Mitel Voice Assist Admin Guide

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1   Mitel Voice Assist

Mitel Voice Assist is an auto-attendant application designed for all platforms connected to Mitel CloudLink where the callers are automatically transferred to an extension without the interruption of an operator. A modern Intelligent Auto-attendant solution, Voice Assist can efficiently augment any voice platform connected to CloudLink. It is available with PBXs like MiVoice Business, MX-ONE, MiVoice 5000 and MiVoice Office 400. It offers features such as Text to Speech(TTS) and Automatic Speech Recognition(ASR), Directory name lookup and Presence. It is easy to build, deploy, manage and it provides both Basic and Advanced workflows. You can also build your own custom workflows based on customer requirements.

2   Intended Audience

This document is intended for Mitel Voice Assist Administrators. Mitel Voice Assist Administrators are users who have a CloudLink customer account with administrator rights and permissions for that account.

This document provides the configuration details of the tasks that an Administrator must perform to set up Mitel Voice Assist for a customer account in the Mitel Administration, which are:

• Deploy/Integrate Mitel Voice Assist
• Configure Mitel Voice Assist

For more information about the Mitel Administration (formerly known as CloudLink Accounts Console), see Mitel Administration.

3   Licensing

Mitel Voice Assist does not need a license; it is available to all accounts that have a CloudLink gateway configured, and valid Software Assurance (SWA). The minimum required level of SWA is Advantage/Standard SWA. If the SWA has expired, Mitel Voice Assist cannot be installed.

4   Supported Platforms

Mitel Voice Assist supports the following PBXs:

• MiVoice Business: 9.4 SP1 and above; MBG: 11.5 SP1
• MX-ONE: 7.4 and 7.5
• MiVoice 5000: 8.0 SP1 and above
• MiVoice Office 400: 7.0 (SP1)

5 Features of Mitel Voice Assist

Mitel Voice Assist provides the following features:

- Basic and Advanced Mitel Voice Assist templates
- Simple Dial By Name
- Dial Menu Options
- Localization support of interfaces
- Unlimited Text to Speech and Automatic Speech Recognition
- Supports 11 languages for Text to Speech and 8 languages for Automatic Speech Recognition

Mitel Voice Assist offers 5000 flow executions per CloudLink customer account per month as part of the package. Subsequent sessions beyond this limit will not be restricted, subject to a fair use policy.

ASR (Automatic Speech Recognition)

The ASR (Automatic Speech Recognition) solution is a valuable component of the Voice Assist workflow and can be utilized for a wide range of industries to provide more interactive customer service.

> **ℹ Note**:
> Speech recognition is performed using AWS. The quality of the result may vary depending on the selected language.

The known challenges that may apply to Dial Menu Activity and Dial By Name Activity are:

- ASR may be sensitive to background noise. ASR systems rely on sophisticated algorithms to differentiate between speech and non-speech sounds, such as background noise. However, in many real-world environments, there are multiple sources of noise that can make it difficult for the system to accurately identify the speech signal. For example, noise from air conditioning systems, traffic, or other people talking in the background can all contribute to this problem. When background noise is present, ASR systems may struggle to correctly identify and transcribe spoken words, which can result in errors or inaccuracies in the final transcription. The best solution may be to minimize background noise as much as possible by controlling the acoustic environment in which the ASR system is used.
- Some common anglicism words may not be recognized. The issue can arise when the system is not properly configured to recognize words that are borrowed from English and used in other languages. This can be a problem in multilingual environments where anglicisms are commonly used in everyday speech. Anglicisms are words or expressions that have been borrowed from English and incorporated into other languages. These words often have a specific meaning or connotation in the context of the language in which they are used, but they may not be recognized by an ASR system that is designed to transcribe speech in a different language. Additionally, there may be lack of accuracy with name matching in non-English languages such as "Luc" being translated as "Luke".
- Some long surnames may be recognized as split to two words. This can lead to inaccurate transcriptions and potentially create confusion or errors in downstream processes. Long surnames are common in many cultures, and if an ASR system is not trained to recognize them as a single entity, it may split them into two words, based on where it detects natural pauses or breaks in the speech signal.

For example, a name like "Gonzalez-Rodriguez" might be split into "Gonzalez" and "Rodriguez" by the ASR system.

6 Deploy Mitel Voice Assist

To Deploy Mitel Voice Assist, you must have a CloudLink account created and CloudLink gateway integrated with the PBX. For more information about integrating Mitel Voice Assist with PBXs, see Mitel Voice Assist Integration.

- To integrate with MiVoice 5000, see Mitel Voice Assist Integration for MiVoice 5000
- To integrate with MX-ONE, see Mitel Voice Assist Integration for MX-ONE
- To integrate with MiVoice Business, see Mitel Voice Assist Integration for MiVoice Business
- To integrate with MiVoice Office 400 see Mitel Voice Assist Integration for MiVoice Office 400

7 Configure Mitel Voice Assist

For information about configuring Mitel Voice Assist, and customizing workflows for routing, and managing the routing numbers, see the following sections:

- Mitel Voice Assist Routing

  - Configuring Workflows
- Number Management

For information about configuring workflows, see the section **Configuring Workflows on page 13**.

8 Mitel Voice Assist Routing

The Voice Assist Routes page displays the default route created when Voice Assist is installed. It also allows you to add new routes, as well as duplicate, edit, or delete existing routes.

The top of the page displays the total number of executions across all defined routes over the previous 30 days. This represents the number of calls that have been handled by your system during that time frame. Underneath each route, information about when the route was last modified, and by whom, are displayed. In addition, the total number of executions of the route over the previous 30 days, or when the route was created, whichever is later, is displayed. This information allows you to track the usage of your Voice Assist system.

For more information on adding, duplicating, editing and deleting routes, see Configuring Routes on page 11.

The Routing feature of Mitel Voice Assist enables you to configure routes for call services (Calling Routes). As an Administrator, you can configure routing for Inbound calls.

Inbound - When an interaction first arrives from an external source, it is handled in the Inbound workflow. For example, when a voice call is received, this workflow typically determines whether the interaction arrived during working hours and routes it to the appropriate destination.

Mitel Voice Assist provides the following two pre-configured templates, which you can customize based on customer requirements.

- Mitel Voice Assist - Basic
- Mitel Voice Assist - Advanced

> **Note**:
> You can choose the preferred template during the integration. For information about integration, see Mitel Voice Assist integration.

8.1   Mitel Voice Assist - Basic

The **Mitel Voice Assist - Basic** template provides the following activities:

- The **Endpoint ringing** activity allows you to configure the inbound number that customers will call to reach Mitel Voice Assist.
- The **Schedule** activity allows you to set the time zone for a specific location, set the business hours, and specify exceptions for a schedule.
- The **Dial by name** activity is used to transfer calls to numbers in the directory by using the phone keypad or through ASR.
- The **Greeting** activity is for playing an audio file or TTS during an active call.
- The **Hang Up Call** activity ends the active call in the workflow.

For information about configuring workflows, see the section **Configuring Workflows on page 13**.

8.2   Mitel Voice Assist - Advanced

The **Mitel Voice Assist - Advanced** template provides the following activities:

- The **Endpoint ringing** activity allows you to configure the numbers that customers will call to reach Mitel Voice Assist.
- The **Check Business Hours** activity allows you to set the time zone for a specific location, set the business hours, and specify exceptions for a schedule.
- The **Dial Menu** activity provides an option for audio messages to be played to a caller in an active call, and then allows the caller to respond to the message by entering a digit or speaking a response.
- The **Transfer** activity transfers the active call to the entered destination after a configured time out value.
- The **Greeting** activity is for playing an audio file or for TTS during an active call.
- The **Hang Up Call** activity ends the active call in the workflow.

In addition to the above functionalities, the Basic and the Advanced templates can be customized to include the following activities in the workflow. To customize the templates by adding activities to a workflow, you can click the plus icon in the workflow and from the activity wheel, you can add the following activities to a workflow:
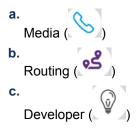
- **Media** – Dial menu, Greeting, Transfer, Hang Up Call, and Dial by name
- **Routing** – Schedule, Emergency mode, and Phone number lookup
- **Developer** – Condition, Set Variables, HTTP Request,Log, Delay, Terminate, and Go To
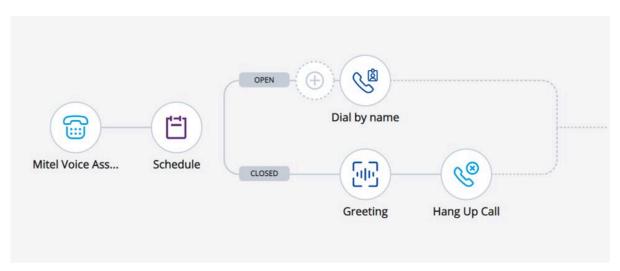
For information about configuring workflows, see the section **Configuring Workflows on page 13**.

8.3   Adding Activities to a Workflow
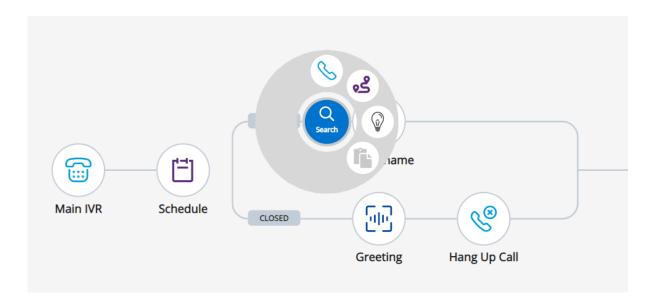
Following is the procedure for adding activities to a workflow in Mitel Voice Assist:

1.

Hover the mouse anywhere over the workflow and click the plus ⊕ icon. The activity wheel window opens, displaying the following activities:

a.
Media (📞)

b.
Routing (🗺️)

c.
Developer (💡)

2. Click any of the categories to display the activities available for that category.

The following figures display the activities available for each category.

Media Activity

Routing Activity

Developer Activity

8.4   Configuring Routes

To add a new Route

1. In the Mitel Administration, select **Voice Assist** > **Routing**. The **Voice Assist Routes** page displays the list of routes configured during integration.
2. Click the **Add Route** button. The **New Route** window opens**.**
3. Enter a descriptive **name** for the route.
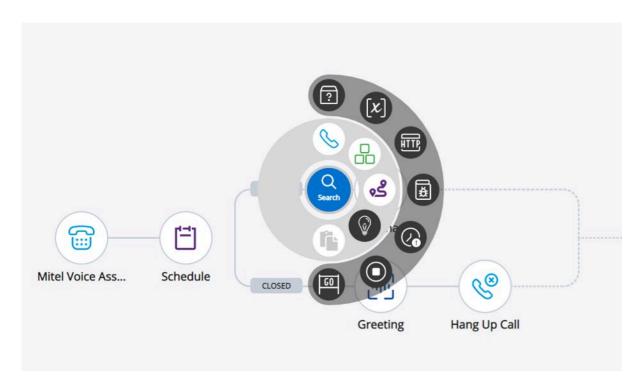4. Enter a **Routing number.** This is the number callers will dial to reach the route. The number can include any dialable characters, such as # and *. Multiple numbers can be entered, if separated with the | character. For example 4000|4001 is valid but 4000 | 4001 is not valid.
5. Click **Create**. A new route is added to the Calling routes list in the **Voice Assist Routes** page.

To delete a Route

1. In the Mitel Administration, select **Voice Assist** > **Routing**. The **Voice Assist Routes** page displays the list of routes configured during integration.
2. Click the three dots to the right of the route that you want to delete.
3. Click the **Delete Route** option**.** The **Delete** window opens.
4. Type confirm in the text box.
5. Click **OK**. The route is deleted.

> **ⓘ Note**:
> When you delete a route, any number associated with that route is also removed from the numbers tab as well.

To duplicate a Route

1. In the Mitel Administration, select **Voice Assist** > **Routing**. The **Voice Assist Routes** page displays the list of routes configured during integration.
2. Click the three dots to the right of the route that you want to duplicate.
3. Click the **Duplicate Route** option**.** The route selected is duplicated and added to the Calling routes list in the **Voice Assist Routes** page. "**(copy)**" is appended to the original route name. Note that the route number will be empty in the duplicated route. To add a route number, edit the route and select the Endpoint ringing activity to enter the number customers will call to reach the route.

8.5   Configuring Google Places

Google Places integration with Mitel Voice Assist allows system administrators to validate their open hours against what they have publicly configured under their Google account. After configuring Google Places, system administrators need not program their business hours within the Schedule Activity separately.

Prerequisites

Ensure that you have set up Google Places integration in Mitel Voice Assist by providing an API key. Perform the following steps to enable Google Places integration in Mitel Voice Assist using API Keys:

1. Log in to the Google Console.
2. Navigate to **API and Services** > **Credentials**.
3. From the **Credentials** page, click **+ CREATE CREDENTIALS** and select **API Key**. **API Key created** dialog box is displayed.
4. Copy the API key that is displayed under **Your API key** and click **CLOSE**.
5. In the CloudLink Accounts Console, log in to CloudLink Accounts Console. For more information about how to log in to CloudLink Accounts Console, see Log in to the CloudLink Accounts Console.
6. In the left navigation panel, navigate to **Voice Assist** and then click **Integrations**. **Integrations Hub** page is displayed.
7. Under **Not connected integrations**, click **See details** button that is associated with **Google**.
8. Click **Connect** and then click **Next**.
9. Click **Add New**. **Add connection** dialog box is displayed.
10. Click **Add** button that is associated with **API Key** and then click **OK**.
11. Click **Complete Setup**. **Configure this connection** dialog box is displayed.
12. Enter a name for your Google Place integration and paste the Google API Key that you generated in step number 4.
13. Click **Create**. A message stating **Connection Complete** is displayed, indicating that the connection is completed.

Procedure

In the CloudLink Accounts Console, perform the following steps to configure Google Places:

1. In the left navigation panel, navigate to **Routing**. **Voice Assist Routes** pages is displayed.
2. Click the **Edit** button that is associated with the Voice Assist call flow that you want to edit.
3. Click **Schedule** activity and select the check box that is associated with **Use Google Places**.
4. From the **Connection** drop-down list, select the Google integration that you set up in Mitel Voice Assist (step number 12 under Prerequisites).
5.
   Click the icon to launch the Google Place ID Finder. **Place IDs** page is displayed. This page will allow you to search for your business..
6. Under **Find the ID for a particular place**, enter the business name.

> **ⓘ Note**:
>
> To ensure correctness, you must search the place ID by business name and not the address.

7. Copy the Google Place ID and paste it into the **Place Id field** field in the CloudLink Accounts Console.

8. Click **OK**.

9. On the top right of the call flow page, click **Save**. This will update the route with Google schedule.

Hours will be displayed in read-only mode and indicate when your business is open. Any holiday or exception hours will be listed under **Exceptions** in the Schedule tab.

> **ⓘ Note**:
>
> Only holidays that occur within the next 7 days are displayed.

8.6   Configuring Workflows

Workflows are how callers are routed to groups and individuals within your organization. Workflows dictate the prompts callers hear, the inputs requested by the system, and the available routing options. Workflows can identify customers and determine their service needs by phone number, numbers dialed, and the digits entered to reach specific areas of your organization.

Workflows are used to direct callers to the user, department, or employee best qualified to handle their requests.

This section explains workflows and workflow activities available in Mitel Voice Assist and relevant configuration procedures.

Inbound workflows direct incoming calls to the Mitel Voice Assist user, departments, and employees best qualified to handle their requests. Inbound workflows can also be used for self-service.

8.6.1   Getting Started

Before you begin, it is important that you review the glossary of terms used throughout this guide.

The glossary of terms is listed below.

Table 1: Glossary

Term	Definition
Flow	A flow is the set of actions executed when triggered by an event.
Activity	An activity is a building block used within flows.
Trigger	A trigger is an event that occurs that can cause a flow execution to start or stop.
Integration	Third-party product integrations.
Inputs	Arguments sent to activities.
Outputs	Results of executing an activity.
Throughputs	Arguments that are passed into an activity, changed and returned as an output; that is, Input +Output in one.

8.6.1.1   Building Workflows

Mitel Voice Assist installs a default workflow. An administrator can add new workflows, or edit/delete existing workflows.

As an administrator, to edit a workflow you must be aware of the following basic operations that you can perform within the workflow:

- Click **Editor** to edit the existing activities in the workflow page.
- Click **Debug** to troubleshoot issues.
- Click **History** to view the execution history of the workflow.
- Click the ✎ icon to change the name of the flow.
- Click the ↶ icon to Undo the changes made in the workflow page.
- Click the ↷ icon to Redo the changes made in the workflow page.
- Click the ⇅ icon to download the workflow.

- Click the (x) icon to view more options related to variables; that is, to Add, Delete, or Search for variables.

- Click **Actions**. This will display the following options:

  - **Export as SVG** - An administrator can export the workflow in scalable vector graphic file (.svg) format for better presentation.

8.6.1.2   Viewing Workflows

To navigate the workflow canvas, press and hold the left button of the mouse anywhere on the workflow view and drag the mouse to display different areas of the workflow.

You can configure activities directly from the workflow page by clicking each activity. Clicking an activity brings that activity into focus, enabling you to quickly identify and update required changes in complex workflows.

8.6.1.3   Resizing Workflows

You can zoom in or out of the workflow by scrolling using the mouse wheel. Scroll the mouse wheel up to zoom in and scroll the mouse wheel down to zoom out.

8.6.2   Activities

8.6.2.1   Media Activities

Table 2: Media Activities

ACTIVITY NAME	ICON	DETAILS
Greeting		Greeting plays an audio message to the caller in an active call. You can add pre-recorded greeting messages by using existing greetings, upload a recorded file, record a greeting, or enter text that will be converted to voice. For configuration procedures, See Configuring Greeting Activity.

Dial Menu		The Dial menu activity provides an option for audio messages to be played to a caller in an active call, and then allows the caller to respond to the message by entering a digit or speaking a response. You can add pre-recorded greeting messages by using the existing greetings, upload a recorded file, record a greeting, or enter text that will be converted to voice. For details on Configuring Dial Menu, See Configuring Dial Menu.
Transfer		This activity transfers the active call to the entered. The **Schedule** activity allows you to set the destination. For configuration details, See Configuring Transfer Activity.
Hang Up Call		This activity ends an active call. For configuration procedures, See Configuring Hang Up Activity.
Dial by Name		This activity allows you to provide customers with the option to access people in your company directory, and then transfer their call to that individual. For configuration details, See Configuring Dial by Name Activity on page 21.

8.6.2.1.1 Configuring the Greeting Activity

As an administrator, you can play an audio file or enter a message in text that will be converted to speech to play a greeting to an active call.

You can access the Greeting activity from the workflow: **Voice Assist** > **Routing > Voice Assist Routes**. The **Voice Assist Routes** page displays the list of routes configured. Select the workflow and click **Edit** to open the workflow.

To add the Greeting activity to the workflow:

1.

Click the ⊕ icon on the workflow at the position where you want to add the Greeting activity.

2.

From the activity wheel, select the 📞 icon and click the 🔲 icon.

The **Greeting** activity configuration window opens.

3. You can choose one of the following options to configure the greeting.

- **Use existing greeting –** Select this option to choose one of the existing greeting files already configured in the system. If there are no existing greeting files in the system then you need to upload a file and then you can select from the use existing greeting drop down. You can type the name to search for the file. Use the play icon ▷ to preview the greeting and listen to the message that will be played.

   To delete the existing greeting, click the delete button beside each greeting.

- **Upload from a file** – Select this option to choose an audio file (.wav, mp3, or .wma) from your local machine. You can browse and select the file from your local machine or drag and drop a file into the drop box.

   > ℹ️ **Note**:
   >   The audio file size must be less than or equal to 2MB.

- **Record a Greeting** – Select this option to record a voice message directly in this window. Enter a greeting name and click the record icon ⦿ . If your browser is not configured to allow use of the microphone, you must provide permission in the pop-up dialog box that appears. Click **Allow** to use the microphone to record a new greeting. Press the ⬜ icon when you have completed the recording and press the ▷ to play back the recording. After recording you can select recordings from the **Use existing greeting** drop-down.

- **Text to Speech** – Select this option to enter a text message which will be converted to a voice message and played to the caller.

   - Enter the message in the **Text to Speech** text box
   - Select the language and voice option to be used to play the message from the Voice option drop-down list.
   -

      Click the ▷ icon to play the entered message in the selected language. The text to speech format allows sending variables for read-back, for example:My account is {{balance}}.

4. Click **OK**.

5. Click **Save** to save the activity in the workflow.

The Greeting activity is added to the workflow.

8.6.2.1.2   Configuring the Dial Menu Activity

The Dial Menu activity offers a menu of options to the caller, prompting the caller to select service options by entering a configured digit or speaking a response. For example, "Press 1 for service and 2 for sales". Depending on the caller's selection, the workflow will branch to a different set of activities.

You can access the Dial Menu activity from the workflow: **Voice Assist** > **Routing > Voice Assist Routes**. The **Voice Assist Routes** page displays the list of routes configured. Select the workflow and click **Edit** to open the workflow.
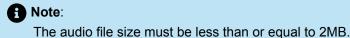
To add the Dial Menu activity to the workflow:

*
    Click the icon on the workflow at the position where you want to add the Dial Menu activity.
*
    From the activity wheel select the icon and click the icon.

    The **Dial menu** activity configuration window opens.
*   You can choose one of the following options to configure the dial menu.

    *   **Use existing greeting –** Select this option to choose one of the existing files from the **Use existing greeting** drop-down list. This drop-down list includes all recorded files that are recorded or uploaded.
    *   **Upload from a file** – Select this option to choose an audio file (.wav, mp3, or .wma) from your local machine. You can browse and select the file from your local machine or drag and drop a file into the drop box.

    > **ℹ Note**:
    >   The audio file size must be less than or equal to 2MB.

    *   **Record a Greeting** – Select this option to record a voice message directly in this window. Enter a greeting name and click the record icon. A pop-up alert appears in the browser for microphone

permissions. Click **Allow** to use the microphone to record a new greeting. Press the ⬚ icon when

you have completed the recording and press the ▷ to play back the recording.

- **Text to Speech** – Select this option to enter text message, which will be converted to voice message and played to the caller.

  - Enter the message in the **Text to Speech** text box
  - Select the language and voice option to be used to play the message from the Voice option drop-down list.
  -
    Click the ▷ icon to play the entered message in the selected language. The text to speech format allows sending variables for read-back, for example:My account is {{balance}}.

- **Enable speech recognition –** Select this option to enable automatic speech recognition (ASR) to identify the words spoken. This allows callers to speak their responses or enter digits when prompted.

  - Select the language from the **Language** drop-down list. This is the language that will be used to detect the caller's speech.
  -
    Click the record button 🔴 icon and speak to test the automatic speech recognition. After you finish speaking, click the icon again and the detected speech will be displayed in the Transcribed audio text box. This is useful for adding prompts that are similar to the one you are expecting. The duration limit for the audio is 15 seconds. For example, "sells" in addition to "sales" or "sport" in addition to "support".

- Click **OK.**
- Click **Save** to save the activity in the workflow.

For more information about ASR, see the section ASR (Automatic Speech Recognition) .

The following branches are added to the Dial Menu activity by default:

Press 1 – executed when the digit entered by the caller is a 1.

No Match – executed when the digit entered by the caller does not match any of the expected digits.

Failed – executed when the activity fails, such as when the greeting cannot be played.

Click the **Add** option to add additional branches, such as 2, 3, 4, and so on.

If you have enabled ASR, you can enter words or phrases as well as digits. Press the enter key, after each digit, word or phrase is entered, and then press **OK** when all options are added.

> **ⓘ Note**:
> By default, the greeting will be repeated four times. If the caller fails to enter a valid response after four attempts, the Failed branch will be executed. This option can be modified to increase or decrease the number of times the greeting is played for the caller to enter a valid response. If the caller enters a response but it does not match one of the expected responses, the No Match branch will be executed.

The Dial menu activity is added to the workflow.

8.6.2.1.3   Configuring the Transfer Activity

You can access the Transfer activity from the workflow: **Voice Assist** > **Routing > Voice Assist Routes**. The **Voice Assist Routes** page displays the list of routes configured. Select the workflow and click **Edit** to open the workflow.
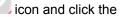
To add the Transfer activity to the workflow:

1.
   Click the [icon] icon on the workflow at the position where you want to add the Transfer activity.
2.
   From the activity wheel, select the [icon] icon and click the [icon] icon.

   The **Transfer** activity configuration window opens.
3. In the **Destination** field, enter the number to which you want to transfer the call.
4. Select **Blind** to transfer the call without waiting for the call to be answered .

> **ⓘ Note**:
> Blind Transfer is the only transfer type that is supported.

5. Click **OK**.
6. Click **Save** to save the activity in the workflow.

The Transfer activity is added to the workflow.

Four branches of Transfer activity are:

• **Success** : This is the branch executed when the transfer is successfully performed.
• **Failure** : This is the branch executed when the call fails to transfer due to an error.
• **Timeout** : This is the branch executed when the transfer fails to complete within the configured timeout value. This branch is currently not used.
• **Abandon** : This is the branch executed when the caller hangs up during the transfer.

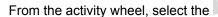# 8.6.2.1.4   Configuring the Hang Up Call Activity

The Hang up Call activity ends an active call being handled by the workflow.

You can access the Hang Up Call activity from the workflow**: Voice Assist > Routing > Voice Assist Routes.** The **Voice Assist Routes** page displays the list of routes configured. Select the workflow and click **Edit** to open the workflow.

To add the Hang up Call activity to the workflow:

1. Click the ⊕ icon on the workflow at the position where you want to add the Hang up Call activity.

2. From the activity wheel, select the 📞 icon and click the 📞 icon.

   The **Hang Up Call** activity configuration window opens.

3. Click **OK**.

4. Click **Save** to save the activity in the workflow.

The Hang up Call activity will be added to the workflow.

8.6.2.1.5   Configuring Dial by Name Activity

As an administrator, you can provide customers with the option to access people in your company directory, and then transfer their call to that individual. Customers search the directory by entering two or more characters in the user's name through the customer's telephone keypad, or by speaking the user's name. It is possible to exclude users from the search results, such as the company CEO.

You can access the Dial by Name activity from the workflow**: Voice Assist > Routing > Voice Assist Routes.** The **Voice Assist Routes** page displays the list of routes configured. Select the workflow and click **Edit** to open the workflow.

To add a Dial by Name activity to the workflow:

1. Click the ⊕ icon on the workflow at the position where you want to add the Dial by Name activity.

2. From the activity wheel, select the 📞 icon and click the 📞 icon.

3. The **Dial by name** activity configuration window has three option tabs:

   • **Instruction** - provides a prompt message to the customer asking for digits to be entered or a name to be spoken to begin the search for a user.

   • **Matched** - provides information to the customer when the user name entered by the customer matches the user name from the directory.

   • **No match** - provides information to the customer when the user name entered by the customer does not match any of the user names in the directory.

4. To enter instruction details, click on the Instruction header and enter the details. This is the message that will initially play to the caller. You can provide instructions explaining how to search the directory for

users and how to exit without searching. Example: *Enter two or more digits after the beep to search for a user by name. Press star to exit the current menu*.

- **Use existing greeting** - Select this option to choose one of the existing greeting files already configured in the system.

  Use the play ⊙ icon to preview the greeting and listen to the message that will be played. Click the ⊙ icon to play the next audio file in the list. To delete an existing greeting, click the delete button beside the greeting.

- **Upload from a file** - Select this option to choose an audio file (.wav, mp3, or .wma) from your local machine. You can browse and select the file from your local machine or drag and drop a file into the drop-down box.

> ℹ **Note**:
>   The audio file size must be less than or equal to 2MB.

- **Record a greeting** - Select this option to record a voice message directly in this window. Enter a greeting name and click the ⊙ record icon . If your browser is not configured to allow use of the microphone, you must provide permission in the pop-up dialog box that appears. Click Allow to use the microphone to record a new greeting. Click the ⊡ icon to stop the recording.

  Press the ⊙ icon to playback the recording.

- **Text to Speech** - Select this option to enter a text message that will be converted to a voice message and played to the caller. Enter the message in the Text to Speech text box and select the language and voice option to be used to play the message. Click the ⊙ icon, to play the entered message in the selected language and voice.

- **Enable speech recognition** – Select this option to enable speech recognition to identify the words spoken.

  - Select the language from the **Language** drop-down list.

5. To provide information to the customer when the user name entered by the customer matches a user name in the directory, click the Matched header and enter the details. This is the message that will play to the caller after the search completes and there are one or more matches in the directory. Note that this message will play for each matched user, providing the caller with the option to transfer to that user

or skip to the next user. Example: *Press 1 to transfer, any other digit to skip, star to search again or pound to exit*.

- **Use existing greeting** - Select this option to choose one of the existing greeting files already configured in the system.

   Use the ⊳ play icon to preview the greeting and listen to the message that will be played. Click the ⊳| icon to play the next audio file in the list. To delete an existing greeting, click the delete button beside the greeting.

- **Upload from a file** - Select this option to choose an audio file (.wav, mp3, or .wma) from your local machine. You can browse and select the file from your local machine or drag and drop a file into the drop-down box.

> ℹ **Note**:
>   The audio file size must be less than or equal to 2MB.

- **Record a greeting** - Select this option to record a voice message directly in this window. Enter a greeting name and click the record ⊙ icon . If your browser is not configured to allow use of the microphone, you must provide permission in the pop-up dialog box that appears. Click Allow to use the microphone to record a new greeting. Click the ⊡ icon to stop the recording.

   Press the ⊳ icon to playback the recording.

- **Text to Speech** - Select this option to enter a text message that will be converted to a voice message and played to the caller. Enter the message in the Text to Speech text box and select the language and voice option to be used to play the message. Click the ⊳ icon, to play the entered message in the selected language and voice.

6. To provide information to the customer when the user name entered by the customer does not match any of the usernames in the directory, click the **No Match** header and enter the details. This is the message that will play to the caller after the search completes and there are no matches to the characters entered by the caller. Example: *No persons found. Please try again.*

- **Use existing greeting** - Select this option to choose one of the existing greeting files already configured in the system. Use the ⊳ play icon to preview the greeting and listen to the message that will be played. Click the ⊳| icon to play the next audio file in the list. To delete an existing greeting, click the delete button beside the greeting.

- **Upload from a file** - Select this option to choose an audio file (.wav, mp3, or .wma) from your local machine. You can browse and select the file from your local machine or drag and drop a file into the drop-down box.

> **ⓘ Note**:
> The audio file size must be less than or equal to 2MB.

- **Record a greeting** - Select this option to record a voice message directly in this window. Enter a greeting name and click the record ⏺ icon . If your browser is not configured to allow use of the microphone, you must provide permission in the pop-up dialog box that appears. Click Allow to use the microphone to record a new greeting. Click the ⏹ icon to stop the recording.

  Press the ▷ icon to playback the recording.

- **Text to Speech** - Select this option to enter a text message that will be converted to a voice message and played to the caller.

  - Enter the message in the Text to Speech text box.
  - Select the language and voice option to be used to play the message from the Voice option drop-down list
  - Click the ▷ icon, to play the entered message in the selected language and voice.

7. Click **OK**.

For more information about ASR, see the section ASR (Automatic Speech Recognition) .

> **ⓘ Note**:
> **To use Automated Speech Recognition (ASR) with Dial by Name**:
>
> - By default, the activity prompts for DTMF digit entry on the three tabs (Instruction, Matched, and No Match). To use ASR, update the prompts to indicate that responses can be spoken as well as entered through DTMF. The DTMF and ASR can be used together, so a prompt can indicate "Please press 1 or say transfer to transfer".
> - To search through ASR, the caller should be prompted to say the first or last name of the person they are trying to reach.
> - New input variables UseASR and ASRLanguage are exposed on the user interface and in the **Advanced** tab to indicate that the activity should support ASR.
> - On the **Advanced** tab, the following variables indicate the expected responses for ASR when playing the list of matched names. They can be updated to another term:
>
>   - AcceptTerm = transfer. This indicates that the caller requests to transfer to the played party.
>   - ExitTerm = exit. This indicates that the caller wishes to exit and not transfer.
>   - SearchTerm = search. This indicates that the caller wishes to initiate a new search.
>
>   If you want to add more than one word into the speech recognition e.g. exit | End | Hang up etc.. you need to use the | (Pipe) character to separate each word.

8. Click **Save**.

The Dial by Name activity is added to the workflow.

> ⓘ **Note**:
>
> The Dial by Name activity performs a lookup based on the contacts and users defined in CloudLink. The information is synchronized from the PBX to which your Mitel Voice Assist is connected into CloudLink as follows:
>
> • MiVoice Business: Users in the telephony directory, or users and devices that have an associated email address.
> • MX-ONE: Extensions in the MX-ONE with an associated email address.
> • MiVoice 5000: Users with an associated email address.

8.6.2.1.6 Configuring the Paste Activity

As an administrator, you can copy and paste any activity to any preferred location in the workflow.

You can access the Paste activity from the workflow: **Voice Assist** > **Routing > Voice Assist Routes**. The **Voice Assist Routes** page displays the list of routes configured. Select the workflow and click **Edit** to open
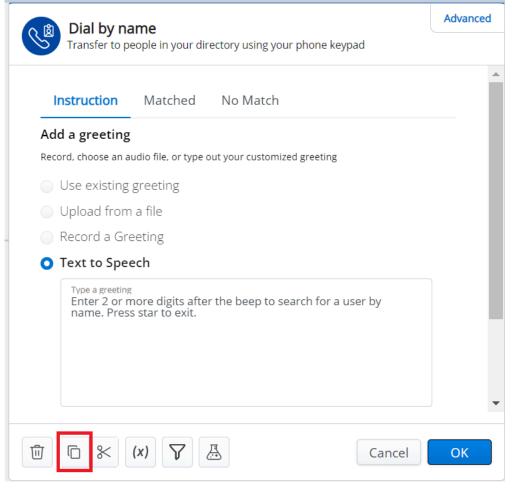
the workflow. The Paste activity is found in the activity wheel with the ⧉ icon.

To paste activity in the workflow:

1. Select and open any activity (Ex: Greeting, Dial by name, Transfer, etc,.) in the workflow.

2. Click the copy icon in the activity to copy the activity.

3.

Select any preferred location in the workflow and click the plus [⊕] icon from the activity wheel.

4.

Click the paste icon [📋]. The activity that was copied is pasted in the preferred location.

8.6.2.2 Routing Activities

Details of Routing activities are described in the below table.

Table 3: Routing Activities

ACTIVITY NAME	ICON	DETAILS
Schedule		This activity allows you to set working hours and holiday schedules for your organization. For configuration procedures, See Configuring Schedule Activity.
Emergency Mode		This activity turns on or off emergency mode for your account, allowing you to route interactions differently based on the configured setting. For configuration procedures, See Configuring Emergency Mode Activity.
Phone Number Lookup		This activity allows you to lookup a phone number to determine approximate location attributes for the calling customer. For configuration procedures, See Configuring Phone Number Lookup Activity on page 31.

8.6.2.2.1   Configuring the Schedule Activity

As an Administrator, you can add the Schedule activity to configure the working hours and holiday schedules for your organization.

To add the Schedule activity to the workflow, perform the following steps:

1. Click the icon on the workflow at the position where you want to add the Schedule activity.
2. From the activity wheel, select the icon and click the icon.

   The **Schedule** configuration window opens.
3. From the **Timezone** drop-down list, select the time zone in which your business operates.

4. From the **Time Range** drop-down list, select the duration for the business hours.

- If you select **All Day**, midnight to midnight will be considered as open business hours and the **From** and **To** options will become unavailable.
- If you select **Time of Day**, you must select the opening and closing hours of business from the **From** and the **To** drop-down lists respectively.

5. From the **Recurrence** drop-down list, select the days for which the business hours apply. You can choose one of the available recurrence rules, including: **Every weekday (Mon-Fri)**, **Every weekend (Sat and Sun), Every day (All days of week)**, or you can select **Custom** to customize a recurrence rule as per the business need.

> **ⓘ Note**:
>
> If you choose to customize the recurrence of business hours, you can use a predefined schedule list that includes fixed holidays.

6. Click the **Exceptions from schedule** tab and schedule the date and time when the business will be closed. This is useful for holidays, when the business is closed.

> **ⓘ Note**:
>
> When the workflow executes during the scheduled closed hours, the workflow will follow the **CLOSED** branch.

7. Click **Add** to schedule additional business schedules.
8. Click the ⊖ icon to delete a Schedule activity.
9. Click **Ok**.

The Schedule activity will be added to the workflow with two branches.

- **OPEN**: this branch is followed when the workflow executes during open business hours.
- **CLOSED**: this branch is followed when the workflow executes during closed business hours.

10. Click **Save.**

The Schedule activity is added to the workflow.

8.6.2.2.1.1   Configuring Google Places

Google Places integration with Mitel Voice Assist allows system administrators to validate their open hours against what they have publicly configured under their Google account. After configuring Google Places, system administrators need not program their business hours within the Schedule Activity separately.

Prerequisites

Ensure that you have set up Google Places integration in Mitel Voice Assist by providing an API key. Perform the following steps to enable Google Places integration in Mitel Voice Assist using API Keys:

1. Log in to the Google Console.

2. Navigate to **API and Services** > **Credentials**.

3. From the **Credentials** page, click **+ CREATE CREDENTIALS** and select **API Key**. **API Key created** dialog box is displayed.

4. Copy the API key that is displayed under **Your API key** and click **CLOSE**.

5. In the CloudLink Accounts Console, log in to CloudLink Accounts Console. For more information about how to log in to CloudLink Accounts Console, see Log in to the CloudLink Accounts Console.

6. In the left navigation panel, navigate to **Voice Assist** and then click **Integrations**. **Integrations Hub** page is displayed.

7. Under **Not connected integrations**, click **See details** button that is associated with **Google**.

8. Click **Connect** and then click **Next**.

9. Click **Add New**. **Add connection** dialog box is displayed.

10. Click **Add** button that is associated with **API Key** and then click **OK**.

11. Click **Complete Setup**. **Configure this connection** dialog box is displayed.

12. Enter a name for your Google Place integration and paste the Google API Key that you generated in step number 4.

13. Click **Create**. A message stating **Connection Complete** is displayed, indicating that the connection is completed.

Procedure

In the CloudLink Accounts Console, perform the following steps to configure Google Places:

1. In the left navigation panel, navigate to **Routing**. **Voice Assist Routes** pages is displayed.

2. Click the **Edit** button that is associated with the Voice Assist call flow that you want to edit.

3. Click **Schedule** activity and select the check box that is associated with **Use Google Places**.

4. From the **Connection** drop-down list, select the Google integration that you set up in Mitel Voice Assist (step number 12 under Prerequisites).

5. Click the icon to launch the Google Place ID Finder. **Place IDs** page is displayed. This page will allow you to search for your business..

6. Under **Find the ID for a particular place**, enter the business name.

> **Note**:
> To ensure correctness, you must search the place ID by business name and not the address.

7. Copy the Google Place ID and paste it into the **Place Id field** field in the CloudLink Accounts Console.

8. Click **OK**.

9. On the top right of the call flow page, click **Save**. This will update the route with Google schedule.

Hours will be displayed in read-only mode and indicate when your business is open. Any holiday or exception hours will be listed under **Exceptions** in the Schedule tab.

> ℹ **Note**:
>
> Only holidays that occur within the next 7 days are displayed.

8.6.2.2.2   Configuring the Emergency Mode Activity

As an Administrator, you can set the account to be in emergency mode. Existing workflows can check this setting and then take a different route when emergency mode is set.

> ℹ **Note**:
>
> The Emergency Mode activity allows the Administrator to set the status of a system to normal or emergency. For example, this mode can be used when there is an outage, or during limited service.

To add an Emergency Mode activity to the workflow:

1. Click the ⊕ icon on the workflow at the position where you want to add the Emergency Mode activity.

2. From the activity wheel, select the icon and then click the icon.

   The **Emergency mode** window opens.

3. From the **Operation (String)** drop-down list, select either **Set** or **Check** as the operation for emergency mode. **Set** is used to set or clear emergency mode, and **Check** is used to check the current emergency mode setting for the account.

4. From the **Status(String)** drop-down list, select **Enabled** to activate the emergency mode. Selecting **Disabled** de-activates the emergency mode. If you are checking the emergency mode, selecting **Enabled** will follow the Success branch if emergency mode is activated, and selecting **Disabled** will follow the Success branch if emergency mode is not activated.

5. Click **Ok**.

   The Emergency Mode activity will be added to the workflow with two branches.

   • **SUCCESS** – Indicates emergency mode was set correctly, or the current mode matches the checked mode.

   • **FAILURE** – Indicates emergency mode failed to be set, or the current mode does not match the checked mode.

6. Click **Save**.

The Emergency Mode activity is added to the workflow.

8.6.2.2.3   Configuring Phone Number Lookup Activity

As an Administrator, you can use the Phone Number Lookup activity to lookup a phone number to determine approximate location attributes for the caller.

To add a Phone Number Lookup activity to the workflow:

1. Click the [icon] icon on the workflow at the position where you want to add the Phone Number Lookup activity.

2. From the activity wheel, select the [icon] icon and click the [icon] icon.

   The **Phone number lookup** activity configuration window opens.

3. In the **PhoneNumber (String)** text field, enter the phone number that you want to look up. Normally this will be a variable, such as {{CallerNumber}}.

4. Click **OK**.

5. Click **Save**.

The Phone Number Lookup activity will be added to the workflow. The following output variables will be set by the activity and can be used to obtain additional information about the caller:

- **PhoneNumberNational**: Represents the phone number in national format, without the country code.
- **PhoneNumberE164**: Represents the phone number in fully formatted E.164 format, with the country code.
- **Country**: Name of the country from which the phone number is registered with.
- **CountryCodeIso2**: Name of the country in ISO-abbreviated format.
- **StateOrProvince**: State or province from which the phone number is registered from.
- **City**: City from which the phone number is registered with.
- **PhoneType**: Indicates the type of phone as one of the following: MOBILE, LANDLINE, VOIP, INVALID, PREPAID or OTHER.
- **Longitude**: Displays the Longitude value.
- **Latitude**: Displays the Latitude value.
- **Carrier**: The carrier or service provider that the phone number is currently registered with.
- **Success**: A value of **true** indicates that the activity succeeded, and the output variables are set. A value of **false** indicates that the output variables are not set currently.
- **AreaCode**: Area code associated with the phone number.
- **CountryCode**: Country code associated with the phone number.

8.6.2.3   Developer Activities

Developer activities are a set of activities that allow the user to use logic in the flow, and query both internal and external APIs.

Details of developer activities are described in the following table:

Table 4: Developers Activities

ACTIVITY NAME	ICON	DETAILS
Condition		This activity is used to branch the workflow based on variables, values, or expressions. For configuration procedures, see Configuring Condition Activity.
Set Variables		This activity is used to set the value of variables defined in the workflow. For configuration procedures, see Configuring Set Variable Activity.
Log		This activity logs messages that can be displayed in the debug output to assist with debugging a workflow. For configuration procedures, see Configuring Log Activity.
Terminate		This activity exits the workflow and no further activities will be executed. For configuration procedures, see Configuring Terminate Activity.
Delay		This activity delays or pauses the workflow for a specified amount of time. For configuration procedures, see Configuring Delay Activity.

ACTIVITY NAME	ICON	DETAILS
Http Request		This activity allows the workflow to send an Http request to a service and receive a response. For configuration procedures, see Configuring the HTTP Activity on page 37.
Go To		This activity redirects the workflow to any other activity in the flow. For configuration procedures, see Configuring Goto Activity.

8.6.2.3.1   Configuring the Condition Activity

As an administrator, you can configure conditions that branch the workflow, add one or more branches, and group multiple branches. This allows the workflow to take different actions depending on the customer's actions, or the data received.

To add a Condition activity to the workflow:

1. Click the ⊕ icon on the workflow at the position where you want to add the Condition activity.

2. From the activity wheel, select the 💡 icon and click the 🔲 icon.

The **Condition** activity configuration window opens.

3. In the **Expression** text box, enter an expression.

> **ℹ Note**:
>
> You can directly enter the expression in the text, or you can refer to the list of variables available in the drop-down list and select the variable, comparison operator, and the data type value to set the expression.

For expressions, here is an example,

Syntax - "checkvalue == true", then branch the flow to "Success" and when" the "checkvalue == false", then branch the flow to "Fail".

Result – When this expression is executed, the flow checks whether the entered variable is True or False.

- If the set variable is True, the flow follows the Match branch.
- If the set variable is False, the flow follows the No Match branch.

4. The following comparison operators are available. Based on the data type of the variable, you can select the required operators. For example, for number type of variables you can use the (<,>,>=, <=, =, !=) operators:

- number - (<,>,>=, <=, =, !=)
- Boolean - (==, !=)
- string - ()
- Object - (Equals, Not Equals, Of)
- Array - (in, Not in)
- String - (Equals, Not Equals)

5. Click **branches** and configure the expression for branching.

> **ℹ Note**:
>
> You can add one or more branches by selecting the **Add** button at the bottom of the branch list.

The **NoMatch** branch will be executed by default when no other branch conditions are met. To set further conditions, click the **OnNoMatch** branch, then click **Advanced,** and set an expression that evaluates to True or False. If the expression does not match, the branch will terminate.

6. Click **OK.**

7. Click **Save** to save the activity in the workflow.

The Condition activity is added to the workflow.

8.6.2.3.2   Configuring the Set Variables Activity

As an administrator, you can set the value of variables in the workflow. For more information on variables, refer to variables.

To add a Set Variables activity to the workflow:

1. Click the ⊕ icon on the workflow at the position where you want to add the Set Variables activity.

2. From the activity wheel, select the 💡 icon and click the [x] icon.

The **Set Variables** activity configuration window opens.

3. Click **Add Settings** and enter the name of the variable you want to change. The variable can be set to either a literal value or an expression.

    a. To set to a literal value, enter the value in the edit fields above the variable name.

    b. To set the variable to an expression, click the abc/123 icon. This will open the expression editor, allowing you to define an expression that will be evaluated. The variable will be set to the result of the expression.

4. To set the values of additional variables in the same activity, click the **Add setting** bar and select another variable.

> ℹ️ **Note**:
> Only local variables added to the flow can be set using the Set Variables activity.

For more information about adding variables refer Adding Variables on page 49.

5. Click **OK**.

6. Click **Save** to save the activity in the workflow.

The **Set Variables** activity is added to the workflow.

8.6.2.3.3   Configuring the Log Activity

As an administrator, you can add log messages and these messages provide additional information that can be used when debugging a flow.

To add a Log activity to the workflow:

1. Click the ⊕ icon on the workflow at the position where you want to add the Log activity.

2. From the activity wheel, select the 💡 icon and click the 🗐 icon.

The **Log** activity configuration window opens.

3. From the **Level (String)** drop-down list, select the type of log message. The drop-down list includes the following type of log messages:

• **Info** - Information type message

• **Warning** - Warning messages

• **Error** - Error message

4. In the **Message (String)** text box, enter the message text. This can be entered as direct text, or as an expression. It can also include variable names that help with debugging.
5. Click **OK**.
6. Click **Save** to save the activity in the workflow.

The Log activity is added to the workflow.

8.6.2.3.4 Configuring the Delay Activity

As an administrator, you can configure the Delay activity to delay or pause the workflow for the specified amount of time.

To add a Delay activity to the workflow:

1. Click the ⊕ icon on the workflow at the position where you want to add the Delay activity.
2. From the activity wheel, select the 💡 icon and click the ⊘ icon.

   The **Delay** activity configuration window opens.
3. In the **Delay(Number)** text box, enter the time in milliseconds.

> ℹ **Note**:
>
> 1000 milliseconds = 1 second; thus, if you want to pause the workflow for 10 seconds, enter the value as 10000.

4. Click **OK**.
5. Click **Save** to save the activity in the workflow.

The Delay activity is added to the workflow.

8.6.2.3.5 Configuring the Terminate activity

As an administrator, you can configure the Terminate activity to completely stop the workflow execution.

To add a Terminate activity to the workflow:

1. Click the ⊕ icon on the workflow at the position where you want to add the Terminate activity.
2. From the activity wheel, select the 💡 icon and click the ⊙ icon.

   The **Terminate** activity configuration window opens.
3. Enter the optional text that is logged as the reason for termination in the **Reason (String)** text box.
4. Click **OK**.
5. Click **Save** to save the activity in the workflow.

The Terminate activity is added to the workflow.

8.6.2.3.6   Configuring the Go To activity

Administrators can redirect the flow of a workflow by using the Go To activity. The workflow will continue executing at the activity indicated by the Go To activity.

To configure the Go To activity to the workflow:

1. Click the ⊕ icon on the workflow at the position where you want to add the Go To activity.

2. From the activity wheel, select the 💡 icon and click the [GO] icon.

The **Go To** activity configuration window opens.

3. From the **Destination (String)** drop-down list, select the branch or activity to which the flow must be redirected. The selected branch or activity will be executed next by the workflow.

> **ⓘ Note**:
>
> The Go To activity can redirect the workflow only to an activity or branch in the current execution flow. For example, if a flow has two branches and the flow has executed on branch 1, the Go To activity cannot redirect activity to an activity on branch 2. It is possible to redirect the flow to the Condition or other activity at the head of branch 2.

4. Click **OK**.

5. Click **Save** to save the activity in the workflow.

The Go To activity is added to the workflow.

8.6.2.3.7   Configuring the HTTP Activity

As an administrator, you can configure the HTTP activity to access RESTful Web APIs in your workflow. This allows you to send requests using HTTP to web services in order to retrieve or update data. The HTTP activity encapsulates the header and body of the API request, making it easy to use within your workflow.

For example, if your workflow needs to retrieve data from a third-party application that supports a REST API, you can use the HTTP activity to request that data, and then the data can be accessed by the workflow.

To add a HTTP activity:

1. Click the ⊕ icon on the workflow at the position where you want to add the HTTP activity.

2. From the activity wheel, select the 💡 icon and click the 🌐 icon.

The opens the **HTTP** activity configuration window.

3. From the **GET** drop-down list, select the method that you want to perform. The drop-down list includes the following functions:

   - **GET** – this is used to request data from the configured web service. This is the most commonly used method for HTTP requests.
   - **PUT** - this is used to send data to a web service to create or update a resource. If the resource does not exist, the PUT request will create it; if it exists, the PUT request will update it, overwriting all properties in the resource with the properties provided in the PUT request. PUT requests are idempotent, which means that if the same request is sent multiple times, it will access the same resource and not create a new identical resource.
   - **POST**- this is used to send data to a server to create a resource. Note that as opposed to the PUT request, the POST request is non-idempotent, which means that if the resource in the POST request already exists, a duplicate copy of the resource will be created by the POST request.
   - **PATCH** – this is less commonly used in REST interfaces but is similar to PUT, as it is used to update a resource. With a PATCH request, only the properties being updated need to be specified, as opposed to PUT, which updates all properties.

   > **ⓘ Note**:
   > Not all web services with a REST API support PATCH.

   - **DELETE** – this deletes the specified resource on the web service.
   - **HEAD** – this is similar to GET, where a request is sent to the web service to retrieve data, but without the response body, so that no actual data is returned. This request is useful to check the return value of GET before retrieving all of the actual data in cases where there is a large amount of response data.

   > **ⓘ Note**:
   > Not all web services with a REST API support HEAD

4. In the **Enter request URL** text box, enter the URL you want to access. This is the URL to the web service supporting the REST API, for example, https://router.api.mitel.io/2018-03-03/skillgroups/

5.
   In the **Headers** tab, click the [+] button to add any required headers. A new row is added that allows you to enter the header and the value. By default, the header Content-Type is included, with the value set to application/JSON. Consult the documentation for the REST API you are accessing for details on any other required header values.

   a. In the **Enter Header** text box, enter the header string.
   b. In the **Enter Value** text box, enter the value of application/file format value. Note: To delete the entered row, click the delete icon

6. In the **Body** tab, enter the content to be sent in the HTTP request. For PUT, POST, and PATCH methods, the Body will normally contain the data to be updated on the web service. This field is disabled for GET and DELETE requests since no data is provided in the request; only the URL is sent to the web service. This field is required for PUT and POST requests.

> **ⓘ Note**:
>
> The Body should be formatted based on the value defined in the Content-Type header.
>
> For example, if Content-Type = application/json, the Body could be formatted in JSON format as follows:
>
> {
>
> "action": "Pending",
>
> "subAction": "Set"
>
> }

7. In the **Authorization** tab, you can select an existing connection for a third-party product already integrated with Voice Assist . This allows you to use the credentials configured for the selected connection to integrate with the REST API supported by that connection.

> **ⓘ Note**:
> The Authorization configuration is optional and does not need to be configured for REST APIs not using third-party authentication, such as when using the Mitel CloudLink APIs.

    a. From the **Integration** drop down list, select the configured third-party software that supports the REST API to which you are connecting.

8. Click **Test** to test the HTTP activity. It is recommended that you test the request before deploying it in your workflow.

9. Click the **Testing** tab.

    a. Any runtime variables defined in the URL will be listed. Enter values for these variables if applicable.

    b. Click the **Test** button to execute the API request. The corresponding response is displayed in the Response field

10. Click **OK**.

11. Click **Save** to save the activity in the workflow.

The HTTP activity is added to the workflow.

8.6.2.4   Configuring the MiCCB Send Data Activity

MiCCB send data activity is configured in the workflow to trigger a communication channel that allows the required variables and related information to be transferred from CloudLink to MiCCB Server.

Before setting up the workflow to transfer data from CloudLink to MiCCB, make sure to complete the following steps:

1. Ensure that the Cloudlink Daemon is installed and running on the MiCCB server.
2. Integrate MiCCB with CloudLink by using the Mitel Administration Portal.
3. Use Integrate Voice Assist to ensure that the necessary configuration for MiCCB is in place.
4. Make sure that at least one user is configured with MiVB.

To enable users to send information captured in Voice Assist to MiCCB, follow these steps: 5. When the call is transferred to the Queue, set the "MiccVarArray" input variable to the "MiCC send activity," as shown below. Toggle on the "MiccbVarArray" to modify the drop-down value. 6.

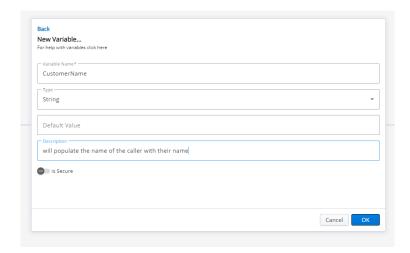Perform the following steps to enables users to send information captured in Voice Assist to MiCCB .

1. Click **Add Route** to create a new voice flow, or modify an existing one.
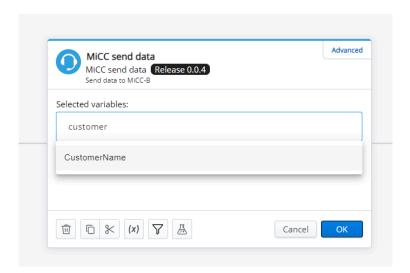

2. Choose the variables from the workflow.

> ℹ️ **Note**:
> Ensure that variable name you select must also exist on the MiCC server. To add variables in MiVoice Assist, see Add Variables.
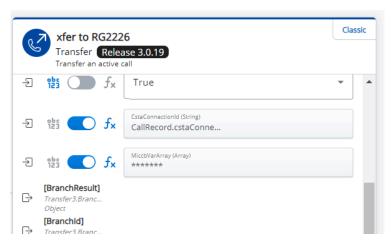
3. Add the **MiCC send data** activity (the headset icon) to the flow where you want to capture the information.
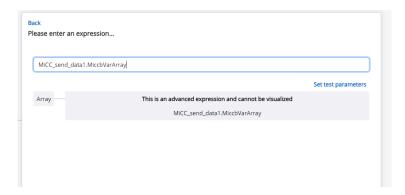

a. Select the variables from the drop-down list that you want to send to the MiCCB Server in the **MiCC send data**.

4. When the call is transferred to the Queue, set the *MiccVarArray* input variable to the **MiCC send data** activity, as shown below.

a. Toggle on the *MiccbVarArray* to modify the drop-down value.

b. Enter the variable name of the **MiCC send data** activity.

This will auto-complete the required fields and complete the workflow.

8.6.3 Expressions

The workflow expression language is used anywhere there is an assignment to a variable, or for constructing comparisons. For example, the following expression ensures that these conditions are met:

- The value of the string variable named "membership" is set to "gold".
- The value of the numeric variable named "waitTime" multiplied by the numeric variable named "factor" is greater than 4000 OR The value of the string variable named "status" is set to "pending" or "error".

```
membership == "gold" and (waitTime * factor > 4000 or status in ("pending",
"error"))
```

8.6.3.1 Values

There are five supported value types for variables.

The details of Values are described in following table.

Table 5: Values

Variable Type	
Boolean	`True, False`
Number	`45, -90.3, NaN, Infinity`
String	`abcd, 23cvb54R 3rt4+53yt`
Object	`someObject`
Array	`(a, b, c)someArray`

8.6.3.2 Variables

```
variableName

variableA + variableB

anotherVariable != False
```

All variables present in the current expression scope are available for use. This includes:

- User-Defined variables within the workflow
- Arguments of all activities in the workflow

Variables are accessible via their plain text name and will be displayed as autocomplete options. You can enter the first few characters of the variable, and the system will complete the name with the accessible variables for the workflow.

Variables will always be of one of the five Value types:

- Boolean, Number, String, Object, Array

8.6.3.3 Arithmetic

```
( x + 5 ) ^ ( y % 3 ) - sqrt( x )
```

All common arithmetic operators are supported:

- Addition, Subtraction, Multiplication, Division

  - `x + y`
  - `x - y`
  - `x * y`
  - `x / y`

- Exponentiation

  - `x ^ y`

- Modulus - Returns the remainder from integer division

  - `x % y`

Several useful arithmetic functions are also available:

- Absolute Value

  - `abs( x: number ): number`
- Natural Logarithm

  - `log( x: number ): number`
- Square Root

  - `//Equivalent to x ^ ( 1 / 2 )`
  - `sqrt( x: number ): number`
- Ceiling - Rounds upwards to the nearest integer

  - `ceil( x: number ): number`
- Floor - Rounds downwards to the nearest integer

  - `floor( x: number ): number`
- Minimum - Returns the smallest number in the given list

  - `min( a, b, c... ): number`
- Maximum - Returns largest number in the given list

  - `max( a, b, c... ): number`
- Rounding - Round to the nearest integer

  - `round( x: number ): number`
- Random - Random floating-point number from 0.0 to 1.0

  - `random(): number`

8.6.3.4   Boolean

```
( x or y ) and not z
```

The following Boolean operators are supported:

- AND - TRUE if both x AND y are TRUE - FALSE otherwise

```
x and y
```
- OR - TRUE if x OR y is TRUE OR both are TRUE - FALSE otherwise

```
x or y
```
- NOT - TRUE if x is FALSE - FALSE otherwise

```
not x
```
- Ternary - If x is TRUE return y otherwise return z

```
x ? y : z
```

8.6.3.5   Equalities

```
volume > 56
```

```
color != "green"
```

The following equality operators are supported:

- Equal, Not Equal
- Less than, Less than OR equal
- Greater than, Greater than OR equal

8.6.3.6   Arrays

Arrays are lists of values

Creation

There are two ways to create an array. The array can be directly assigned with members, as in the following examples:

```
array1 = (a, b, c)
```

```
array2 = (True, "abc", 5)
```

The function ArrayCreate can also be used to create an array, as in the following examples:

```
array3 = ArrayCreate(a, b, c)
```

```
array4 = ArrayCreate(True, "abc", 5)
```

> **ⓘ Note**:
> The arrays can contain items of different value types.

Membership

```
x in (a, b, c)
```

```
x not in (a, b, c)
```

It is possible to check whether an element is included in an array by using the in operator. For example, x in (a, b, c) will return True if the value of variable x is a, b, or c. Otherwise, it will return False.

Using not in provides the reverse functionality, where True is returned if the value of the variable is not in the array; otherwise, False is returned.

Element Access

There are two ways to access elements of an array. The element can be directly accessed by the index value, such as myArray[2]. If the array is defined as myArray = (a, b, c), myArray[2] has the value of c. Note that array indices begin with 0.

The function ArrayGetItem can also be used to access an element of an array. The following example returns the third element in myArray: ArrayGetItem(myArray, 2)

Appending items

Elements can be appended to an array using the function ArrayConcat. Multiple items can be added at the same time. The following example adds d, e, and f to myArray: ArrayConcat(myArray, d, e, f)

Length

The function ArrayCount returns the length of the array.

```
ArrayCount(array: Array(any)): number
```

8.6.3.7   Objects

Generic Objects are supported and are bags of Key-Value pairs, where a Key points to a specific Value.

Creation

- `ObjectCreate(keys: any[], values: any[])`
- `ObjectCreate( ("count", "color", "isReady" ), ( 23, "red" True) )`

To create objects, use the function ObjectCreate. One or more keys can be passed, along with a corresponding number of values.

Member Access

- `x.y`
- `y of x`

To access members of the object, the Key attribute can be used. Using the example above, myObject.count = 23, and myObject.color = "red"

Check existence of object property

- `ObjectHasProperty(obj: object, property: string)`
- `ObjectHasProperty(someObject, "property1" ) )`

The function *ObjectHasProperty* can be used to check if a key exists in an object. It will return True if the key exists in the object; otherwise, **False** is returned.

8.6.3.8   String Expressions

Several convenience functions are available for common String processing situations

The details of String expressions are described in the following table:

Table 6: String Expressions

Type	Description	Example
Length	Returns the length of the string.	`StringLen(str: string): number`
Conditional	Returns the conditional value of the function. True or False.	• `StringStartsWith(str: string, subStr: string): Boolean Returns True if the string begins with the provided substring; otherwise, it returns False.` • `StringContains(str: string, subStr: string): Boolean Returns True if the substring is contained anywhere in the string; otherwise, it returns False.` • `StringEndsWith(str: string, subStr: string): Boolean Returns True if the string ends with the provided substring; otherwise, it returns False.`
Building	Concatenates multiple strings into a single string	`StringBuilder(...strings): string`

Trim	Removes all white space characters from the beginning and end of the string.	`StringTrim(str: string)`
To Lower Case	Converts the entire string to lower case.	`StringToLowerCase(str: string)`
Regular Expressions	These are patterns used to match character combinations in strings. ~= indicates that the string is being compared to a regular expression and will return True if the string matches the expression, or False if it does not. Refer to RegEx documentation for pattern descriptions.	• `x ~= y` • `x ~= ^(abc)`

8.6.3.9   Date and Time Expressions

```
Thu Jan 26 2021 11:00:00
```

While there is no dedicated Date or Time type, several convenience functions are available for working with Date Time Strings:

Current Date Time (UTC)

Returns the current date and time in Coordinated Universal Time (UTC) `DateUtcNow(): string`

Manipulating Date-Time Strings (UTC)

```
//Adding time
DateUtcAddDay(date: string, daysToAdd: number): string
DateUtcAddHour(date: string, hoursToAdd: number): string
DateUtcAddMinutes(date: string, minutesToAdd: number): string
DateUtcAddSeconds(date: string, secondsToAdd: number): string
```

```
//Subtracting time
DateUtcSubDay(date: string, daysToSub: number): string
DateUtcSubHour(date: string, hoursToSub: number): string
DateUtcSubMinutes(date: string, minutesToSub: number): string
DateUtcSubSeconds(date: string, secondsToSub: number): string
```

8.6.4   Variables

Variables are used in workflows and activities to perform various tasks, including:

- Storing information for later use
- Collecting user data
- Performing database queries
- Building simple or complex conditions

Variables can be used within different activities such as:

- Transferring a call to a different destination based on customer class
- Playing different prompts based on account balance
- Holding collected digits for use later in a database query

Some variables can also be passed to Voice Assist users in the form of a desktop screen pop, providing Voice Assist users with customer information gathered by the workflow.

Variables may be configured to mask their contents, enabling the variable to be displayed either entirely masked or partially masked, with a user-specified number of characters left unmasked (that is, ***1234). This limits the exposure of potentially sensitive information, such as credit card or personal identification numbers in logs, call notes, databases, and screen pops. Secured variables cannot be used with the Set Variable activity but can be used with the Variable Compare and Collect Digits activities. Variables that contain file paths to .wav files will also secure the .wav file. System variables cannot be secured.

8.6.4.1   Adding Variables

To add a variable:

1. Click the **(x)** icon on the top right side of the screen while the workflow is displayed.

   The **Variable Stack** configuration window opens.
2. Click the **Add Variable** button.
3. In the **Variable name** text field, enter a variable name.
4. Select the variable type from the following options: **Boolean (True/False)** , **Number**, **String**, **Object**, **Array**.
5. In the **Default value** text field, enter a default value if applicable.
6. In the **Description** text field, enter a description if required.
7. Select the **Is Secure** toggle button to secure the variable and mask it from display.
8. Click **OK** to save the variable.

The variable is now available to be used within the workflow.

8.6.4.2   Deleting Variables

To delete a variable:

1. Click the **(x)** icon on the top right side of the screen while the workflow is displayed.
2. Select a variable from the list or search for the variable by entering the variable name in the **Search variables** text box.
3. Click the **(x)** icon to delete the variable.
4. Click **OK**.

> **ℹ Note**:
> Only user-defined variables can be deleted.

The variable is deleted from the variable list.

9   Number Management

> **ℹ Note**:
> When you create a new route, a number is either created or selected from the list. If a number is created, it is then added to the Number Management page. If a route is deleted with the number still associated to the route, it will also delete the number from the Number Management page.

In Number Management, there is a provision to add and manage phone numbers for direct inward dialing.

9.1   Adding a Phone Number

1. Click the **Numbers** option under Voice Assist. The **Number Management** page opens.
2. Click the **Add Number** button to add the phone number. The **New number** page is displayed.
3. Enter a descriptive name in the **Name** text box.
4. Enter the **Local routing number** in the text box. The number can include any dialable characters, such as # and *.
5. Click **Save**. The new number is added.

9.2   Editing the Number Management and Deleting a Phone Number

1. Click the **Numbers** option under Voice Assist. The **Number Management** page opens.
2. From the list of phone numbers, select the check box beside the number you want to edit.

3. Click the **Manage** button. A window opens

4. Edit the **Name** that needs to be updated.

5. Click the **Save** button to update the name or click the **Delete** button to delete the phone number.

6. Type confirm in the **Warning** message box.

7. Click **OK**. The number is deleted.

> **ⓘ Note**:
>
> Only numbers listed as "Unassigned" can be deleted. Otherwise, they must be removed first from the associated workflow.

10 Best Practice on Securing Voice Assist

Disclaimer

The Best practice on securing Mitel Voice Assist section is provided "As Is" and without warranty. In no event will Mitel Networks Corporation or its affiliates have any liability whatsoever arising from in connection with this document. You acknowledge and agree that you are solely responsible to comply with any and all laws and regulations in association with your use of CloudLink and/or other Mitel products and solutions including without limitation, laws and regulations related to call recording and data privacy. The information contained in this document is not, and should not be construed as, legal advice. Should further analysis or explanation of the subject matter be required, please contact an attorney.

Introduction

Mitel Voice Assist is a managed cloud service built on the robust and secure CloudLink Platform. A shared responsibility model exists when operating in Cloud and Mitel will handle the security responsibilities of the infrastructure, however, the customer is responsible for the administration and customization of the services and applications they use. The proceeding sub-sections will provide references to security and privacy related documentation for the CloudLink Platform, what is the customer's responsibility, what data is being captured by Voice Assist, and provide some best practices on how the customer can handle their security responsibilities.

CloudLink Documentation

The following links provides details around the security and privacy topic for the CloudLink Platform:

• CloudLink Security Overview
• Mitel Global Terms of Service

Customer's Responsibility

In the Cloud, the customer is responsible for managing their own accounts and users and ensure their users have the appropriate permissions assigned to them. Any customer managed data (data which the customer inputs to the system) is the customer's responsibility to ensure the information is entered with privacy in mind and conforms to any regulatory and regional laws. In addition, the customer is responsible

for any local networking configuration (typically firewall rules) to ensure network connectivity between their users and CloudLink.

The Mitel Voice Assistant customer responsibility include:

- Proper administration of their users and the user's permissions from the Mitel Administration. Mitel Voice Assistant administration access requires a local administrator role or higher.
- Local firewall configuration to ensure the administrator can access the Mitel Administration:

  - Top of the section
  - Network Diagram section
  - Accounts Console section
- Proper configuration of routing, integrations, and numbers in a secure, private, and compliant manner if the customer must adhere to compliance requirements.

What Data is Being Collected with Mitel Voice Assistant

Mitel does not perform analytics or use the data for alternate use on the customer managed data related to Mitel Voice Assist. The Mitel Voice Assist solution does collect logs which the system generates for the purpose of security, maintenance, product improvement and troubleshooting. More details are presented in the Mitel Global Terms of Service around data collection and usage.

Best Practices for Administering Voice Assistant in a Secure, Private, and Compliant Manner:

1. Assigning users with the appropriate role, only enable users as Account Admin role to those users that are required to modify Voice Assist configuration as they will be allowed to perform Add/Edit and Delete Routes.
2. Name the activities in the Route->Workflow Editor appropriately, do not name the branches activity with privacy information.
3. Do not share credentials as each modification to the flow will display who updated the flow, this will provide a view on who made the last change.

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