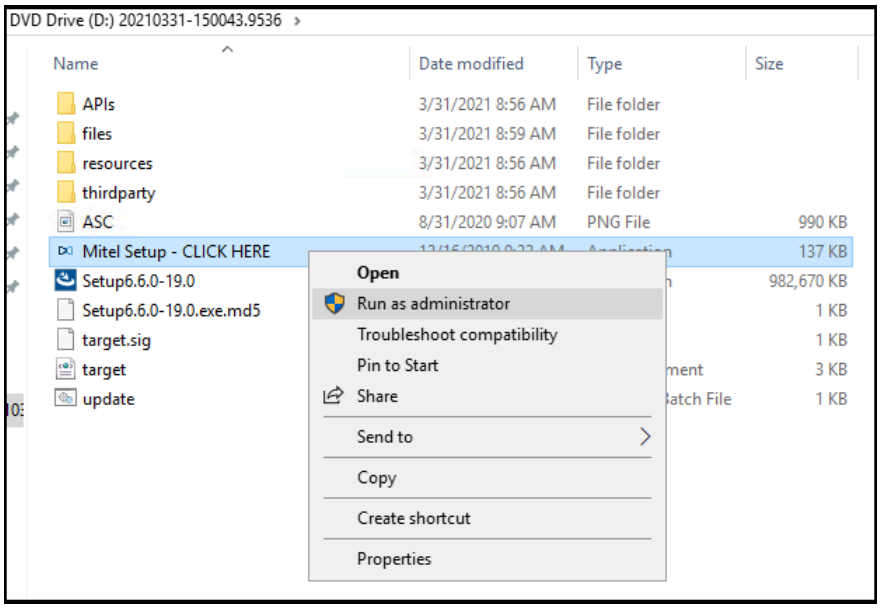
7.6.2 Configuration Steps to Create Server E*

The steps for setting up Server E* are the same as those of Server A and Server H. However, for Server B, Server C, and Server D, you do not select the check boxes **Application Server**, **Data Storage**, and **Solr** in the System Configuration.

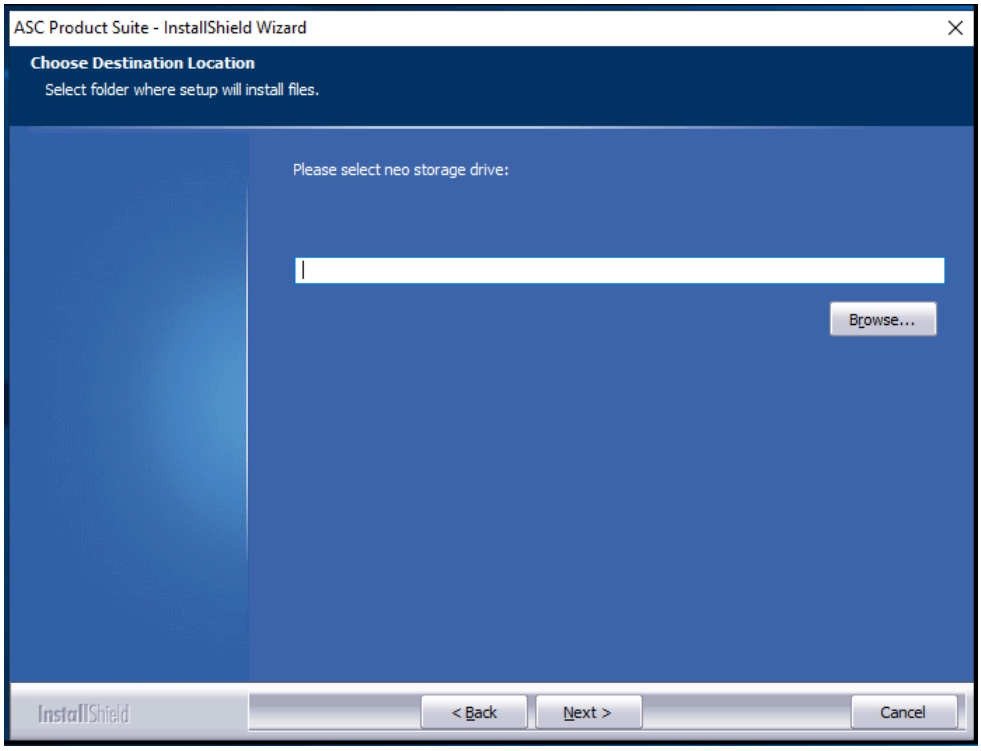
1. To install the ASC application, browse to the download location and Mount the ISO in Microsoft Explorer.



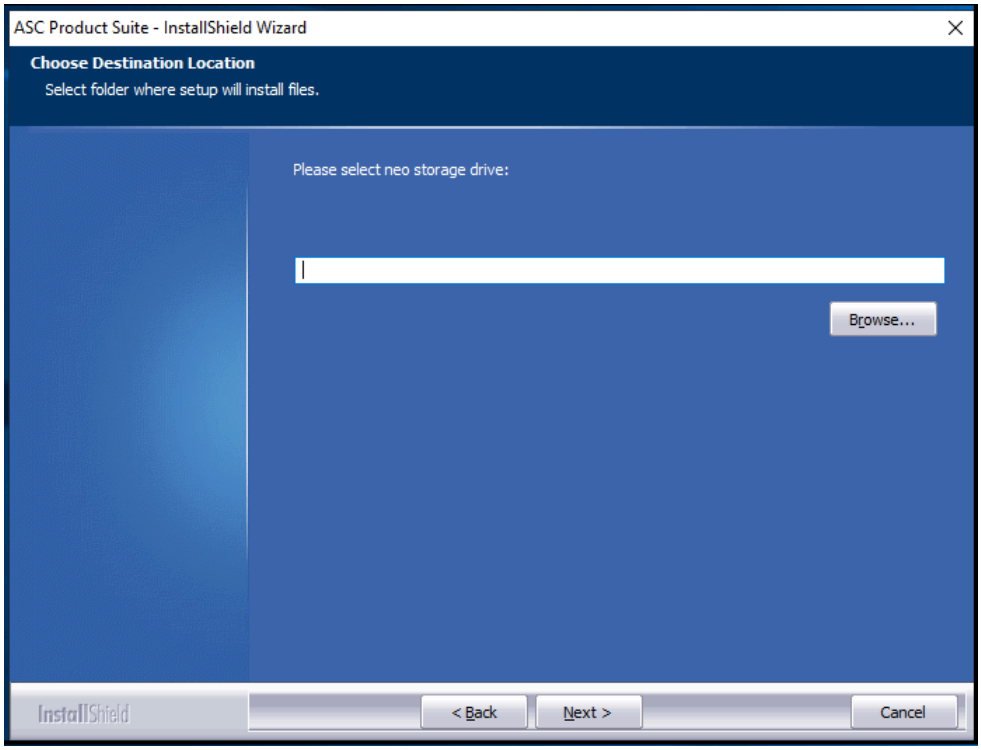
2. From the context menu of the file setup.exe, select the menu item Run as Administrator.



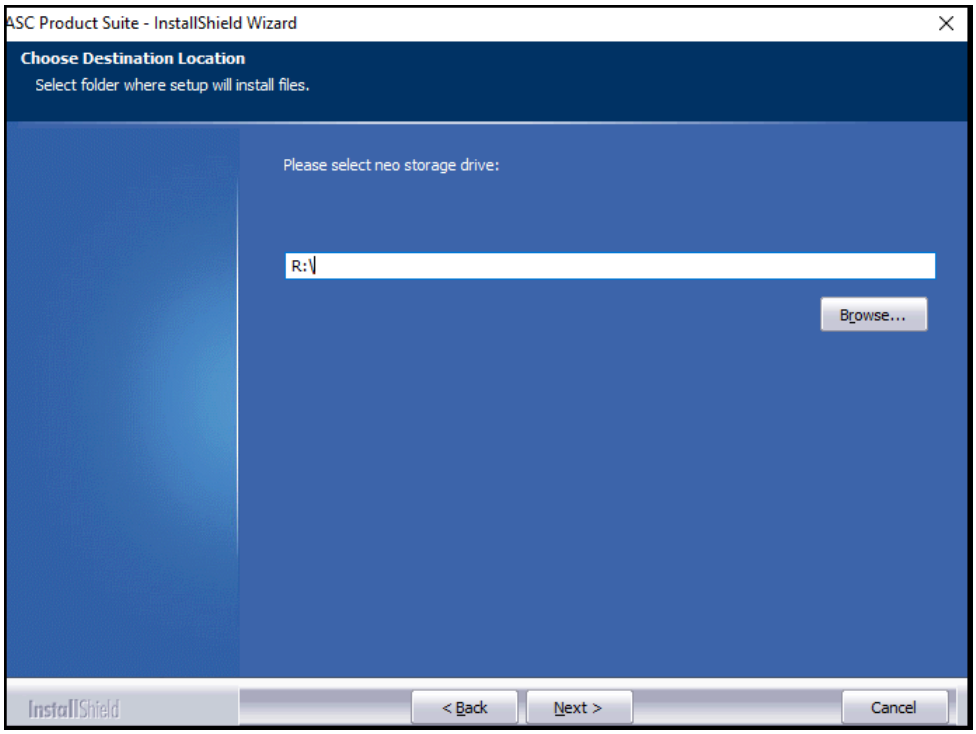
3. Choose the installation location for the ASC program files.



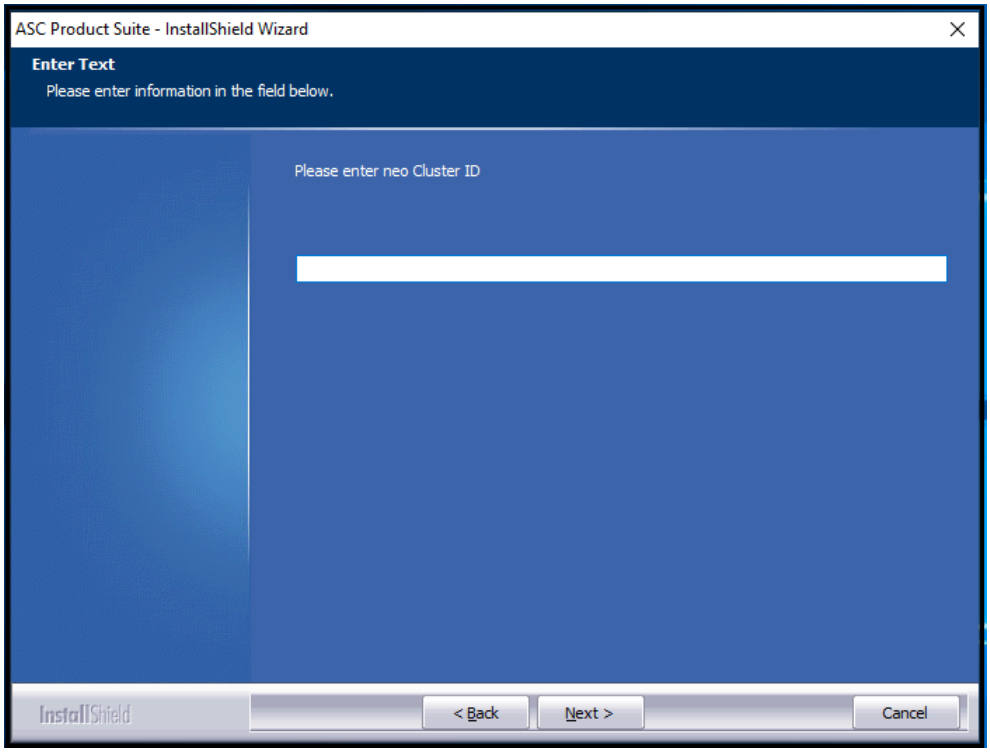
4. Configure the **Storage** location. Click **Browse**.



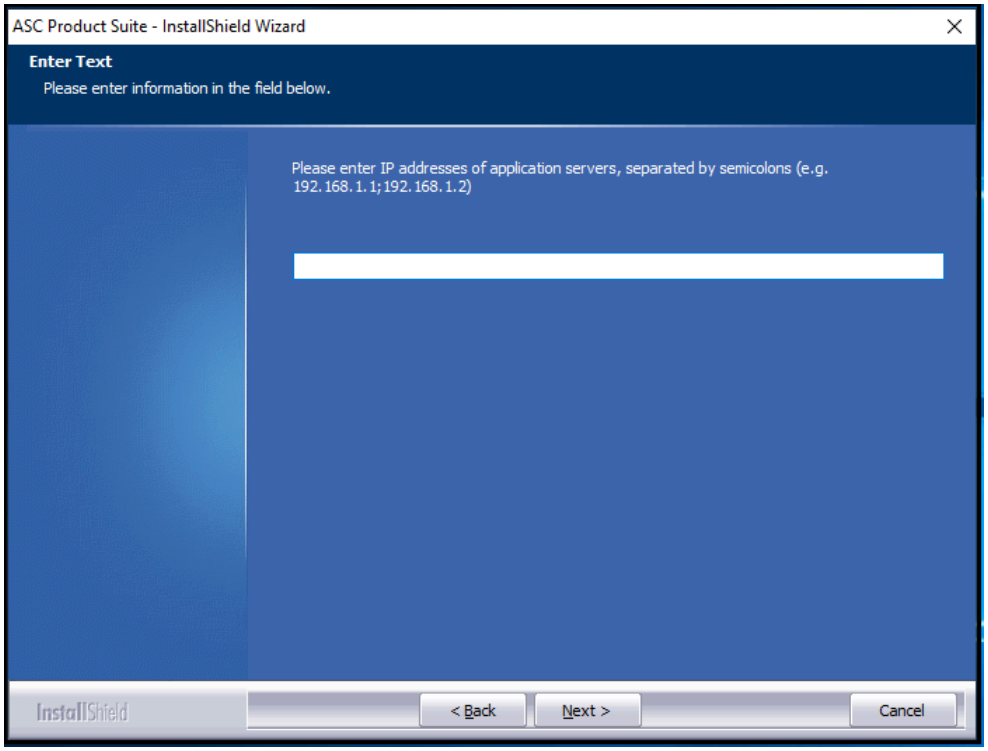
5. Select the Storage location from the context menu and click **OK**. Confirm the location chosen location is correct and click **Next**.



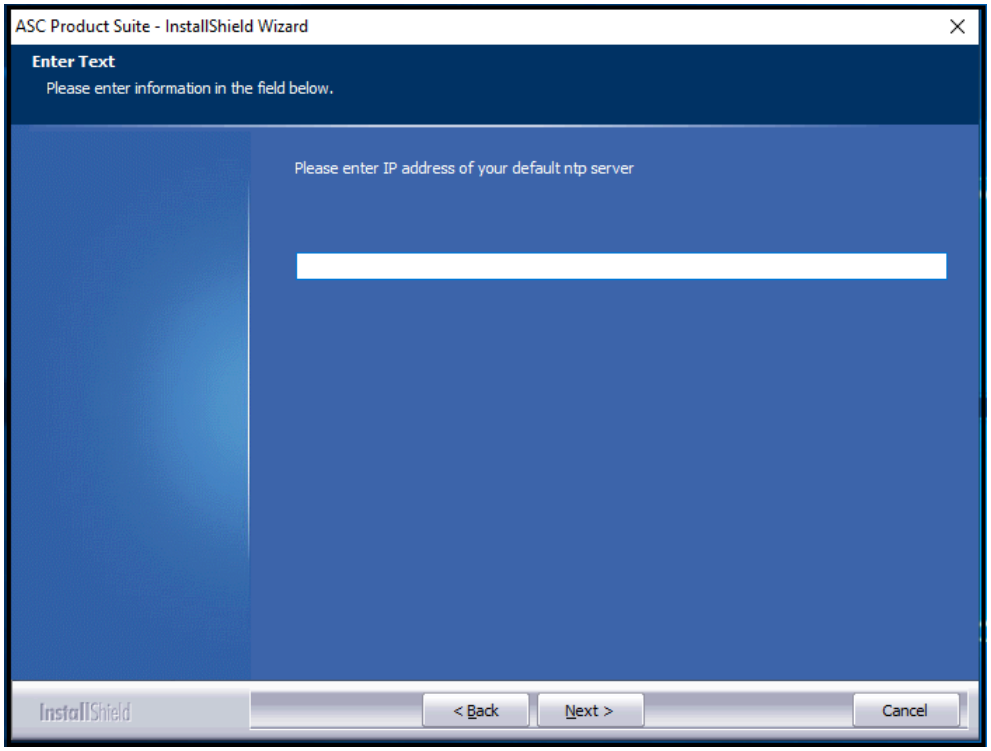
6. Enter the a name for the Cluster ID. You can use the default suggestion or create a unique name. The cluster ID must match when the deployment contains multiple Enterprise Core servers.



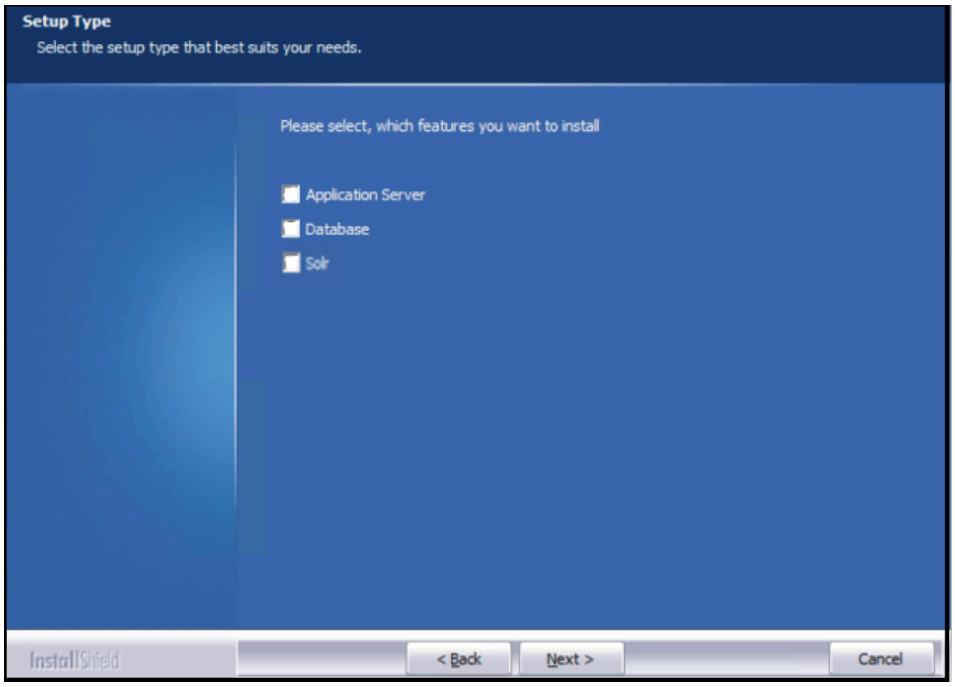
7. Enter the IP address of the enterprise server.



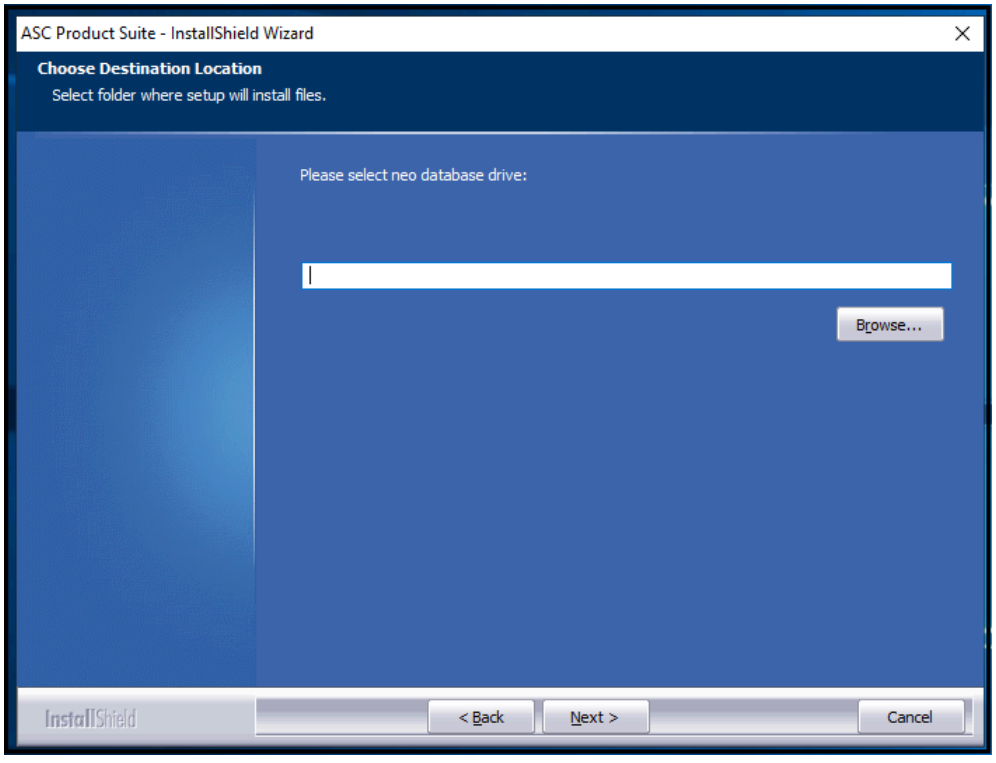
8. Enter the ntp server. All MIR servers have an NTP server configured. This is a mandatory step.



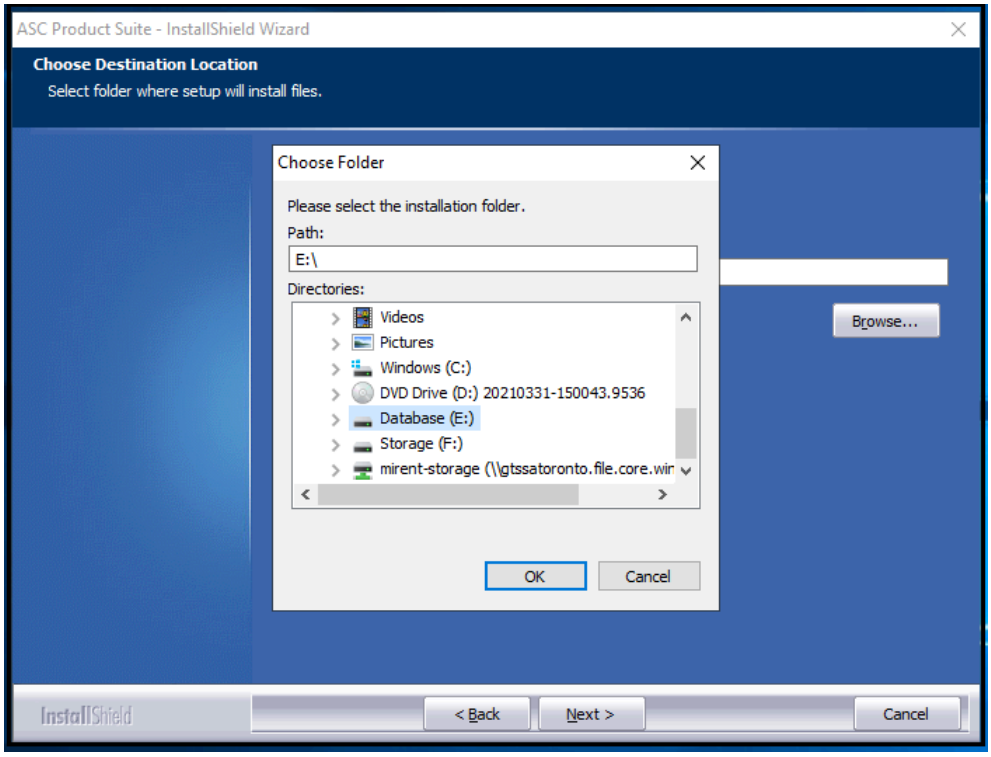
9. While installing for Server-E*, ensure that you clear the check boxes for the **Application Server**, **Database** and **Solr** options.



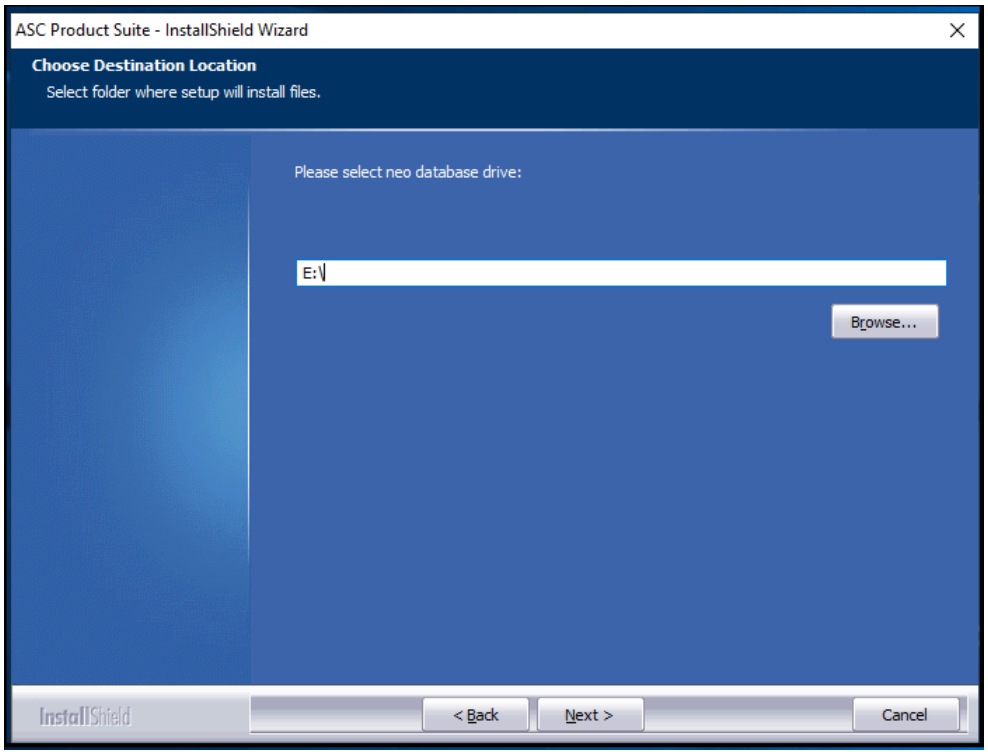
10. Click **Browse** and select the location the PostgreSQL database will be stored. This applies to **Server Type A** or **Server Type H**.



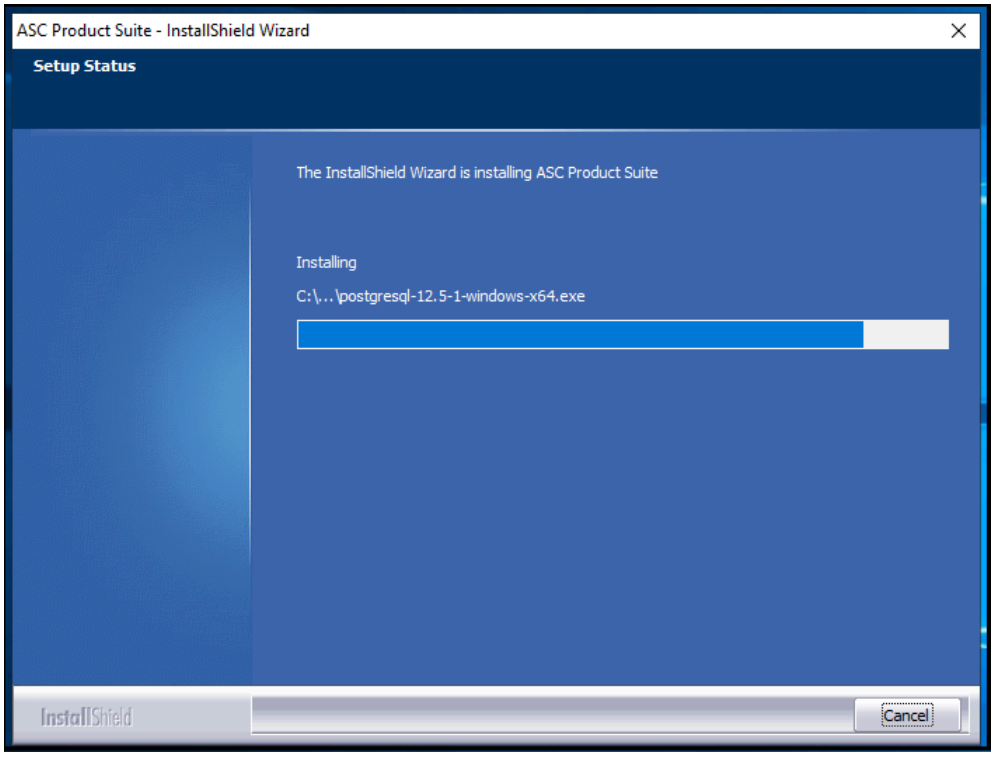
11. Choose the drive for the database and click **OK**.

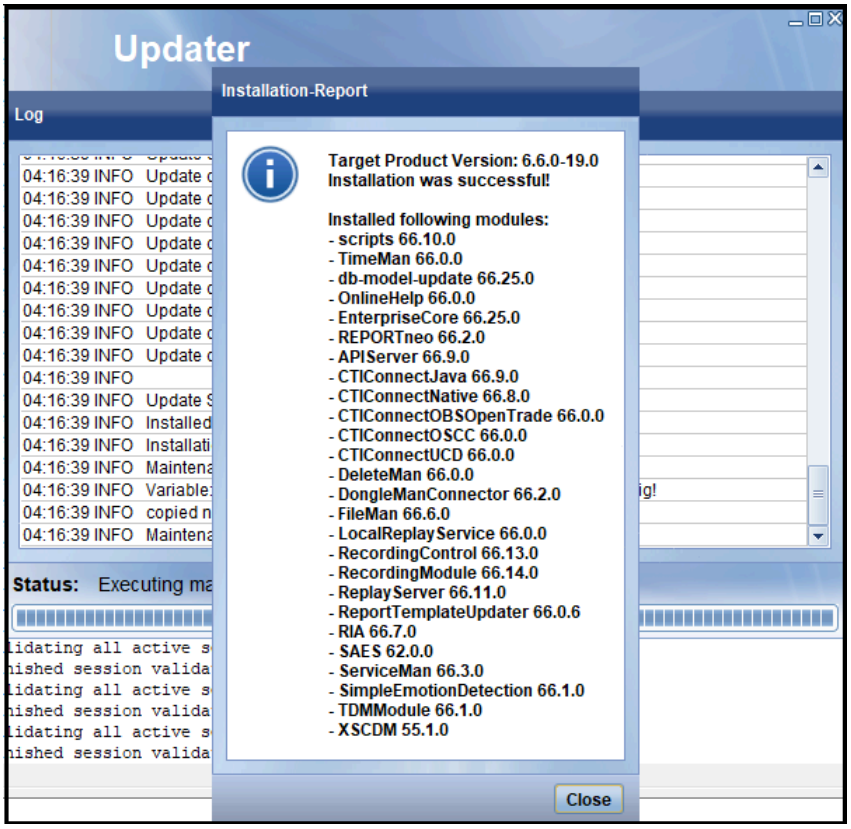


12. The database drive has been configured, click **Next**.

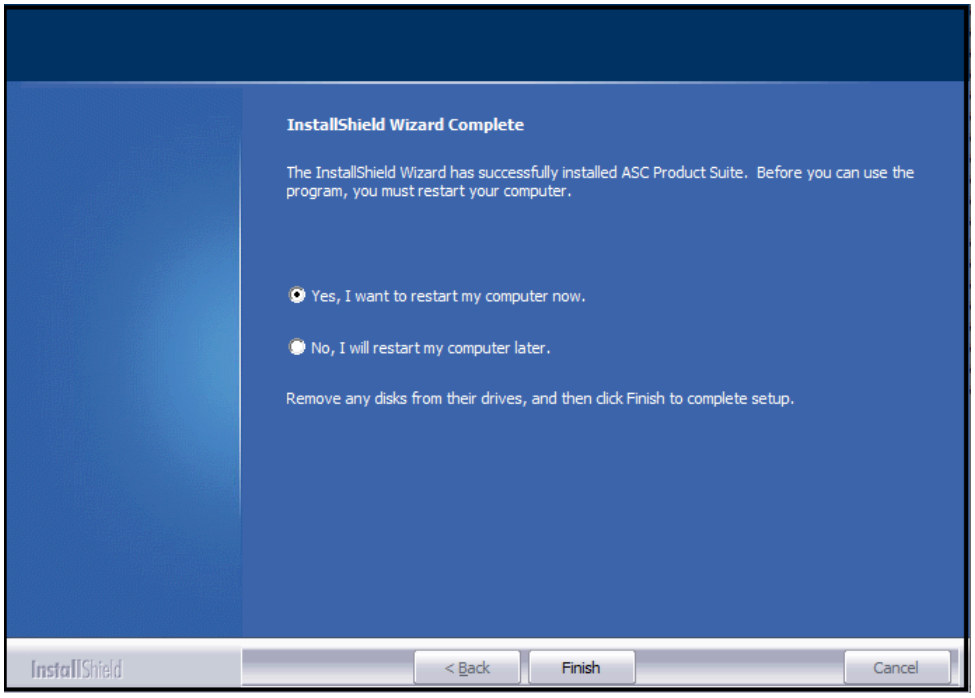


13. Start the installation.

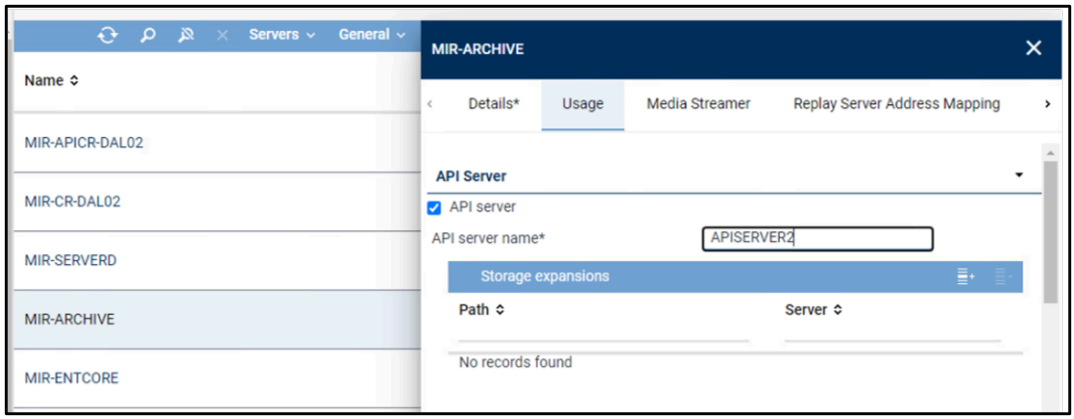




14. Click **Finish** once the installation is complete.



15. From the ASC application, go to the **System Configuration** navigation pane, choose **Servers > Archive (Server- E)**.
16. To configure the server accordingly, select the entry of the corresponding server in the main view, in this case, the **Usage** tab.
17. Select the **API Server** check box.
18. In the **API server name** field, provide a unique name **APIServer2**.



19. Select the **Data storage** check box.

20. Click **Save**.

This completes the configuration of Server E*.

For more detailed information about the configuration of Server E and its architecture, refer the *Config_server_and_recording_architectures_sp_us* document available in Document Center.

For more details about ASC installation manual, see section 8 in the *Inst_recording_software_of_ASC_SP_us.pdf*, available in Document Center.

7.6.3 MPA Notification Programming

You must configure two SNMP agents on Mitel Interaction Recording (MIR) before MPA can monitor the device. For information about how to configure the SNMP agents, refer to the guideConfiguration Microsoft Server 2019, available in the Document Center

7.7 Accessing Mitel Workforce Management (WFM)

The Mitel Workforce Management (WFM) team sends an email with the application URL, username and password to the registered email ID or the account holder. For more information about configuring WFM, see the *MiContact Center-Business Online Help* > *Configuration* > *Configuring Workforce Management integration* available in the Document Center.

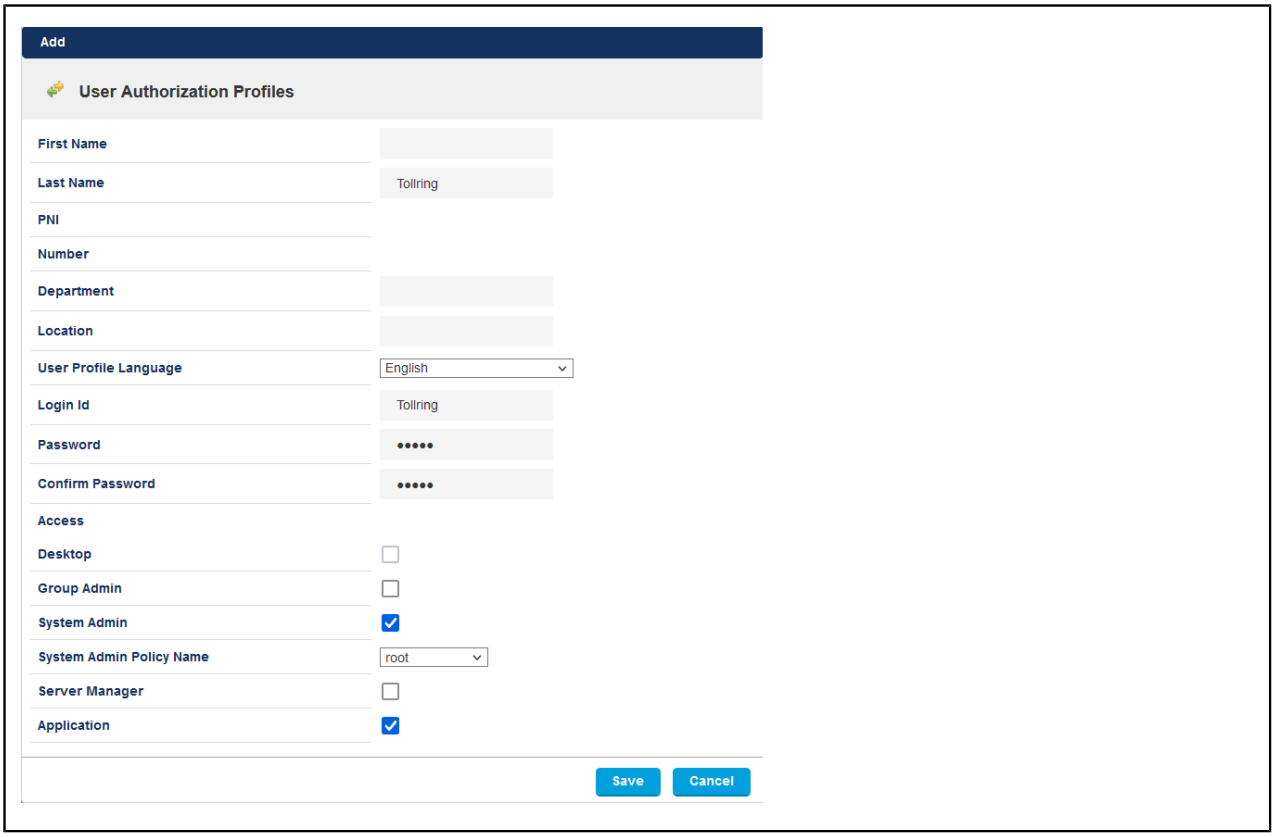
7.8 Accessing Mitel Business Analytics

The Mitel Business Analytics team sends a welcome email to the registered account holder. This email contains the application URL, username, and password.

Creating MiVoice Business account for Tollring

Note:
Prior to creating an MiVB account to add Tollring, ensure you have clustered all your MiVB.

Log into MiVoice Business, and create a user account using the following settings:



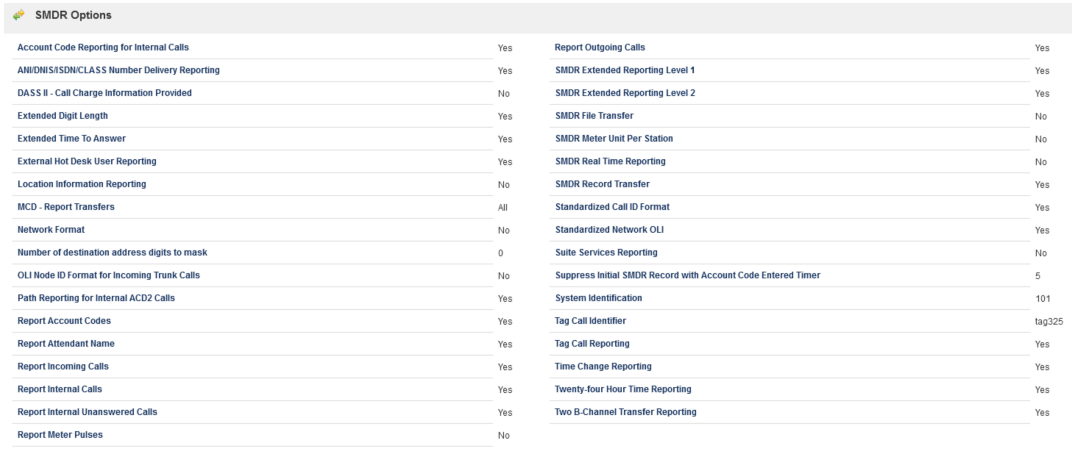
Note:
Refer to the *Handover Guide* for your password.

SMDR Settings for MiVoice Business

To populate reports and dashboards, the SMDR settings must be configured in MiVoice Business.

The procedure for configuring SMDR settings is as follows:

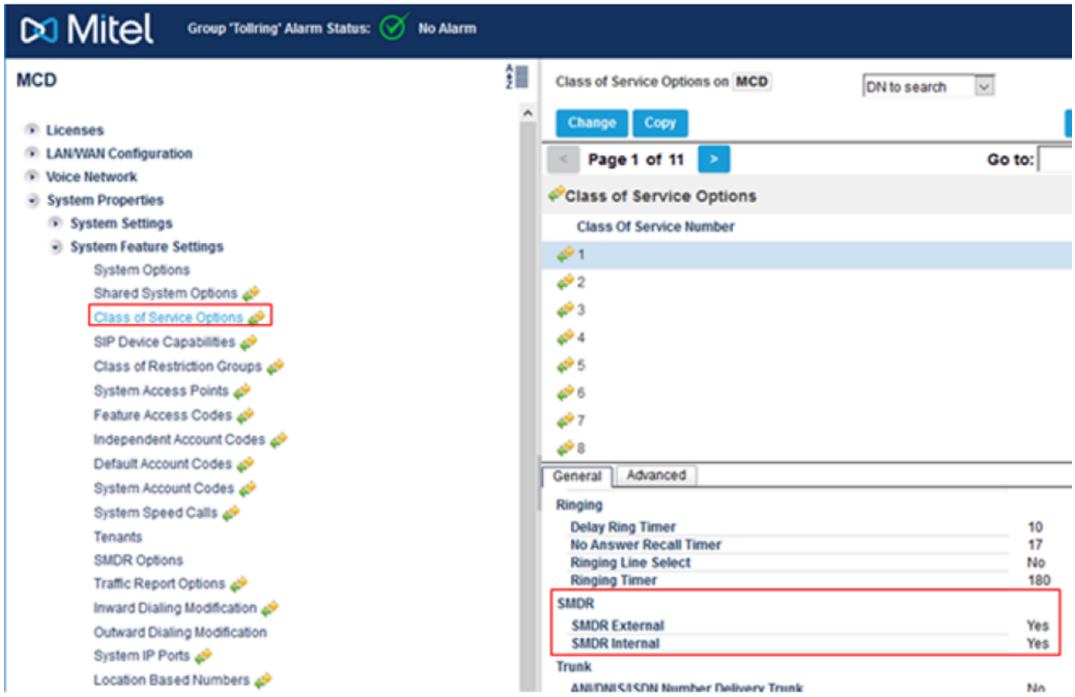
1. In MiVoice Business, navigate to **System Properties** > **System Feature Settings** > **SMDR Options** and configure the settings as follows:



SMDR Options

Account Code Reporting for Internal Calls	Yes	Report Outgoing Calls	Yes
ANI/DNIS/ISDN/CLASS Number Delivery Reporting	Yes	SMDR Extended Reporting Level 1	Yes
DASS II - Call Charge Information Provided	No	SMDR Extended Reporting Level 2	Yes
Extended Digit Length	Yes	SMDR File Transfer	No
Extended Time To Answer	Yes	SMDR Meter Unit Per Station	No
External Hot Desk User Reporting	Yes	SMDR Real Time Reporting	No
Location Information Reporting	No	SMDR Record Transfer	Yes
MCD - Report Transfers	All	Standardized Call ID Format	Yes
Network Format	No	Standardized Network OLI	Yes
Number of destination address digits to mask	0	Suite Services Reporting	No
OLI Node ID Format for Incoming Trunk Calls	No	Suppress Initial SMDR Record with Account Code Entered Timer	5
Path Reporting for Internal ACD2 Calls	Yes	System Identification	101
Report Account Codes	Yes	Tag Call Identifier	tag325
Report Attendant Name	Yes	Tag Call Reporting	Yes
Report Incoming Calls	Yes	Time Change Reporting	Yes
Report Internal Calls	Yes	Twenty-four Hour Time Reporting	Yes
Report Internal Unanswered Calls	Yes	Two B-Channel Transfer Reporting	Yes
Report Meter Pulses	No		

2. Under **Class of Service Options**, set both **SMDR External** and **SMDR Internal** to **Yes**.



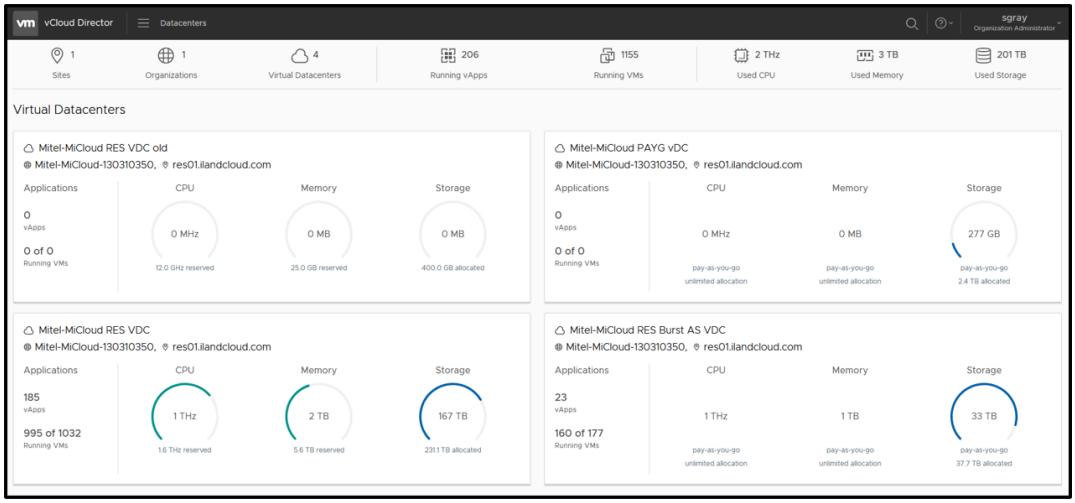
Note:

Mitel Business Analytics syncs at 12.00 AM GMT, every night. The updated details of new customers will be available after the data is synchronized.

7.9 Accessing vCloud Director

Log in to the vCloud Director application, by following the instructions provided in the handover document.

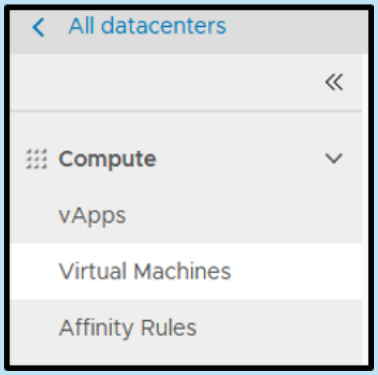
The initial login screen displays a Data Center page that lists the various resource pools or **Virtual Datacenters**(VDCs) for that Datacenter as shown in the following screenshot. A partner can access only those VDCs where their customers reside. The handover document indicates a specific Virtual Data Center where the partner's customer was built.



After you choose your respective resource pool or virtual data center, you are directed to the **Virtual Machines** panel that lists all the serviced virtual machines.

Note:

You can optionally view the virtual machines by choosing **Virtual Machines** or **vApps** from the list as shown in the following screenshot.



7.10 Zerto Disaster Recovery

A deployment that is marketed and built with Enhanced Availability, requires a Dual Data Center setup. Primary and Secondary data centers are each constructed with a Call Control vApp container for resilient MiVB and MBG paired servers.

A second vApp container is created in the Primary data center for the non-resilient servers: Windows-based Application servers and the MiCollab server. This container is known as the Zerto, or Cloud-to-Cloud (C2C) container.

If a disaster occurs, these C2C servers are replicated to the Secondary data center, where the C2C servers connect with the call control servers. During a disaster situation, the manual process of the Disaster Recovery (DR) replication process could take up to 4 hours to invoke.

Maintenance and Troubleshooting 8

This chapter contains the following sections:

For maintenance activities, such as database restore, viewing logs, and troubleshooting information, see the respective application's documentation on Document Center.

Application Name	Location
MiCollab	https://www.mitel.com/document-center/applications/collaboration/micollab/micollab-client
MiVoice Business	https://www.mitel.com/document-center/business-phone-systems/mivoice-business/mivoice-business
MiContact Center Business	https://www.mitel.com/document-center/applications/contact-center/micontact-center-business/micontact-center-business-for-mivb
MiVoice Border Gateway	https://www.mitel.com/document-center/applications/mivoice-border-gateway
Mitel Interaction Recording	https://www.mitel.com/document-center/applications/contact-center/call-recording/mitel-interaction-recording-powered-by-asc
Mitel Workforce Management	https://www.mitel.com/document-center/applications/contact-center/workforce-management
Mitel Business Analytics	Accessible within the application Interface.

Application Name	Location
Mitel Performance Analytics	https://www.mitel.com/document-center/applications/analytics/mitel-performance-analytics

8.1 Backups and Upgrades

Backups

- Mitel's iLand Data Centers maintain seven days of VEAM (a backup utility that is used by Vendor) backups. Backups are taken every night.
- For retail, Mitel uses Mitel Management Gateway (MMG) and a backup server to maintain MSL backups alone. Additionally, Mitel can also perform the File Transfer Protocol (FTP) for ESM backups.
- The Wholesale Partners are responsible for their own backups. They can save on their desktops or on customer site per their agreement with customer. Mitel does not maintain a backup server for wholesale partners.

Upgrades

- Blade upgrades are not recommended in the following scenarios:
  - If the resource changes, it means that the customer has oversubscribed.
  - No *backout* plan is available.
- Restore from a running server is not recommended. The way iLand sets up the cloud infrastructure to protect from IP conflicts causes periodic issues with Network Interface Cards (NICs).
- The preferred method of performing upgrade for Mitel Standard Linux (MSL) based VMs is to deploy a new OVA and restore the backup from the existing server. The following steps are followed during Upgrades.

1. Global Flex Engineering (GFE) spins up new OVAs and verifies whether the resources are correct.
2. Partner backs up the existing server. Mitel provides a temporary Windows server if needed.
3. Partner validates that the backups are complete.
4. GFE powers off the earlier server and removes NIC.
5. GFE adds NIC and IPs to a new OVA and powers on.
6. Partner performs a restore.
7. GFE deletes the earlier VMS and Windows server

- Upgrades procedure for a Windows server:

  1. GFE snapshots on request.
  2. Partners complete upgrades through extensions on the server.
  3. GFE deletes snapshots.

> **Note**:
>
> Earlier versions of Windows servers might require Mitel to deploy a new Windows server side by side. This deployment would require a new IP so that the partner can move the information over. Also, the customer can change the IP on the earlier server and use the IP on the new server to avoid issues. For a detailed procedure, see the *MiContact Center Installation and Administration Guide* available in the Document Center.

Appendix 9

This chapter contains the following sections:

This chapter provides short descriptions and related product page links to various documents associated with the applications supported on MiCloud Flex.

9.1 MiCollab Documentation

The MiCollab documentation is available on the Document Center.

Document Name	Description
MiCollab Client Administrator Online Help	Provides a high-level overview of the provisioning process with links to task-related instructions. The task-related instructions provide detailed descriptions for fields and options.
MiCollab Client Deployment Web Help	Provides MiCollab Client Deployment service that is used to configure the deployment parameters, change the default deployment profile, or to run the diagnostics.
MiCollab Client Administrator Guide	Includes PBX configuration information, Unified Communications specifications and hardware configuration information, and configuration information for integrated applications.

Document Name	Description
MiCollab Client Engineering Guidelines	Provides system requirements, configuration information, network diagrams, virtualization information, performance recommendations, system capacities.
MiCollab Server Manager Web Help MAC	Provides configuration, administration, and maintenance procedures for the MiCollab server.
MiCollab Users and Services Provisioning USP	Provides instructions on how to manage user data and assign or remove user services, such as MiVoice Border Gateway or Teleworker.
MSL Server Manager MAS	Highlights MiCollab Server-level features on MSL.
MiCollab Engineering Guidelines	Highlights specific areas of the product that you must consider before installation. Use them to plan site installations.
MiCollab General Information Guide for MiVB and MiVO 250	Provides a high-level overview of the MiCollab product.
MiCollab ACD SIP Softphone Agents Integration Guide	This document describes how to provision and setup the ACD SIP Softphone in MiCollab, MiVB, and MiCC. It includes procedures on how to setup a new agent on MiCC, MiCollab, MiVB, and MBG for the SIP ACD softphone to function.

9.2 MiContact Center Business Documentation

The MiContact Center Business documentation is available on the Document Center.

Document Name	Description
MiContact Center Business General Information Guide	Provides detailed information on how MiContact Center Business and the ACD system interact with the MiVoice Business platform
MiContact Center Business Installation and Administration Guide	Provides instructions for deploying and configuring MiContact Center Business, remote site deployments, and all IVR Routing configuration
MiVoice Analytics Installation Guide	Provides instructions for deploying and configuring Call Accounting and MiVoice Analytics.
MiVoice Analytics Reports Guide	Provides descriptions of all the report types available with MiVoice Analytics and how to generate, view, and share reports.
MiVoice Analytics User Guide	Provides information on general business and call costing concepts and describes Business Reporter and Call Accounting features and configuration
MiContact Center Business and MiVoice Analytics System Engineering Guide	Provides information on hardware and software requirements, virtualization, data storage, licensing, and third-party integrations.
MiContact Center Business Reports Guide	Provides descriptions of all the report types available with MiContact Center Business' Contact Center Starter Pack and how to generate, view, and share reports
MiContact Center Business-MiVoice Business Deployment Guide	Provides information regarding how to scale up from a simple solution for a deployment that can grow as the contact center grows. High-level requirements, specifications, networking

Document Name	Description
	considerations, best practices, and other useful references for planning the deployment of large-scale, complex contact centers are discussed.
MiContact Center Business BluePrint Guide	Provides an overview of MiContact Center use cases, topologies, technical considerations, best practices, on-premises, cloud, and hybrid deployment models.
MiContact Center – Workgroup Reports Guide	Provides descriptions of all the report types available with MiContact Center Business' Workgroup Starter Pack and how to generate, view, and share reports.
MiContact Center User Guide	Provides information on the basics of contact center management and descriptions for use of all agent and supervisor desktop/Web applications within the MiContact Center Business solution. This guide focuses specifically on voice media.
Multimedia Contact Center Installation and Deployment Guide	Provides all information on deploying and configuring sites with email, chat, and SMS media, including end-user instructions for supervisor and agents using the multimedia Web applications.

9.3 Mitel Performance Analytics

The Mitel Performance Analytics documentation is available on the Document Center.

Document Name	Description
Mitel Performance Analytics Engineering Guidelines	Guidelines and requirements to help the customer plan for MPA installations.

Document Name	Description
Mitel Performance Analytics Installation and Maintenance Guide	Provides information required to install and configure a Mitel Performance Analytics Probe.
Mitel Performance Analytics Probe Installation and Configuration Guide	Guide to assist users with the installation and maintenance of MPA.
Mitel Performance Analytics Quick Start Guide - Cloud Users	Guide to get started on MPA deployments where the software is installed on the cloud.
Mitel Performance Analytics System Description	Provides information required to administer and use an MPA monitoring system.
Mitel Performance Analytics Best Practices Guide	Describes the recommended best practices to follow when you set up MitelPerformance Analytics for the first time.

9.4 Mitel Interaction Recording

The Mitel Interaction Recording's documentation is categorized into:

- Administration
- Documentation Set
- Installation
- Usage

Administration

The Mitel Interaction Recording documentation is available on the Document Center

Document Name	Description
Activity_Guard_SP_us (System ConfigurationActivity Guard)	This manual describes the Activity Guard module. In the Activity Guard module, you can create alarm jobs.

Document Name	Description
Additional_Data_module_SP_us (System Configurati onAdditional Data module)	This manual describes about assigning the available additional data to certain fields to display this information in the search and replay applications or to create a job for them.
Administration_guideline_us (Administration guideline)	This manual describes (subsequent) adjustments to the system according to the individual conditions.
Archiving_of_recordings_T_us (System Configuration A rchiving of recordings)	This manual describes how recorded data can be archived with the neo software.
Config_CLIENTcommand_T_us (System Configuration CLIENT command)	This manual describes about the CLIENT *command* in an application.
Config_drives_SP_us (System Configuration drives)	This manual describes how to configure drives in the ASC recording system.
Config_Free_Seating_us (Configuration Free Seating)	This manual describes the different possibilities to configure the feature Free Seating. Depending on the data available in your system.
Config_IP_address_change_SP_us (Configuration IP address change)	This manual describes the steps which have to be taken when the IP address is supposed to be changed subsequently.
Config_Last_Call_Repeat_Facility_SP_us (Configuratio n Last Call Repeat Facility)	This manual describes how to start up the feature Last Call Repeat Facility.
Config_replay_via_phone_us (Configuration replay via phone)	This manual describes the necessary steps to successfully activate and use replay via phone indifferent telephony environments.

Document Name	Description
Config_server_and_recording_architectures_SP_us (servers and recording ar#chitecture)	This manual describes about creating recording architecture.
Config_Speech-analysis_us (Configuration speech analysis)	This manual describes the configuration of the audio analysis software EML Transcription Server of the company EML European Media Laboratory GmbH.
Config_switch_for_passive_VoIP_recording_SP_us (Switch configuration for passive VoIPrecording)	This manual describes about a passive recording solution to record VoIP calls.
Config_time_formats_SP_us (System ConfigurationConfiguration time formats)	This manual describes about setting the date format and time format for each language separately.
Config_WEBcommand_T_us (System Configuration Configuration WEBcommand)	This manual describes the configuration of the application WEB *command*.
Database_Manager_SP_us (System ConfigurationDatabase Manager)	This manual uses the terms primary server and standby server in the sense.
Drives_module_T_us (System ConfigurationDrives module)	This manual describes the drives of the System Configuration. You can call up different information about these drives (see Detail view) and configure several settings.
Encryption_of_recordings_SP_us (Encryption of recordings)	This manual describes the recording data created by the recording system is encrypted before it is stored.
EVOIPneo_active_for_Mitel_MiVoice_5000_SP_us (EVOIPneo active for Mitel MiVoice 5000)	This manual describes the installation and configuration of the recording solution in the application System Configuration.

Document Name	Description
EVOIPneo_active_for_Mitel_MiVoice_Business_SP_us (EVOIPneo active forMitel MiVoice Business)	This manual describes the installation and configuration of the recording solution in the application System Configuration.
EVOIPneo_active_for_Mitel_MiVoice_MX-ONE_CSTA_3_SP_us (EVOIPneo active forMitel MiVoice MX-ONE (CSTA3))	This manual describes the installation and configuration of the recording solution in the application System Configuration.
EVOIPneo_active_for_SIP_SP_us (EVOIPneo active for SIP)	This manual describes the installation and configuration of the recording solution in the application System Configuration.
EVOIPneo_active_for_SIPREC_SRC_SP_us (EVOIPneo active for SIPREC SRC)	This manual describes the installation and configuration of the recording solution in the application System Configuration.
EVOIPneo_passive_for_Mitel_Mivoice_Connect_SP_us (EVOIPneo passive for Mitel MiVoiceConnect)	This manual describes the installation and configuration of the recording solution in the application System Configuration.
EVOIPneo_passive_for_Mitel_MiVoice_MX-ONE_trunk-side_recording_SP_us (EVOIPneo passive for Mitel MiVoice MX#ONE trunk-side recording)	This manual describes the installation and configuration of the recording solution in the applicaapplicationtion System Configuration.
EVOIPneo_passive_for_SIP_SP_us (EVOIPneo passive for SIP)	This manual describes the installation and configuration of the recording solution in the application System Configuration.
Ex-Import_neo_neo_us (Export and import from neo to neo)	This document describes the preconditions and the procedure to transfer recordings from an ASC recording system version neo to another ASC recording system version neo in neo Conversation import format.

Document Name	Description
Export_of_recordings_T_us (System ConfigurationExport of recordings)	This manual describes how audio recordings can be exported from a recording server.
Import_of_config_data_us (System ConfigurationImport of configuration data)	This manual describes how configuration data which has been stored and is administered outside the system can be imported into the recording system.
Import_of_phone_configurations_SP_us (System ConfigurationImport of phone configurations)	This manual describes how phone configurations which have been stored outside the system can be imported into the recording system. This import function allows you to create several phones in one single process.
Import_of_recordings_SP_us (System Configuration Import of recordings)	This manual describes how audio recordings and text messages which have been created on a different system can be imported to the recording server.
License_administration_SP_us (License_administration_SP_us)	This manual describes how you can request and administrate licenses for the ASC recording system.
Licensing_module_T_us (System ConfigurationLicensing module)	In the Licensing module of the application System Configuration, you find all the information about the available licenses.
Migration_us (System ConfigurationMigration)	This document describes the preconditions and the procedure of a migration of data from ASC recording systems version 10 to ASC recording systems of version neo 4.0 and higher.

Document Name	Description
Mitel_MiVB-MBG_Quick_Guide_us (Mitel Interaction Recording, Quick Installation Guide)	This is a quick start guide that explains the MiVoice Business (MiVB) and MiVoice Border Gateway (MBG) configuration requirements to support the Mitel Interaction Recording (MIR)application powered by ASC.
Notifications_module_SP_us System ConfigurationNotifications module	In the Notifications module of the application System Configuration, you configure the system notifications which are supposed to be sent automatically.
Notifications_module_Tenant_T_us (System ConfigurationNotifications module)	In the Notifications module of the application System Configuration, you configure the system notifications which are supposed to be sent automatically.
Quick_Guide_for_Mitel_MiVoice_5000_SP_us (Quick Guide EVOIPneo active for MitelMiVoice 5000)	This is a quick guide for a recording architecture of the type All-in-one Basic Recording in combination with a Mitel MiVoice 5000 PBX
Quick_Guide_for_Mitel_MiVoice_Business_SP_us (Quick Guide EVOIPneo active forMitel MiVoice Business)	This is a quick guide for a recording architecture of the type All-in-one Basic Recording in combination with a Mitel MiVoice Business PBX.
Rating_Schemes_administration_T_us (System ConfigurationRating schemes management)	In the Rating Schemes module of the application System Configuration, you can define rating schemes which can be used in the application INSPIRATIONneo, e. g. to assess evaluations and quizzes.
Rebuild_of_recordings_SP_us (Rebuild of recordings)	This document describes the preconditions and the procedure to rebuild recordings after are according server has failed.

Document Name	Description
Reconstruction_of_media_T_us (System ConfigurationReconstruction of media)	This manual describes how data of damaged archiving media can be reconstructed with the neo software.
Recording_Planner_T_us (System ConfigurationRecording Planner)	The Recording Planner module of the application System Configuration allows recording selected phone calls and screen contents automatically. In addition, certain access commands enable you to control the automated recording manually.
Resource_editor_SP_us System ConfigurationResource Editor	In the Resource Editor module of the application System Configuration you can edit the texts of the interface.
Salesforce_integration_SP_us Salesforce Integration	Salesforce is an international provider of cloud computing solutions for companies. Salesforce offers Software and Platform as a Service.
Style-Editor_us System ConfigurationStyle Editor module	In the Style Editor module of the application System Configuration, you can edit graphic elements of the user interface.
User_management_SP_us System ConfigurationUser management	This manual describes how you as system administrator can carry out the following configurations: • Create and administrate tenants and resellers. • Create and administrate own users • Administrate function rights for your own users • Set up LDAP authentication for your own users

Document Name	Description
User_management_Tenant_T_us (System ConfigurationUser management)	This manual describes how you as tenant can carry out the following configurations: • Create and administrate own users • Administrate function rights for your own users • Edit your own tenant data
Video_Communications_Recording_for_SIP_active_SP_us (Video Communication Recording for SIPactive)	This manual describes the installation and configuration of the recording solution in the application System Configuration.
XSLT_Management_us (System ConfigurationXSLT management)	In the XSLT Management module, you can create XSLT mappings which are required for the import of configuration data. In addition, you can import, create, and edit XSLT files.

Installation

The Mitel Interaction Recording documentation is available on the Document Center

Document Name	Description
Backup_and_Disaster_Recovery_us (Backup and disaster recovery)	This manual describes the preconditions and the procedure to create backups and to rebuild data after a partial or complete failure of the system.
Config_browser_us (Configuration browser)	This document describes the configuration of the browsers for the ASC software
Config_MS_SQL_2014_SP_us (Configuration Microsoft SQL Server2014)	This document describes the configuration of Microsoft SQL Server 2014 for the EVOIPneosoftware.

Document Name	Description
Config_MS_SQL_2016_SP_us (Configuration Microsoft SQL Server2016)	This document describes the configuration of Microsoft SQL Server 2016 for the EVOIPneosoftware.
Config_Windows_Server_2019_SP_us (Configuration Microsoft Windows Server2019)	This document describes the installation and configuration of Microsoft Windows Server 2019for the EVOIPneo software.
Failover_PostgreSQL_SP_us (Failover operation forPostgreSQL databases)	This manual describes how to set up a failover concept with two PostgreSQL databases and which steps to take to reset the failover operation once the primary database is available again.
Hardening_guidelines_us (Hardening guidelines)	This document gives detailed instructions on how to harden the Windows servers which are used for the ASC recording solutions
Inst_CLIENTcommand_T_us (Installation CLIENTcommand)	This manual describes the installation of the client software for the application CLIENTcommand.
Inst_Dongle_Manager_SP_us (Dongle Manager)	This manual describes the installation of the application Dongle Manager.
Inst_Download_Client_T_us (Installation Download Client)	This manual describes the installation of the client software for the application Download Client.
Inst_Google_Stackdriver_SP_us (Installation Google Stackdriver)	This document describes the installation of the interface to the software Google Stack driver.
This document describes the installation of the interface to the software Google Stackdriver.	In the installation manuals, the installation of the recording system (hardware and software) is described.

Document Name	Description
(Installation guideline)	• Installation requirements • Hardware setup and installation • Setup of operating systems and databases for the operation with the neo software • Installation of the neo software
Inst_recording_software_of_ASC_SP_us (Installation of the recording software ofASC)	This document describes the installation of the neo software.
Inst_SCREENrec_T_us (Installation SCREENrec)	This manual describes the installation of the application SCREENrec with SCREENrec Audio and the optional component SCREENrec scan Editor
Installation_requirements_us (Installation requirements)	This document describes the hardware and software requirements for the servers and clients used for the neo recording solutions
Inst_speech_analysis_EML_Linux_2.1_SP_us (Installation speech analysis software ofEML Linux version 2.1)	This manual describes the installation of the audio analysis software EML Transcription Server of the company EML for Linux operating systems to be used with the neo recording system.
Inst_speech_analysis_EML_Windows_2.0_SP_us (Installation speech analysis software ofEML Windows version 2.0)	This manual describes the installation of the audio analysis software EML Transcription Server of the company EML for Windows operating systems to be used with the neo recording system.
Restoration_of_the_database_SP_us (Restoration of the database)	This manual describes the steps to backup and restore a PostgreSQL or an MSSQLdatabase

Document Name	Description
Software_updates_SP_us Software updates	This document describes the preconditions and steps necessary to update the neo software.
System_architectures_SP_us neo system architectures	This document explains about different system architectures.

Usage

The Mitel Interaction Recording documentation is available on the Document Center

Document Name	Description
General_info_about_ASC_products_us (General information about ASC products)	The delivered software is used for recording and monitoring conversations. The recording is executed either via a recorder of the EVOLUTIONneo series or via a computer with installed EVOIPneo software.
General_info_INSIGHT_us INSIGHTneoGeneral information	The application INSIGHTneo is the central location for any type of reporting within the product line neo.
General_info_INSPIRATIONneo_us (INSPIRATIONneoGeneral information)	ASC‘s quality management application INSPIRATIONneo captures valuable information from your customer interaction and assesses it.
INSPIRATIONneo_for_agents_us (INSPIRATIONneo for agents)	INSPIRATIONneo supports a predefined user right scenario (default role Agent) which has been customized to the tasks of agents.
Usage_Agents_module_us (INSPIRATIONneoAgents module)	The Agents module offers an overview of the agents, their sessions, evaluations, and current conversations.

Document Name	Description
Usage_Audio_Analysis_module_us (INSPIRATIONneoAudio Analysis module)	In the Audio Analysis module, you are able to identify audio sessions which meet certain criteria by means of different speech analysis technologies and subsequently analyze them in a target oriented way.
Usage_CLIENTcommand_us (CLIENTcommand)	This manual describes all functions and options of the application CLIENTcommand
Usage_Dashboards_module_us (INSIGHTneoDashboards module)	In the Dashboards module, different information is displayed in widgets. A pool containing the available widgets allows users to create their own overview page which may consist of several tabs.
Usage_Download_Client_us (Usage Download Client)	This manual describes about the application Download Client searches for audio files.
Usage_E-Learning_module_us (INSPIRATIONneoE-Learning module)	In the E-Learning module, users can train their skills with provided learning contents
Usage_Last_Call_Repeat_Facility_us (Last Call Repeat Facility)	The function Last Call Repeat (LCR) allows you to replay calls which have been recorded with the ASC recording system on any phone. User are guided through the process by automatic telephone announcements.
Usage_Portal_us (Portal)	The application Portal is the central interface of the product line neo.

Document Name	Description
Usage_POWERplay_Web_us (POWERplay Web)	The application POWERplay Web is a browser-based software for searching and replaying conversations which have been saved in the recording system.
Usage_Quality_Management_module_us (INSPIRATIONneoQuality Management module)	The allows users to administrate evaluations, carry out calibrations, and define quality alarms
Usage_Report_Instances_module_us (INSIGHTneoReport Instances module)	The report instances available in the system are displayed in the Report Instances module.
Usage_Report_Templates_module_us (INSIGHTneoReport Templates module)	In the Templates module, you can upload report templates that you have created yourself by means of a specific design tool.
Usage_Reports_module_us (INSIGHTneoReports module)	In the Reports module, you can view the reports that have already been created on basis of the templates and the corresponding instances.
Usage_Salesforce_App_us Salesforce integration	The Salesforce application for ASC can be used to link a recording to Salesforce objects. You can then use the recordings in different areas, e. g. in customer processes, opportunities, contacts, leads, and accounts.
Usage_SCREENrec_scan_Editor_us SCREENrec scan Editor	SCREENrec scan Editor is an application for action-controlled recording based on activities on the agents' screen

Document Name	Description
Usage_Sessions_module_us INSPIRATIONneoSessions module	The Sessions module offers users the possibility to search recorded sessions, filter them according to different criteria thus to reduce the total number to a manageable amount, and subsequently replay, analyze and evaluate them.
Usage_System_Monitoring_us (System Monitoring)	The application System Monitoring is the central interface for error diagnosis within the recording system.
Usage_Template_generator_us INSPIRATIONneoTemplate generator	The template generator allows you to create the following templates in different modules: • Evaluation • Templates • Training Package Templates • Quiz Templates
Usage_Templates_module_us (INSPIRATIONneoTemplates module)	In the Templates module, you can create templates adjusted to your individual requirements to be used in different cases of application and administrate already existing templates.

9.5 MiVoice Business Documentation

The Mitel Interaction Recording documentation is available on the Document Center

Document Name	Description
General Information Guide	Provides an overview of the MiVoice Business c all-processing software and its host hardware platforms.

Document Name	Description
Engineering Guidelines	Highlight specific areas of the product that you must consider before installation. Use them to plan site installations.
Security Guidelines	Provides information for ensuring the secure deployment and secure operation of the MiVoice Business system.
Resiliency Guidelines	A comprehensive overview of the Mitel® Resiliency solution and provides customers the tools to understand, plan, and implement a resilient network.
Troubleshooting Guide	Lists problem symptoms, possible causes, and corrective actions for MiVoice Business installation and configuration issues.
Clustering Design and Implementation Guide	Provides design considerations and configuration guidelines for networking MiVoice Business systems with emphasis on setting up a cluster.
Voice Quality Troubleshooting Guide	Provides information on how to troubleshoot voice quality issues on the Mitel MiVoice Business platform and its supported applications.
System Administration Online Help	The primary source of information on configuring and maintaining the MiVoice Business software.

9.6 MiVoice Border Gateway Documentation

The MiVoice Border Gateway documentation is available on the Document Center

Document Name	Description
MBG Customer GDPR Compliance Initiatives	Discusses security processes, security controls and features available on MiVoice Border Gateway (MBG) to comply with GDPR.
MiVoice Border Gateway Online Help	Provides instructions to deploy multiple services in a variety of network configurations securely.
MBG Remote Phone Guide	Provides procedures to configure your Mitel or non-Mitel IP or SIP phone to work remotely using MBG.

9.7 Endpoints Documentation

The Endpoints is available on the Document Center

Document Name	Description
MiVoice 6900 Series IP Phones Administrator Guide	This guide explains how to use the administrator features of the Mitel MiVoice 6900 Series (6920, 6930, and 6940) IP Phones that can be accessed through the IP Phones' advanced Settings menu and Web UI.
Mitel 6900 Series IP Phones Administrator Guide	This guide explains how to use the administrator features of the Mitel 6970 IP Conference Phone that can be accessed through the IP Phones' advanced Settings menu and Web UI.
MiVoice 6905 IP Phone User Guide	This guide explains how to use the basic features of your Mitel MiVoice 6905 IP Phone.

Document Name	Description
MiVoice 6910 IP Phone User Guide	This guide explains how to use the basic features of your Mitel MiVoice 6910 IP Phone.
MiVoice 6920 IP Phone User Guide	This guide explains how to use the basic features of your Mitel MiVoice 6920 IP Phone.
MiVoice 6930 IP Phone User Guide	This guide explains how to use the basic features of your Mitel MiVoice 6930 IP Phone.
MiVoice 6940 IP Phone User Guide	This guide explains how to use the basic features of your Mitel MiVoice 6940 IP Phone.
MiVoice 6905 IP Phone Quick Reference Guide	This guide contains an overview of the User Interface (UI), call handling instructions and information on other important features for Mitel MiVoice 6905 IP Phone.
MiVoice 6910 IP Phone Quick Reference Guide	This guide contains an overview of the User Interface (UI), call handling instructions and information on other important features for Mitel MiVoice 6910 IP Phone.
MiVoice 6920 IP Phone Quick Reference Guide	This guide contains an overview of the User Interface (UI), call handling instructions and information on other important features for Mitel MiVoice 6920 IP Phone.

Document Name	Description
MiVoice 6930 IP Phone Quick Reference Guide	This guide contains an overview of the User Interface (UI), call handling instructions and information on other important features for Mitel MiVoice 6930 IP Phone.
MiVoice 6940 IP Phone Quick Reference Guide	This guide contains an overview of the User Interface (UI), call handling instructions and information on other important features for Mitel MiVoice 6940 IP Phone.
MiVoice 6905 IP Phone Installation Guide	This guide contains installation and set-up instructions for Mitel MiVoice 6905 IP Phone along with general features and functions.
MiVoice 6910 IP Phone Installation Guide	This guide contains installation and set-up instructions for Mitel MiVoice 6910 IP Phone along with general features and functions.
MiVoice 6920 IP Phone Installation Guide	This guide contains installation and set-up instructions for Mitel MiVoice 6920 IP Phone along with general features and functions.
MiVoice 6930 IP Phone Installation Guide	This guide contains installation and set-up instructions for Mitel MiVoice 6930 IP Phone along with general features and functions.
MiVoice 6940 IP Phone Installation Guide	This guide contains installation and set-up instructions for Mitel MiVoice 6940 IP Phone along with general features and functions.

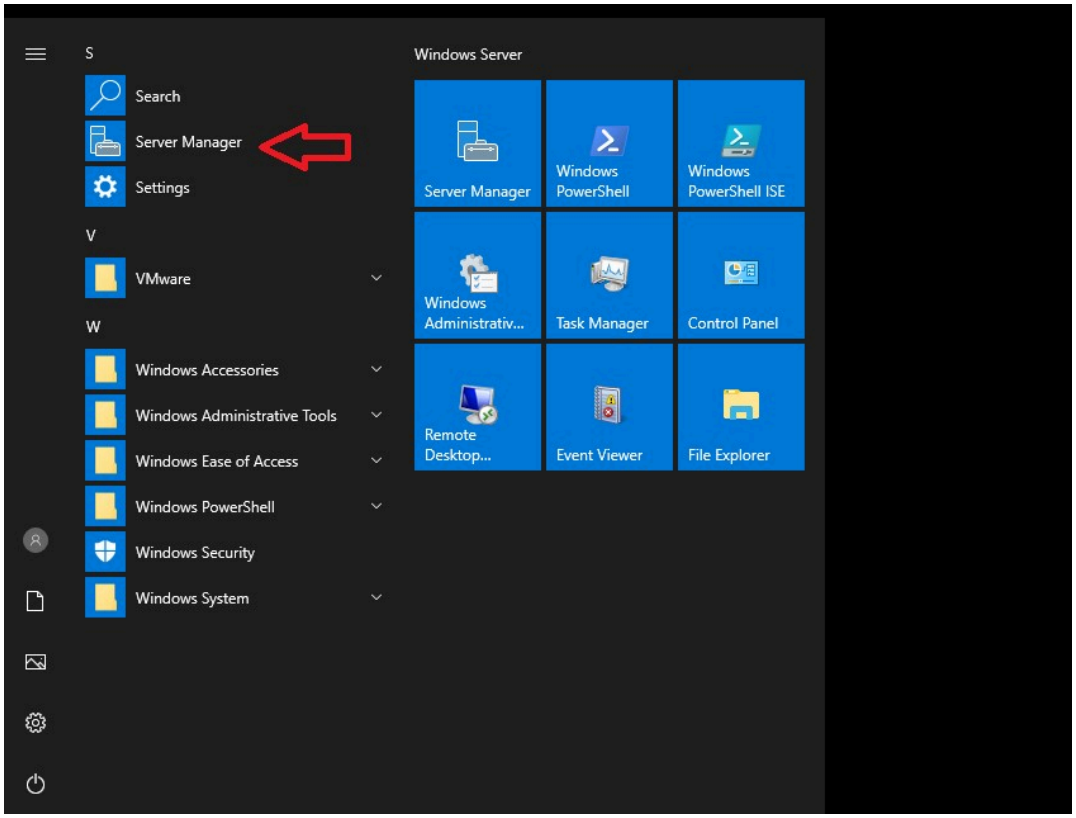
Document Name	Description
Mitel 6970 IP Conference Phone Installation Guide	This guide contains installation and set-up instructions for Mitel MiVoice 6970 IP Conference phone along with general features and functions.
XML API for Mitel 69xx MiNet Phones Firmware 1.5.0 Development Guide	This document details the XML objects supported by the Mitel 69xx phones using firmware version 1.5.0 and how to implement them.
Mitel S720 Bluetooth Speakerphone QRG	This guide contains instructions to connect and use the Mitel S720 Bluetooth Speakerphone with your Mitel MiVoice 6930 and 6940 IP Phones.
Cordless Bluetooth Handset Install Guide	This guide contains installation and set-up instructions for pairing the Mitel Cordless Bluetooth Handset to your Mitel MiVoice 6800 Series, 6930 and 6940 IP Phones.
M695 Programmable Key Module Install Guide	This guide contains installation and set-up instructions for connecting the M695 PKM to your Mitel MiVoice 6900 Series IP Phones.
Mitel 6970 IP Conference Phone Quick Reference Guide	This guide contains an overview of the User Interface (UI), call handling instructions and information on other important features for Mitel MiVoice 6970 IP Conference phone.
Mitel 6970 IP Conference Phone User Guide	This guide explains how to use the basic features of your Mitel MiVoice 6970 IP Conference phone.
Mitel WLAN Adapter documentation	This documentation explains how to configure, setup and use the Mitel WLAN Adapter in a wireless network.

Document Name	Description
Mitel IP Sets Engineering Guidelines	This document covers engineering guidelines for the 5000, 5200, 5300 and 6900 families of IP Phones as well as a number of specialized phones and consoles.
Network Engineering for IP Telephony	This document covers networking for the 5000, 5200, 5300 and 6900 families of IP Phones as well as a number of specialized phones and consoles.
SIP-DECT documentation	This documentation provides information on installation, configuration, administration, and maintenance of the SIP-DECT solution.
112 DECT documentation	This documentation provides information on installation and configuration of 112-DECT phone with RFP 12 Single Cell Base Station.

9.7.1 Configuring DHCP Option 125 or 43

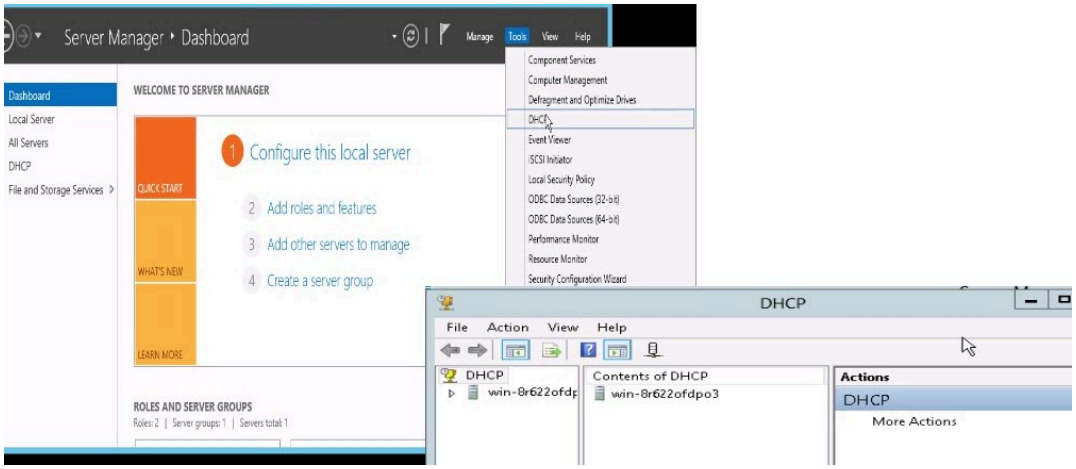
To create Options 125/43 on a Windows 2019 DHCP server:

1. Start **Server Manager**.



2. On the **Tools** menu, click **DHCP**.

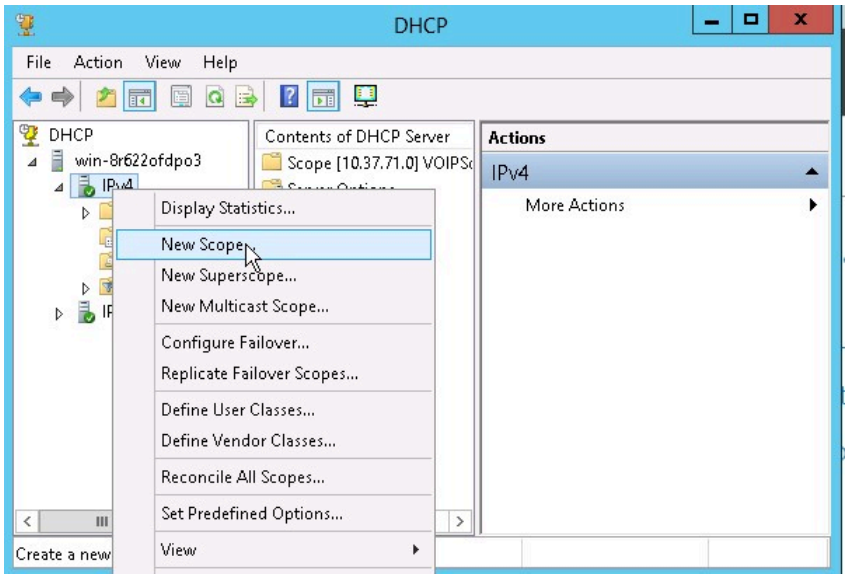
   The DHCP window is displayed.



3. In the left pane, navigate to **DHCP > server name> IPv4**.

4. Right-click **IPv4**, and click **New Scope**.

   The New Scope Wizard window is displayed.



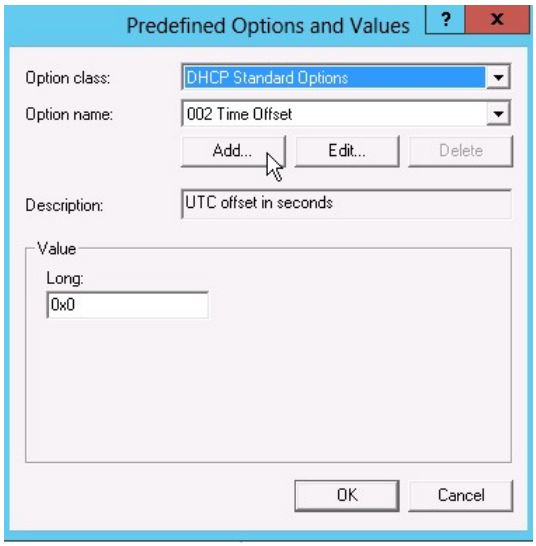
5. Follow the wizard to enter the following details (skip rest of the wizard windows that are not listed below by clicking **Next**):

   a. **Scope Name** (for example, VOIPScope)
   b. **IP Address Range**
   c. **Configure DHCP Options**
   d. Select **Yes, I want to configure these options now**.
   e. **Router (Default Gateway)**
   f. **Domain Name and DNS Servers (if applicable)**
   g. **Activate Scope**
   h. Select **No, I will activate this scope later.**
   i. Click **Finish**.

6. In the left pane, navigate to **DHCP > server name> IPv4**.

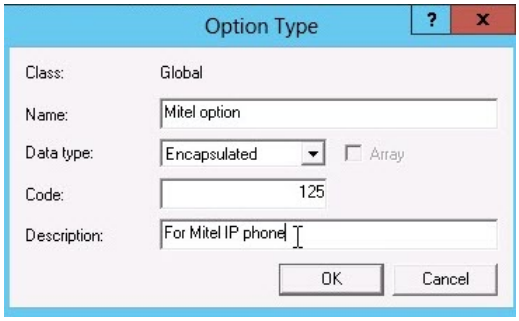
7. Right-click **IPv4**, and click **Set Predefined Options**.

   The Predefined Options and Values window is displayed.



8. Click **Add**.

   The Option Type window is displayed.

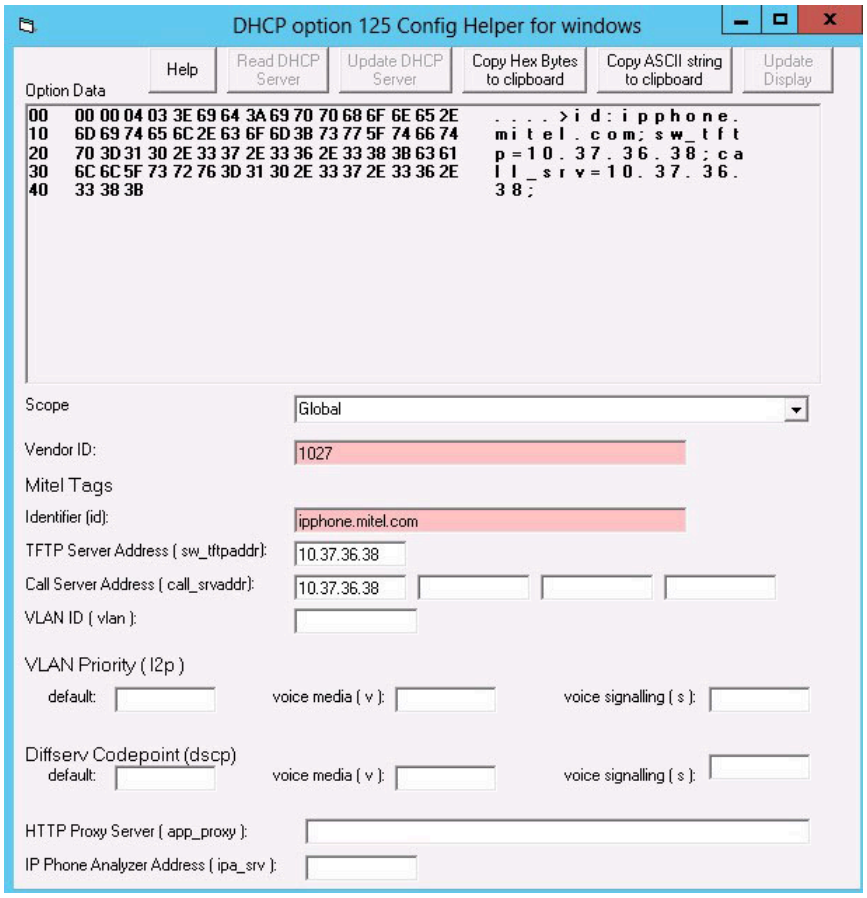


9. Enter the following, and click **OK**.

   - **Name - Mitel option**
   - **Data type - Encapsulated**
   - **Code - 125 or 43**
   - **Description - For Mitel phone**

10. In the Windows 2019 server, start the **DHCP Config Helper** application.

Note:
You can download the **DHCP Config Helper** application from **Software Download Center** (under the **MiVoice Business** category).



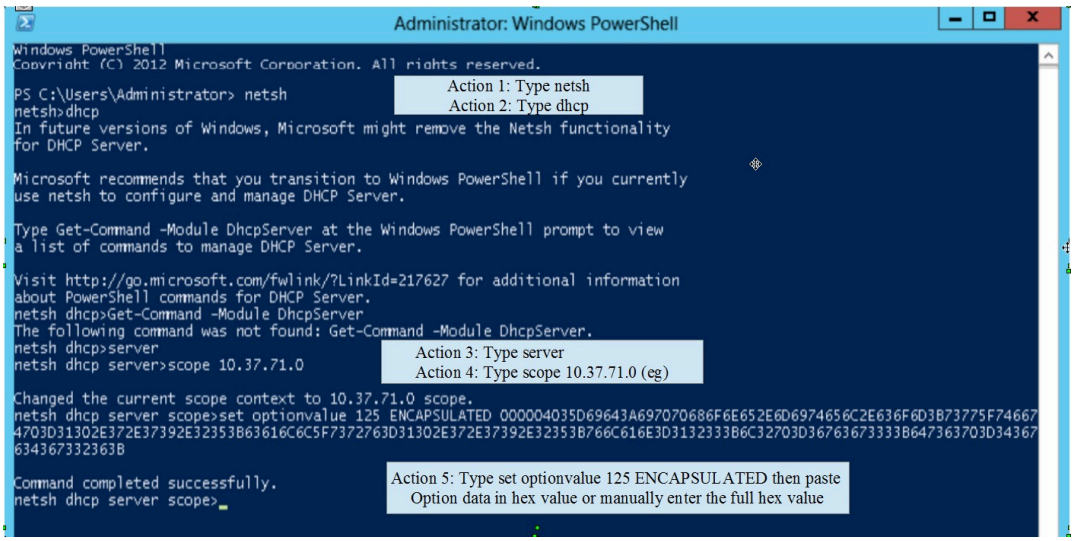
11. Enter the following:

- **TFTP Server Address (sw_tftpaddr)** - IP address of the TFTP server provided in the handover e-mail.
- **Call Server Address (call_srvaddr)** - IP address of the call server provided in the handover e-mail.
- **VLAN ID (vlan)** (if applicable)
- **Diffserv Codepoint (dscp)** (if applicable)

12. Click **Update Display**.

> **Note**:
>
> The **Update Display** button is not available until you specify the mandatory fields.

13. Click **Copy Hex Bytes to clipboard**, and past the Hex Bytes to a txt file using the Notepad application.
14. In the Windows 2019 server, start **Windows PowerShell**.



15. Enter the following command:

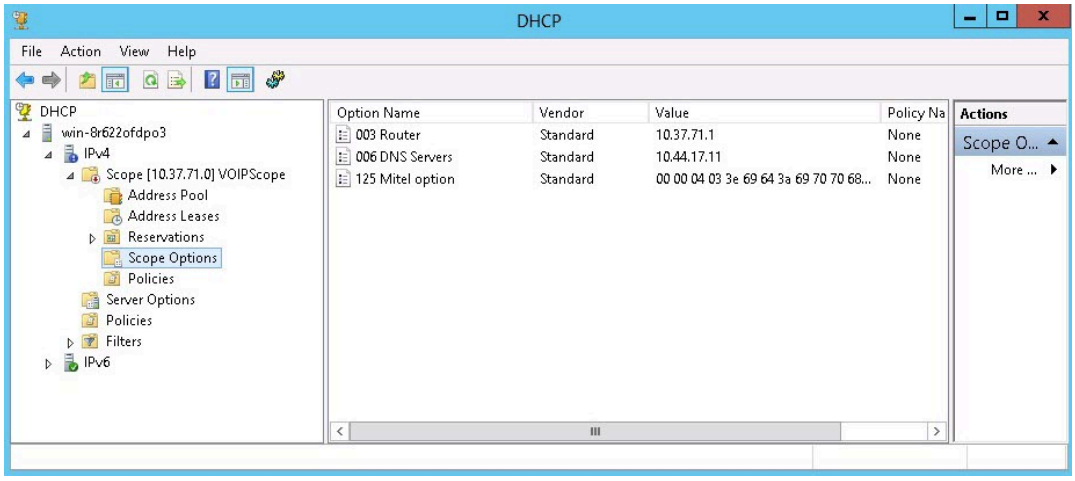
    a. `netsh`
    b. `dhcp`
    c. `server`
    d. `scope <fqdn/ip address of the scope>`
    e. `set optionvalue 125 ENCAPSULATED <paste the Hex Bytes from the txt file)`

> **Note**:
>
> To set option 43, enter the command `set optionvalue 43 ENCAPSULATED <paste the Hex Bytes from the txt file)`

16. In the DHCP window, in the left pane, navigate to **DHCP > server name > IPv4 > Scope**.
17. Click **Scope Options**.

    The DHCP Option 125 or 43 is displayed on the right side of the pane.

> **Note**:
> If the DHCP Option is not displayed, then on the **Action** menu, click **Refresh**.



18. In the DHCP window, in the left pane, navigate to **DHCP > server name > IPv4**.
19. Right-click **Scope** and click **Activate**.

> **Note**:
> If VLANs are included in your switch configuration, an IP Helper command might be required because VLANs block broadcasts by design and DHCP servers communicate through broadcasts. An IP Helper command can identify a DHCP broadcast and redirect it to the DHCP server on its VLAN.