Oracle® Intelligent Communication Orchestration Network
User Guide

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Introduction

The Oracle® Intelligent Communication Orchestration Network enables Enterprise and Managed Service Provider licensees to connect on-premises and SaaS based Unified Communications (UC) and Contact Center (CC) communication tools. The Oracle® Intelligent Communication Orchestration Network is a SaaS offering that you manage through a user interface where you can customize settings to meet your needs now and in the future.

This guide explains the concepts and procedures for working in the user interface to configure and manage the features and operations the Oracle® Intelligent Communication Orchestration Network provides. The guide is organized with a chapter for each landing page on the user interface. Each chapter provides instructions for using the features and operations on the landing page.

Chapters:

- [Accounts](#)
- [Sites](#)
- [Number Blocks](#)
- [Services](#)
- [Voice Gateways](#)

Oracle® Intelligent Communication Orchestration Network Network Overview

The Oracle® Intelligent Communication Orchestration Network enables enterprises and Managed Service Providers to connect Unified Communications (UC) and Contact Centers (CC) because the service supports connecting to both on-premises and SaaS based UC and CC solutions. The Oracle® Intelligent Communication Orchestration Network focuses on bringing voice communications services together in one place to relieve you from managing Carrier Service compatibility issues.

Oracle® Intelligent Communication Orchestration Network provides numerous features to enable bringing voice communications services together with a single point of management rather than managing each of them independently. The following diagram shows how the

features and services interact to provide voice services to the end customer.
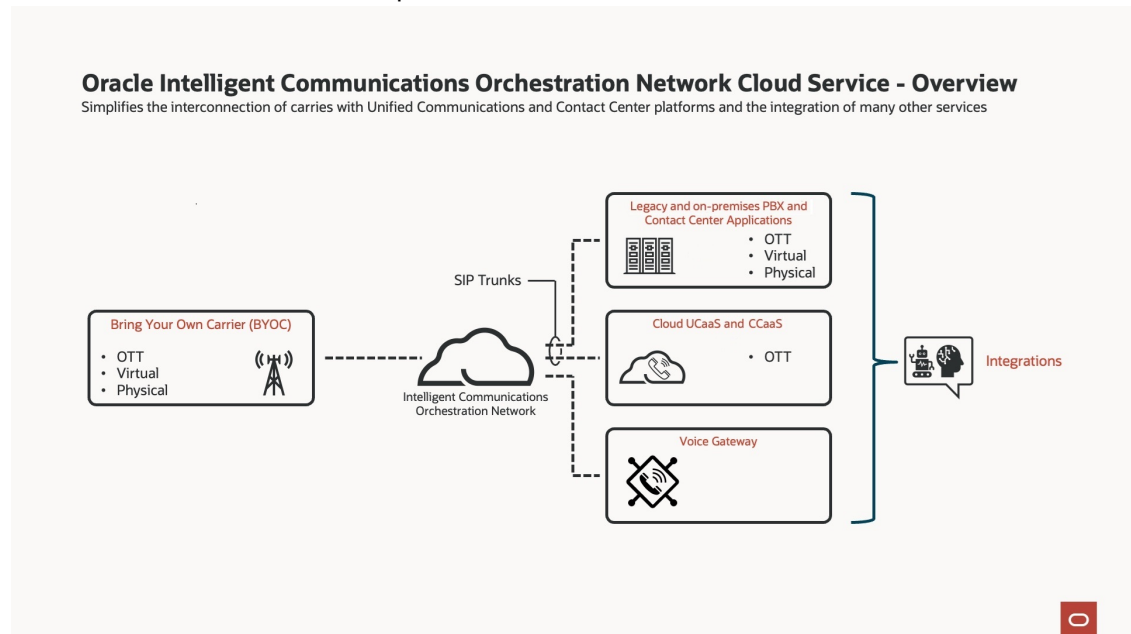
The preceding diagram begins with associating your carrier with Oracle® Intelligent Communication Orchestration Network Over the Top, Virtually, or Physically. To that association, you add SIP Trunks and Voice Gateways in Oracle® Intelligent Communication Orchestration Network to integrate with the voice services you want.

Number Management

The Oracle® Intelligent Communication Orchestration Network allows customers and Managed Service Providers to manage the numbers they use for their services. Number management integration provides you with the ability to add and remove numbers to services and accounts as needed.

The base components of Oracle® Intelligent Communication Orchestration Network voice services are numbers, which give you the ability to make and receive telephone calls. Oracle® Intelligent Communication Orchestration Network supports Bring Your Own Carrier (BYOC) agreements, which allow you to utilize your existing carrier services on our platform. You import your numbers into the system to ensure that Oracle has the necessary information to support your BYOC connectivity.

> ⓘ **Note**
>
> The responsibility of managing BYOC connectivity lies solely with the Oracle® Intelligent Communication Orchestration Network subscriber, as does the purchasing and porting of numbers. While Oracle ensures the security and reliability of the platform, it does not form part of the contractual relationship for these services.

Number Provisioning

When you use the services of a carrier, you must add the numbers provided by that carrier into Oracle® Intelligent Communication Orchestration Network . You can add numbers in blocks of 1, 10, or 100 at a time.

> ⓘ **Note**
>
> There is no integration with the Bring Your Own Carrier (BYOC) provider. Customers cannot buy or port numbers from the Oracle® Intelligent Communication Orchestration Network into those services. Such actions fall under the agreement with the provider.

Inventory Management

In addition to managing numbers across services and accounts, you can manage your inventory of numbers by way of the Inventory site that is embedded by default in each account.

The Inventory site is for storing unassigned numbers that you do not want to cancel and return to the carrier when you discontinue the services for which they were originally provisioned. You might want to keep the numbers for future use. You can also put new numbers in Inventory until you assign them to a service.

Numbers in inventory cannot be associated with an active service and cannot be used to make or receive calls until you assign them to a service.

> ⓘ **Note**
>
> You cannot delete the Inventory site.

Number Actions

You can perform certain actions on the platform for a more granular level of functionality to help you use your number inventory in a more consistent manner. See [Actions on the Number Blocks Page](#).

Self-Service Management Portal

The Oracle® Intelligent Communication Orchestration Network provides a portal for creating and using the following elements you need to manage voice services.

Sites—A site is an artifact that represents the physical location where voice services are delivered. Sites hold all relevant information related to the location, such as the address and contact details. For example, a corporate headquarters office can be considered a site. The portal provides tools to create, edit, and delete site information.

Numbers—A number is an artifact that represents a block of phone numbers where services are routed. You can access numbers after they have been imported into the platform through Bring Your Own Carrier (BYOC). The availability of numbers depends on the location of the service and the types of numbers allowed. You can move numbers from sites, store numbers in inventory, and split number blocks across different service types. Managing numbers is an important component of the platform access services, enabling Managed Service Providers (MSP) and Enterprises to effectively manage their telecommunications operations.

Services—A Service is a voice application connected to the platform through SIP trunks, enabling communication between other services and selected carrier networks When you create a SIP trunk, you select a service profile, such as Carrier, Genesys, Microsoft Teams, Generic, or Voice Gateway. You can add voice bots to the Voice Gateway. Oracle® Intelligent Communication Orchestration Network displays the configuration fields required for the selected profile when you add the service. The Services pages in the Portal allows Enterprises and MSPs to manage platform features such as trunks and their attributes, as well as other

platform features enabled as part of their subscription. Services is the landing page when an Enterprise customer logs on. MSPs can navigate to the Services page from their landing page.

Accounts—An Account is a logical container used as the entry point for working with Oracle® Intelligent Communication Orchestration Network . Oracle creates an account for each Enterprise end-user customer (single-tenant only) and each Managed Service Provider (multi-tenant capable) customer. MSPs can create sub-accounts with in their account for their customers. The Accounts page is the landing page when an MSP logs on. Enterprises cannot access the Accounts page.

SIP Trunks

SIP trunks enable services to make and receive telephone calls. Customers will connect a SIP trunk (known as a service) within Oracle® Intelligent Communication Orchestration Network and connect it to their telephony equipment. By creating such connections, customers can make and receive telephone calls both locally and internationally.

Oracle® Intelligent Communication Orchestration Network provides the following predefined profiles to connect to different endpoints.

- [Connect the Carrier Service](#)
- [Connect the Generic SIP Service](#)
- [Connect the Genesys Cloud CX Service](#)
- [Connect the Microsoft Teams (Direct Routing) Service](#)

Service Groups

Oracle® Intelligent Communication Orchestration Network offers a solution to customers facing service outages on specific trunks, enabling them to continue operating their businesses. This is achieved through the provision of trunk groups, which allow Managed Servie Providers and Enterprises to combine multiple trunks into a single group. Trunk group types include:

End-Point service groups—Groups services such as Microsoft Teams, Genesys, and Generic SIP.

Carriage service groups—Groups carriers.

With both types of groups, you can set the priority among the services to automatically switch to a backup trunk in the event that the currently active trunk becomes unavailable.

About Using Oracle® Intelligent Communication Orchestration Network

Oracle® Intelligent Communication Orchestration Network provides tools and functions to help you consolidate and coordinate your voice communications services through one Cloud service that is vendor agnostic.

With Oracle® Intelligent Communication Orchestration Network , you can configure and manage SIP trunks to connect carriers and voice communication services for use with your organization's telephony needs. Through the Oracle® Intelligent Communication Orchestration Network Dashboard, you create sites that represent physical locations where you use telephony services. At each site you specify which communications services to use and assign phone numbers.

Managed Service Provider (MSP) licensees can create Oracle® Intelligent Communication Orchestration Network sub-accounts for managing their customers.

Oracle® Intelligent Communication Orchestration Network also supports the single tenant Enterprise license for Enterprise customers that subscribe directly through Oracle. Enterprise licensees cannot create sub-accounts.

The Oracle® Intelligent Communication Orchestration Network Dashboard displays sections for working with Sites, Services, Numbers, and Accounts (MSP licensees only). Each section displays a landing page that is initially unpopulated. As you build your deployment, the landing pages display information about your configurations and provide tools to manage them.

Establish Your Subscription

To obtain the Oracle® Intelligent Communication Orchestration Network service, contact Oracle Cloud Sales to purchase a Cloud Services Agreement and the subscription. Oracle does not offer the Oracle® Intelligent Communication Orchestration Network as an online purchase in the Oracle Cloud Marketplace. You must purchase through Oracle Sales.

Upon executing the Cloud Service Agreement, Oracle adds the Oracle® Intelligent Communication Orchestration Network service to your Oracle Cloud account, if you have one already. If you do not have an account, use the instructions located under Get Started on the Oracle® Intelligent Communication Orchestration Network landing page to access and configure your account. After you configure your account, you can use Oracle® Intelligent Communication Orchestration Network .

Configuration Process

After you become an Oracle® Intelligent Communication Orchestration Network customer, you can begin the process of configuring the service for your business needs.

The following steps match pages on the Oracle® Intelligent Communication Orchestration Network dashboard. This guide contains a chapter for each step. After you perform the initial configuration, you can revisit any step at any time to adjust the settings as your business needs change.

1. Accounts—Establish an account with Oracle and obtain one of the following licenses:

   • Enterprise - Cannot add sub-accounts.

   • Managed Service Provider (MSP) SIP Trunk - Can add sub-accounts.

2. Sites—Create a Site for every location where you want numbers and services associated. Start by clicking Add Site on the Sites page. For your employees who work remotely, consider assigning their phone numbers to a physical location of your company rather than making a site for each employee at their home address.

3. Number Blocks—Assign number blocks to each Site. Start by clicking Add Number Blocks on the Number Blocks page. You can perform the actions listed in the Actions menu on the Number Blocks page to manage their use on the sites.

4. Services—Add Voice Services, Voice Gateways, and Voice Bots to your deployment. Start by clicking Add Service on the Services page. The process includes selecting a Service or a Voice Gateway, assigning number blocks, and configuring Service settings.

User Groups and Privileges for MSP SIP Trunk Licensees

Oracle® Intelligent Communication Orchestration Network provides and enforces user roles to help Managed Service Provider (MSP) SIP Trunk licensees manage access to the service according the least amount of privilege needed. The privileges defined for each users group determine which information the user can access and which actions the user can perform.

Oracle creates the following user groups in your Oracle Cloud Identity Access Management (OCIAM) account and you can assign them to your personnel to access the Oracle® Intelligent Communication Orchestration Network portal.

- Oracle® Intelligent Communication Orchestration Network MSP SIP Trunk Admin User—Administrative user access to manage the Oracle® Intelligent Communication Orchestration Network configuration.

- Oracle® Intelligent Communication Orchestration Network MSP SIP Trunk Read-Only User—Read-only user access to view the Oracle® Intelligent Communication Orchestration Network configuration.

> ⓘ **Note**
>
> The initial release supports only the Oracle® Intelligent Communication Orchestration Network MSP SIP Trunk Admin User functionality. The Oracle® Intelligent Communication Orchestration Network MSP SIP Trunk Read-Only User functionality is not available at this time.

The following lists show the operations Oracle® Intelligent Communication Orchestration Network Admin Users can perform.

Services SIP Trunk

- Add New Services
- View Configurations
- Edit Services
- Delete Services
- Pause Services
- Resume Services
- Add a Service group
- View a Service Group
- Edit a Service Group
- Delete a Service Group

Voice Gateway

- Add New Voice Gateway
- View Voice Gateway Configuration
- Edit Voice Gateway
- Delete Voice Gateway

- Pause Voice Gateway

- Resume Voice Gateway

- Add Voice Bot

- View Voice Bot

- Edit Voice Bot

- Remove Voice Bot

Numbers

- Add or Delete Numbers

- View Numbers

- Set Active or Pause Numbers

- Split or Merge Number Blocks

- Move Numbers to a Service

- Remove Numbers from a Service

- Move Numbers to a Site

Sites

- View Sites

- Add Sites

- Edit Sites

- Delete Sites

MSP Dashboard

- View Accounts

- Add Accounts

- Edit Accounts

- Delete Accounts

Account Switcher

- View

User Groups and Privileges for Enterprise Licensees

The Oracle® Intelligent Communication Orchestration Network provides and enforces user groups and roles to help Enterprise licensees can manage access to the service according the least amount of privilege needed. The privileges defined for each user group determine which information the user can view and which actions the user can perform.

Oracle creates the following user groups in your Oracle Cloud Identity Access Management (OCIAM) account and you can assign them to your personnel to access the Oracle® Intelligent Communication Orchestration Network portal.

- Oracle® Intelligent Communication Orchestration Network Enterprise Edition Admin User —Administrative user access to manage the Oracle® Intelligent Communication Orchestration Network configuration.

- Oracle® Intelligent Communication Orchestration Network Enterprise Edition Read-Only User—Read-only user access to view the Oracle® Intelligent Communication Orchestration Network configuration.

> ⓘ **Note**
>
> The initial release supports only the Oracle® Intelligent Communication Orchestration Network Enterprise Edition Admin User functionality. The Oracle® Intelligent Communication Orchestration Network Enterprise Edition Read-Only User functionality is not available at this time.

The following lists show the operations Oracle® Intelligent Communication Orchestration Network Enterprise licensees can perform.

Services - SIP Trunk

- Add New Service
- View Configuration
- Edit Service
- Delete Service
- Pause Service
- Resume Service
- Add a Service group
- View a Service Group
- Edit a Service Group
- Delete a Service Group

Voice Gateway

- Add New Voice Gateway
- View Voice Gateway Configuration
- Edit Voice Gateway
- Delete Voice Gateway
- Pause Voice Gateway
- Resume Voice Gateway
- Add Voice Bot
- View Voice Bot
- Edit Voice Bot
- Remove Voice Bot

Number Blocks

- Add or Delete Numbers
- View Numbers
- Set Active or Pause Numbers

- Split or Merge Number Blocks
- Move Numbers to a Service
- Remove Numbers from a Service
- Move Numbers to a Site

Sites

- View Sites
- Add Sites
- Edit Sites
- Delete Sites

Managed Services Provider Dashboard

Not applicable at this time.

Not applicable at this time.

Account Switcher

Not applicable at this time.

2

Accounts

The Accounts Dashboard page is only accessible to Oracle® Intelligent Communication Orchestration Network subscribers who purchased the Managed Service Provider SIP Trunk License. The Accounts Dashboard is the landing page when those subscribers log in.
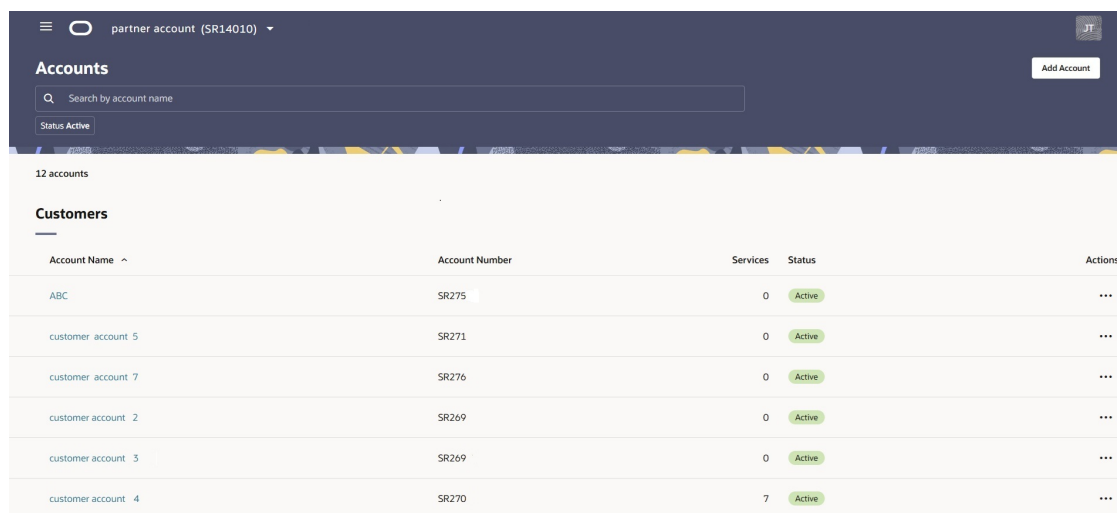
Topics:

- [Accounts Page Display and Operations](#)
- [Accounts Management](#)

Accounts Page Display and Operations

When you log in with the Managed Service Provider SIP Trunk license, Oracle® Intelligent Communication Orchestration Network displays the Accounts Dashboard page with information about your sub-accounts (customers) and controls for adding and editing your customer accounts.

The following screen capture shows an example of the Accounts Dashboard.

Table 2-1   Table Columns

Column Name	Description
Account Name	The name you configured for the account is a link to the Service page for that account.
Account Number	The number Oracle Communications Intelligent Orchestration Network Cloud Service set for the account during account creation.
Services	The number of services assigned to the account.
Status	Active	Suspended
Actions	Edit	suspend	Reactivate

Table 2-2   Search Filtering

Control	Description
Search	Use to find a customer account by name or number.
Status Search Filter	Use to narrow your search by status. Statuses include Active | Canceled | Suspended. Default: Active.

At the top of the page, the account switcher drop-down list displays the name and identification number of your account followed by a list of your sub-accounts. The drop-down list shows the status of each sub-account account in addition to the name and account number.
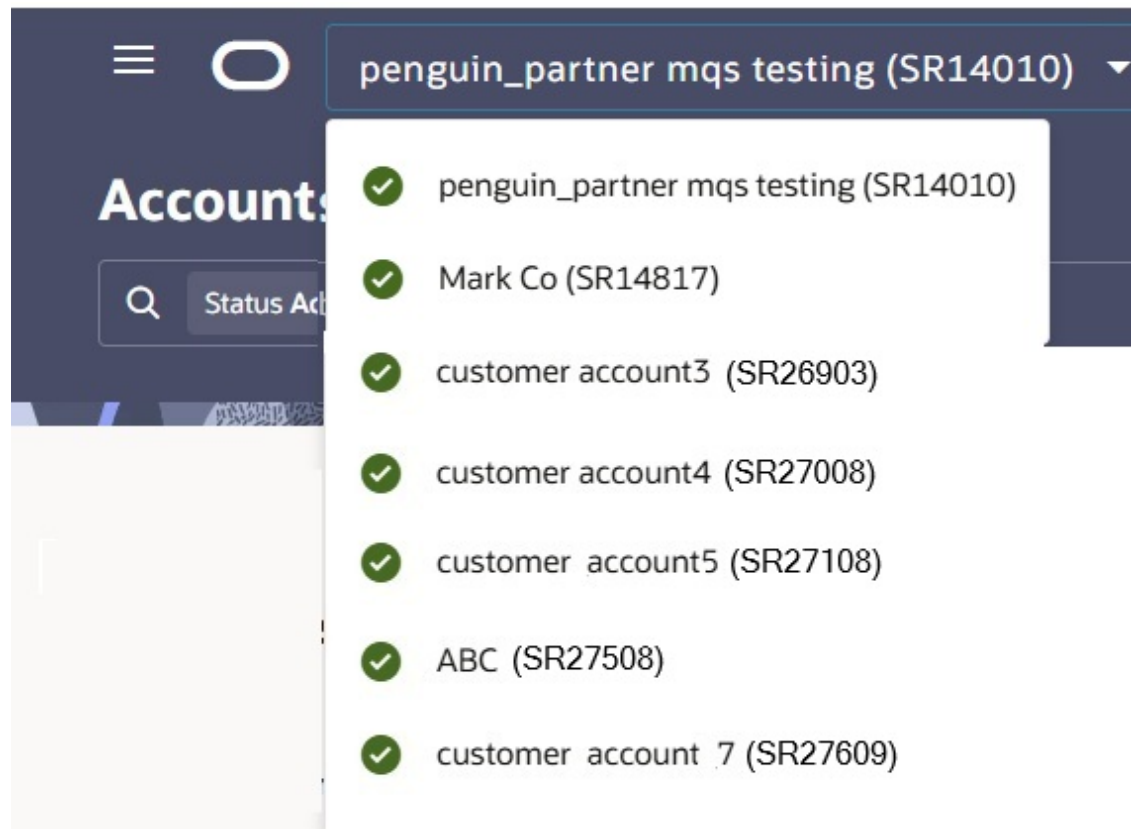
Status Indicators

• Green circle with the check mark—Active

• Orange warning triangle with an exclamation mark—Suspended

• Red circle with the X character—Canceled

When you click the name of an account, Oracle® Intelligent Communication Orchestration Network displays the Services page. To navigate back to the Accounts page, click the name of your account located at the top of the account switcher. When you navigate to a sub-account, the main navigation menu displays Customer navigation pages (Services, Numbers, and Sites). The only way to navigate back to the Accounts page is to use the Account Switcher.

Actions on the Accounts Page

Oracle® Intelligent Communication Orchestration Network provides the following actions for managing accounts. Click the ellipsis in the Actions column at the end of the row in the Customers table for the customer you want to affect to view the actions menu.

Add Account—Opens the Add Account drawer, where you specify the account details such as the Company Name and Company Address.

Edit—Opens the Customer Account drawer where you can update the Company Address information.

Sub-Account Suspension

With the Managed Service Provider (MSP) SIP Trunk license, you can create sub-accounts in your Oracle® Intelligent Communication Orchestration Network tenancy for managing your customers. When necessary, you can suspend a customer's account. For example, you might suspend a customer's account when the contractual expiry date passed without renewal but you don't yet want to terminate the account.

Account suspension is a reversible process that instantly blocks all service activity (both incoming and outgoing) for the account until you reactivate the account. When you reactivate the account, badges throughout the User Interface turn green and all operations are restored.

To Suspend a Customer Account

- Go to the Accounts page and click the action ellipses on the customer's account listing. Select Suspend and confirm.

What Happens After Suspension

- The account status is marked as Suspended with a yellow triangle icon throughout the User Interface.

- Calls and service operations are blocked.

- Service, Number, and Site management becomes read-only. Most actions, such as Pause and Add, are disabled. Delete is available for all the Services, single voice gateways, and all the voice bots under a voice gateway.

- Visual indicators and status badges turn gray or show the Suspended icon.

- You cannot add numbers, services, or sites to a suspended account.

To Reactivate a Customer Account

- To reactivate, go to the Accounts page and click the action ellipses on the suspended customer's account listing. Select Reactivate and confirm.

Accounts Management

After you add Accounts to Oracle® Intelligent Communication Orchestration Network , you can manage them through the Accounts page.

The following topics provide instructions for managing Accounts.

- [Add Accounts](#)
- [Edit Accounts](#)

- [Suspend an Account](#)

- [Reactivate an Account](#)

Add Accounts

Oracle® Intelligent Communication Orchestration Network subscribers with the Managed Services Provider SIP Trunk License can add sub-accounts within their account by way of the Accounts Dashboard page. In this way, you can manage multiple customers from one place.

Context
The following procedure enables you to add one or more sub-accounts to your tenancy.

Procedure

1. Go to the **Accounts** page and click **Add Account**.

   Oracle® Intelligent Communication Orchestration Network opens the Add Account drawer.

2. In the Add Account drawer, do the following:

   - Company Name—Enter the name of the company that owns the account. Maximum Characters: 100. No other restrictions.

   - Country—Select the country where the company that owns the account is located from the drop-down list.

   > ⓘ **Note**
   >
   > If the country you want is not listed in the drop-down list, contact Oracle Support about adding the country.

   - Address—Enter the company's address in the Search for an Address field or click Manually Enter Address.

   The Add Account drawer displays the fields required to complete the address entry. If you successfully searched for an address, Oracle® Intelligent Communication Orchestration Network populates the address fields with as much information as possible.

3. Complete the address fields if you chose to manually enter the address or if the pre-populated information needs enhancement.

4. Click **Add**.

   Oracle® Intelligent Communication Orchestration Network adds the account to the list on the Accounts page.

Next Steps

- Navigate to the customer's account page by clicking the account name either in the account switcher drop-down list or in the table to continue the configuration with [Services](#), [Number Blocks](#), and [Sites](#) .

Edit Accounts

Oracle® Intelligent Communication Orchestration Network Managed Service Provider licensees can edit their customer's account information by way of the Accounts page.

Context
In the following procedure, you can only edit the Company Address fields.

Procedure

1. Go to the **Accounts** page, locate the account you want to edit, and click **Edit** in the Actions menu.

   Oracle® Intelligent Communication Orchestration Network opens the Add Account drawer.

2. In the Account drawer, edit any of the Company Address fields.

3. Click **Update**.

Suspend an Account

When you want to suspend one of your customer's accounts in Oracle® Intelligent Communication Orchestration Network go to the Accounts page and perform the following procedure. You might suspend an account when the customer's billing lapses or the customer no longer uses the account but you do not want to delete the account until the final billing is resolved.

Context
Suspension denies all outbound and inbound calls for the account. You can later reactivate a suspended account.

Procedure

1. Go to the **Accounts** page, locate the customer you want to suspend, and click the ellipses in the **Actions** column.

2. In the **Actions** menu, select **Suspend**.

   Oracle® Intelligent Communication Orchestration Network displays a confirmation dialog.

3. In the Suspend Account? dialog, click **Suspend**.

   Oracle® Intelligent Communication Orchestration Network displays a suspension confirmation message.

Reactivate an Account

When you want to reactivate a suspended Oracle® Intelligent Communication Orchestration Network Customer account, go to the Accounts page and perform the following procedure.

Context
After you reactivate an account, status badges displayed throughout the User Interface return to their regular color. Active status badges turn green, Paused status badges turn orange, Inactive badges remain gray.

Procedure

1. Go to the **Accounts** page, locate the customer you want to reactivate, and click the ellipses in the Actions column.

2. In the **Actions** menu, select **Reactivate**.

   Oracle® Intelligent Communication Orchestration Network displays a confirmation dialog.

3. In the Suspend Account? dialog, click **Reactivate Account**.

   Oracle® Intelligent Communication Orchestration Network displays a reactivation confirmation message.

3

Sites

A site is an object you create in Oracle® Intelligent Communication Orchestration Network that contains information about the physical location using the service. The Sites page lists the sites you create and provides tools for adding and managing sites.

Topics:

- [Sites Page Display and Operations](#)
- [Site Details Page](#)
- [Add Sites](#)

Sites Page Display and Operations

The Oracle® Intelligent Communication Orchestration Network Sites page displays a map of your sites and a table listing attributes for each one. You can add new sites and edit existing sites from the page. On the linked Sites Details page, you can perform management actions.

The sites map shows all your sites, but you may need to move the map with your mouse or scroll in or out to see some sites when there are many. A pin represents each site on the map. Hover over the pin to view the name of the site.

The following screen capture shows an example of the Sites page with pins on the map.
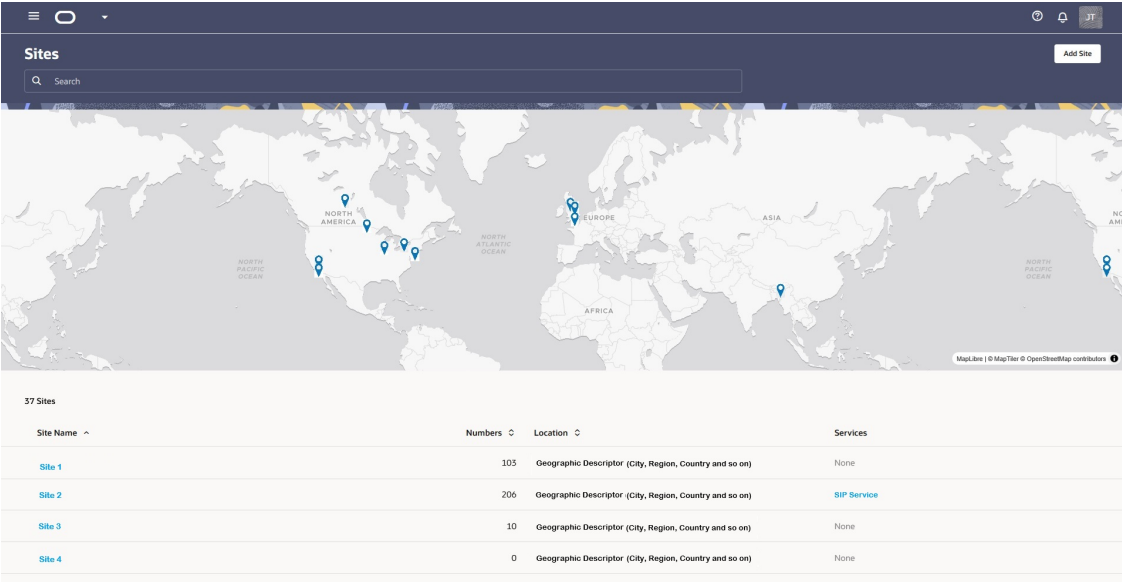
Table Columns

Column	Description
Site Name	The name of the site as a link. Click the link to view the Site Details page.

Column	Description
Numbers	The count of numbers assigned to the site.
Location	The physical location of the site.
Services	The services associated with numbers for the site.

Below the map, the page lists the sites you created with information about each one. To see the more details about a site or to edit the details, click the Site Name in the table to display the Site Details Page.

Oracle® Intelligent Communication Orchestration Network includes the Inventory site during the creation of your account. The Inventory site is the default holding area for number blocks until you assign them to a site. For example, when you add number blocks and do not assign them to a site Oracle® Intelligent Communication Orchestration Network assigns them to the Inventory site.

> ⓘ **Note**
>
> You cannot delete the Inventory site.

You can move number blocks to and from the Inventory site. To move an assigned number to the Inventory site, you must first remove it from the Service it is assigned to because numbers in Inventory cannot be assigned to a Service. Note that you do not need to move number blocks that are out-of-service on another site to the Inventory site for storage. Such number blocks can remain assigned to another site while out-of-service.

The Sites page displays a menu icon at the top-left and the Add Site button at the top-right.

- Menu Icon—Click to display the navigation menu. Click the X to close the menu.

- Add Site—- Click to display the New Site drawer where you specify a new site name, description, address, and primary contact. You can either find the address in the table or enter it manually. When the address is in the list, Oracle® Intelligent Communication Orchestration Network completes the individual address fields with the selected address. Either way, all address fields are always displayed.

Site Details Page

Oracle® Intelligent Communication Orchestration Network displays the Site Details page when you click a Site Name on the Sites page. On the Site Details page you can view site information, edit site attributes, take actions on the numbers assigned to the site, add number blocks, link to Services, and perform actions on number blocks.

The following screen capture shows an example of the Site Details page.

The left pane displays the geographic and contact information, plus the edit icon. Click the edit icon to open the Site Details drawer where you can edit the site attributes.

The right pane displays the Add Number Block button, links to the details of each Starting Number listed on the site, links to each Service listed on the site, and Actions you can perform on each number block.

Actions on the Site Details Page

On the Site Details page, you can use the following actions to manage the number blocks associated to the selected site.

Click the Actions menu at the end of any row.

Pause the Use of a Number Block—Use to temporarily stop the number from receiving and routing calls. The number remains provisioned and you can reset it to ACTIVE any time. You can select PAUSE only when the number block is ACTIVE. When you pause the number, its status changes from ACTIVE to PAUSED on the Number Blocks page.

Split Number Blocks—Use to split a number block into two sub-blocks. You can only split a number block when the block size is larger than 1.You can only split a number block into two sub-blocks. Sub-blocks can be different sizes, but the total size of both sub-blocks must equal the size of the parent block. Each sub-block must be 1 or greater (Oracle® Intelligent Communication Orchestration Network does not support a sub-block size of zero). You can further divide sub-blocks greater than 1.

Merge Number Blocks—Use to merge a number block with a contiguous number block from the same parent number block. You cannot merge number blocks from different parent number blocks. Merge Block is only available when the target number block was previously split from a larger number block.

Move Number Blocks to a Service—Use to move number blocks to a service. You cannot move a number block to a PAUSED service.

Move Number Blocks to Another Site—Use to assign a number block to an existing site. You cannot move an ACTIVE number block to the Inventory site. You can move an INACTIVE number block to any site.

Remove Number Blocks from Active Use—Use to remove a number block assigned to a service from your call traffic. You can keep the number block in the existing site or move it to the Inventory site. You cannot remove the last number from an active service. Doing so will disable the service. You can optionally add a new numbers to the service. You cannot remove

the number assigned as the CLI Default Identifier (which is defined in the service configuration) from the service, but you can edit the service configuration.

Remove Number Blocks from an Account—Use to remove INACTIVE number blocks from an account.

Sites Management

After you add Sites to Oracle® Intelligent Communication Orchestration Network , you can manage them through the Sites page, where you can also add new sites.

The following topics provide instructions for managing Sites.

- Add Sites
- Edit Sites

Add Sites

When you want to add one or more sites to your Oracle® Intelligent Communication Orchestration Network deployment, the user interface can guide you through the process from the Sites page.

Before You Begin

- If you want to import phone numbers to the new site in bulk, download and prepare the .csv template, otherwise you manually add number blocks one at a time.

- If you want to inventory phone numbers for employees who work from home or other off site locations, Oracle recommends that you do not create a site for each employee. Rather, assign their numbers to a nearby office, for example, and make the office the site.

Context

Note the following behavior in this procedure. After you select a country in step 2, the New Site drawer adds the Address field and the Manually Enter Address link. You can:

- Search for an address by entering some or all of the address in the Address field. Oracle® Intelligent Communication Orchestration Network attempts to find one that matches. When you click the search result you want, the drawer displays more fields for you to complete. If Oracle® Intelligent Communication Orchestration Network finds no match, click Manually Enter Address.

- Click Manually Enter an Address and the drawer displays more fields for you to complete.

Procedure

1. Go to the **Sites** page and click **Add Site**.

2. In the New Site drawer, do the following:

    - Enter a unique name for the site.

    - Enter a description for the site.

    - Select a country for the site.

> ⓘ **Note**
>
> If the country you want is not listed in the drop-down list, contact Oracle Support about adding the country.

- Complete the additional fields the drawer displays when you either search for an address or manually enter one. You may need to scroll to see all the fields.

- Enter the primary contact's first name.

- Enter the primary contact's last name.

- Enter the primary contact's phone number.

- Enter the primary contact's email address

3. Click **Add**.

   Oracle® Intelligent Communication Orchestration Network displays a success message and adds the new site to the table on the Sites page.

4. In the table on the Sites page, click the **site name** and Oracle® Intelligent Communication Orchestration Network displays the Site Details page.

5. On the Sites Details page, click **Add Number Block**.

   Oracle® Intelligent Communication Orchestration Network displays the Select Site page with the selected site name in the Site field.

6. Click **Continue**.

   Oracle® Intelligent Communication Orchestration Network displays the Select your Telecom Carrier page.

7. Select the carrier that hosts the numbers you want to add, and click **Continue**.

8. On the Add Number Blocks page, do one of the following:

   - Click Add Number Block—Oracle® Intelligent Communication Orchestration Network opens the Add Number Block drawer, where you specify the block and click **Add** or **Add Another**.

   - Click Import Number Blocks—Oracle® Intelligent Communication Orchestration Network opens the Import Number Blocks drawer, where you drag and drop the .csv file you want to use and click **Add** and **Submit**.

   Oracle® Intelligent Communication Orchestration Network displays the Number Blocks page with the newly added number block in the list.

9. (Optional)

   - Click Add Number Blocks to add more number blocks.

   - Click the ellipses at the end of a row to perform actions on existing number blocks.

Edit Sites

When you want to update Site attributes in your Oracle® Intelligent Communication Orchestration Network deployment, open the Site Details drawer from the Sites page to make your changes.

Procedure

1. Go to the **Sites** page and click the site link the **Site Name** column.

   Oracle® Intelligent Communication Orchestration Network displays the Sites Details page.

2. On the Site Details page, click the **Edit** icon.

   Oracle® Intelligent Communication Orchestration Network displays the Site Details drawer.

3. In the Site Details drawer, edit the fields you want update and click **Update**.

Allow a few moments and Oracle® Intelligent Communication Orchestration Network will display a success message.

Delete Sites

When you no longer need an Oracle® Intelligent Communication Orchestration Network site, you can delete it by way of the Site Details page.

Before You Begin

- Ensure that no number blocks are assigned to the site. You cannot delete a site with associated numbers.

- The system is designed so that you can delete a Site when no number blocks are assigned to the Site. In the scenario where you deleted a split number block, the system will not let you delete the Site. Deleting a sub-block corrupts the entire block. You must merge the number block back to its original size before deleting.

> ⚠ **Caution**
>
> You cannot recover a deleted site.

1. Go to the **Sites** page and click the site link in the **Site Name** column.

   Oracle® Intelligent Communication Orchestration Network displays the Sites Details page.

2. On the Site Details page, click the **three ellipses** at the top of the left panel.

3. In the menu, click **Delete**.

   Oracle® Intelligent Communication Orchestration Network displays a confirmation dialog.

4. In the confirmation dialog,click **Delete**.

   Oracle® Intelligent Communication Orchestration Network displays the Sites page, where the deleted site is no longer listed.

4

Number Blocks

After setting up accounts and sites, you can begin adding number blocks to Oracle® Intelligent Communication Orchestration Network . The Numbers Blocks page displays the Add Number Blocks button, a table of your number blocks, and Search capability. You can add and manage number blocks from the page.
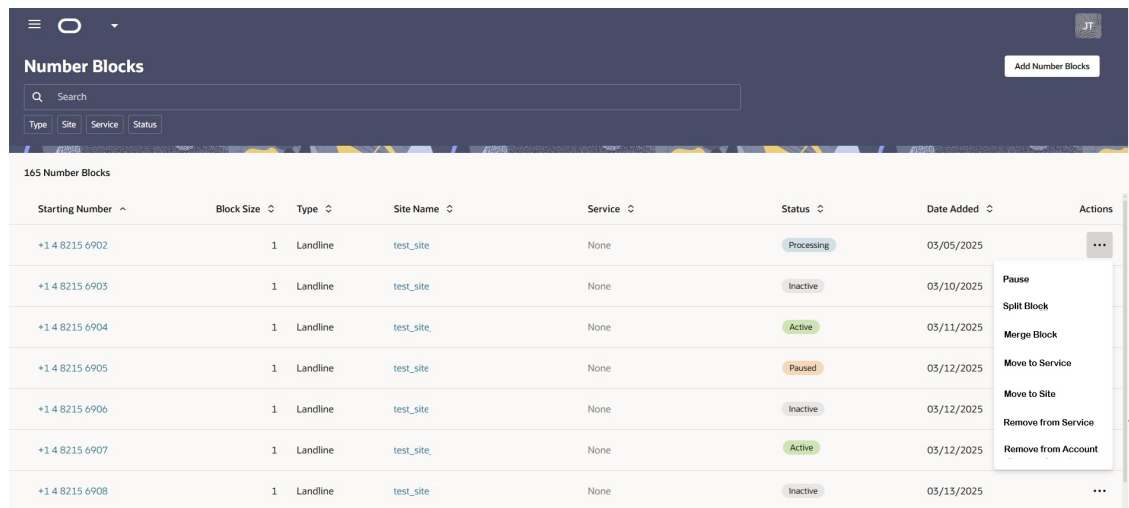
Topics:

- [Number Blocks Page Display and Operations](#)
- [Actions on the Number Blocks Page](#)
- [Number Blocks Management](#)

Number Blocks Page Display and Operations

The Number Blocks page displays a table listing all your number blocks along with search filters, the Add Number Blocks button, and links to the Number Blocks, Sites, and Services pages. You can also perform actions on the number blocks, depending on their status.

The following screen capture shows an example of the Number Blocks page.

The Numbers page displays the menu icon at the top-left and the Add Number Blocks button at the top-right.

- Menu Icon—Click to display the navigation menu for the other pages. Click the X to close the menu.

- Add Number Blocks—The Add Number Blocks button initiates a three-step guided process. Click Continue to step through the process, which concludes with clicking the Submit on the last step. You can also step through the guided process by clicking the list steps listed in the right pane. You can proceed to the next step only when you satisfy the requirements of the active step.

Filter Chips for Search

To refine the information displayed on the Number Blocks page, use the filter chips located below the Search field to narrow your search. You can use the displayed filter chips or type a site name or service name in the Search field. Click a default filter chip to move it into the Search field and see the options for further refinement. When you type in the Search field, the resulting filter custom filter chip does not offer any further options when you right-click. You can add multiple filter chips to the Search field, including combining the default chips with custom chips.

Filter Name	Description
Type	Supported phone types: Landline | Mobile
Site	A list of all of your sites by name. Includes the default Inventory site for unassigned number blocks.
Service	A list of all your services by name.
Status	The status of each number block: Active | Inactive | Processing | Paused.

Column Descriptions

Column Name	Description
Starting Number	The first phone number in the number block. Click the number to open the Number Block drawer where you can view all the numbers in the block and their status.
Block Size	The number of phone numbers in the number block. For Mobile phone numbers, the only block size is 1. For Landlines, block sizes include 1, 10, and 100.
Type	The type of telephone connection, either Mobile or Landline.
Site Name	The name of the site hosting the number block. Click the site name to launch the Site Details page, where you can edit the site attributes and perform actions on the number blocks.
Service	The name of the service hosting the site. Click the Service name to launch the Service Details page, where you can work with number blocks, link to other sites, and perform actions on number blocks.
Status	The life cycle state of the number block. Active | Inactive | Paused | Processing
Date Added	The month, day, and year the number block was added.

Column Name	Description
Actions	The actions available for the number block. Actions in black are available for the number block. Actions in gray are not. Available actions depend on the status. Actions: Pause | Split Block | Merge Block | Move to Service | Move to Site | Remove from Service | Remove from Account.

Number Blocks Status Descriptions

Status	Description
Inactive	The number has been configured, but is not yet assigned or associated with a service. You cannot set an INACTIVE number to ACTIVE until you assign it to a service. You can assign an INACTIVE number to any site, including Inventory. You can remove an INACTIVE number from an account.
Processing	The system is in the process of making a change to the number. Allow a few moments after you make a change for the Number Blocks page to display the new status. You cannot PAUSE, move, or remove a number that is PROCESSING from a service or an account.
Active	The number is assigned to a service that is running. You can PAUSE an ACTIVE number that is assigned to an ACTIVE service. You cannot PAUSE an ACTIVE number when the service it is assigned to is PAUSED. You cannot remove an ACTIVE number from an account.
Paused	The number is temporarily prevented from receiving or routing calls until you set it to ACTIVE. You cannot move a PAUSED number to a service or remove a PAUSED number from service. You can move a PAUSED number to any existing site.

Add Number Blocks Button

Add Number Blocks—Click to launch the Add Number Blocks drawer, where you can, [Add Number Blocks Manually](#).

Actions on the Number Blocks Page

To help you manage your number blocks, Oracle® Intelligent Communication Orchestration Network provides the following actions on the menu displayed when you click the ellipses at the end of each row on the Number Blocks page.

Pause—Use to temporarily stop a number from receiving and routing calls. You can select PAUSE only when the number block is ACTIVE. When you pause the number, its status changes from ACTIVE to PAUSED on the Number Blocks page. When PAUSED, the number remains provisioned and you can reset it to ACTIVE any time.

Set to Active—Use to reactivate a PAUSED number. When you reactivate a number, Oracle® Intelligent Communication Orchestration Network changes its status from PAUSED to ACTIVE on the Number Blocks page. Note: You cannot set a PAUSED number block to ACTIVE when the associated service is PAUSED.

Split Block—Use to split a number block into two sub-blocks. You can only split a number block when the block size is larger than 1.You can only split a number block into two sub-blocks, but the sub-blocks can be different sizes. The total size of both sub-blocks must equal the size of the parent block. Each sub-block must be 1 or greater (Oracle® Intelligent Communication Orchestration Network does not support a sub-block size of zero). You can further divide sub-blocks.

Merge Block—Use to merge an ACTIVE or INACTIVE number block with another number block from the same parent number block. You cannot merge number blocks from different parent number blocks. Merge Block is only available when the target number block was previously split from a larger number block.

Move to Service—Use to move an unassigned (INACTIVE) number block to a service that uses the same hosting carrier. You cannot move a number block to a PAUSED service.

Remove from Service—Use to remove a number block assigned to a service. You can keep the number block in the existing site or move it to the Inventory site. You cannot remove the last number from an active service. You can optionally add a new number to the service. You cannot remove the number assigned as the CLI Default Identifier (which is defined in the service configuration) from the service, but you can edit the service configuration.

Move to Site—Use to assign a number block to an existing site. You cannot move an ACTIVE number block to the Inventory site. You can move an INACTIVE number block to any site.

Remove from Account—Use to remove INACTIVE number blocks from an account.

Number Blocks Management

After you add Number Blocks to Oracle® Intelligent Communication Orchestration Network , you can manage them through the Number Blocks page.

The following topics provide instructions for managing Number Blocks.

- Add Number Blocks Manually
- Pause the Use of a Number Block
- Set a Paused Number Block to Active
- Split Number Blocks
- Merge Number Blocks
- Move Number Blocks to a Service
- Move Number Blocks to Another Site
- Remove Number Blocks from Active Use
- Remove Number Blocks from an Account

Add Number Blocks Manually

You can add number blocks manually, one-by-one, to Oracle® Intelligent Communication Orchestration Network anytime from the Add Number Block drawer that you access from the Numbers page.

Context

Use the following procedure to add number blocks manually to one of your sites or to the default Inventory site for assignment at another time. Note that Oracle® Intelligent Communication Orchestration Network will not allow you to add a new number block that overlaps an existing number block.

When you enter the country dial code for Australia in step 5, the Add Number Blocks drawer displays the SZU field.

Procedure

1. Go to the **Numbers** page and click **Add Number Blocks**.

   Oracle® Intelligent Communication Orchestration Network displays the Add Number Blocks page.

2. Select the site assignment for the number blocks.

   Note: You cannot assign the same number block to multiple sites.

3. Select the carrier you want to host the number blocks.

   Note: If the Hosting Carrier you want is not listed, contact Oracle Support about adding the carrier.

4. Click Add Number Block.

   Oracle® Intelligent Communication Orchestration Network displays the Add Number Blocks drawer.

5. In the Add Number Blocks drawer, do the following:

   • Type—Select Landline or Mobile for the type of number block you want to add.

   • Country dial code—Select the country code for the number block you want to add.

   • SZU—Select the Australian Standard Zone Unit (SZU) you want for this number block from the drop-down list.

   • Starting number—Enter the first number of the block you want to add minus the country dial code.

   • Block size—Select the size of the number block you want to add. Valid values for land lines: 1 |10 | 100. Valid values for mobile phones: 1.

6. Do one of the following.

   • Click **Add**. Oracle® Intelligent Communication Orchestration Network adds the number block to your list of number blocks on the Add Number Blocks page.

   • Click **Add Another**. Oracle® Intelligent Communication Orchestration Network clears the fields in the Add Number Block drawer so you can add another number. Click **Add** when done adding numbers.

7. Click **Submit**.

   Oracle® Intelligent Communication Orchestration Network displays the Number Blocks page with the new block listed in the table.

Add Number Blocks from a .csv File

When you want to add multiple number blocks at the same time, you can import them in a .csv file that you prepare in advance using the Oracle® Intelligent Communication Orchestration Network template.

Before You Begin

- If you do not have the necessary .csv file prepared, Download the Number Blocks .csv Template and prepare it before performing this procedure. For example, enter the Country Dial Code, Starting Number, and Block Size for each number block you want to import. The template provides examples.

Procedure

1. Go to the **Numbers** page and click **Add Number Blocks**.

   Oracle® Intelligent Communication Orchestration Network displays the Add Number Blocks page.

2. Select the site assignment for the number blocks.

   Note: You cannot assign the same number block to multiple sites.

3. Select the carrier you want to host the number blocks.

4. Select **Import From CSV File**.

   Oracle® Intelligent Communication Orchestration Network displays the Import Number Blocks drawer.

5. Do one of the following:

   - Drag and drop the .csv file into the drop box.

   - Click the drop box to open your file explorer, locate the .csv file, and click it to add it to the drop box.

6. Click **Add**.

Download the Number Blocks .csv Template

When you want to add many number blocks to a site at once, you can import a file containing all the numbers rather than by adding them one-by-one. The numbers must be in a specified format in a .csv file before performing the import procedure. The Oracle® Intelligent Communication Orchestration Network provides a .csv template that you can download and prepare in advance.

Context
Perform the following procedure before you perform the Add Number Blocks from a .csv File procedure. You need the prepared file ready to go during the Add Number Blocks from a CSV File procedure.

Procedure

1. Go to the **Numbers** page and click **Add Number Blocks**.

2. On Add Number Blocks page, click **Download CSV Template**.

   Oracle® Intelligent Communication Orchestration Network downloads the template to your download location.

3. Open the .csv file and add the necessary information, as indicated by the column headings and sample entries. For example, enter Country Dial Code, Starting Number, and Block Size for each number block.

4. Save the file locally.

Next Steps

• Select or drag and drop the .csv file in the Add Number Blocks from a .csv File procedure.

Pause the Use of a Number Block

When you want to temporarily suspend the use of a number block, use the Pause action from the Numbers Block page.

Context
When you pause a number block, Oracle® Intelligent Communication Orchestration Network cannot receive or route calls to the numbers in the block. You can reactivate the number block any time.

Procedure

1. Go to the **Number Blocks** page and find the number you want to pause in the **Starting Number** column.

2. At the end of the row in the table, click the ellipses, and click **Pause**.

Oracle® Intelligent Communication Orchestration Network displays a confirmation message.

3. Click **Pause**.

Oracle® Intelligent Communication Orchestration Network updates the status on the Number Blocks page. First the status is Processing, then becomes Paused.

Next Steps

• Set a Paused Number Block to Active

Set a Paused Number Block to Active

When you want to activate a paused number block, use the Set to Active action from the Numbers Block page. When you activate a paused number block, Oracle® Intelligent Communication Orchestration Network can resume receiving and routing calls to the numbers in the block.

Procedure

1. Go to the **Number Blocks** page and find the number you want to activate in the **Starting Number** column.

2. At the end of the row in the table, click the ellipses, and click **Set to Active**.

Oracle® Intelligent Communication Orchestration Network displays a confirmation message.

3. Click **Set to Active**.

Split Number Blocks

When you want to split a number block, for example to retire a set numbers or reassign a set of numbers to different services, you create two number blocks from one.

Context
In the following procedure you do not need to split the blocks evenly, but the total of the two blocks must equal the total of the original block. You can split blocks across multiple services.

> ⓘ **Note**
>
> You can [Merge Number Blocks](#) when you no longer want them split, but the blocks you merge must be from the same original block.

Procedure

1. Go to the **Number Blocks** page and find the number block you want to split in the **Starting Number** column.

2. At the end of the row in the table, click the ellipses, and click **Split Block**.

   Oracle® Intelligent Communication Orchestration Network displays the Split Number Block drawer.

3. In the Split Number block drawer, do the following:

   • Block 1 Size—Set the number of phone numbers in the first block. Valid value: Maximum of the block size minus 1.

   • Block 2 Size—Set the number of phone numbers in the second block. Valid values: Maximum of the remainder of the block size after setting the Block 1 size.

4. Click **Split**.

   Oracle® Intelligent Communication Orchestration Network displays a confirmation message and updates the Block Size column on the Number Blocks page.

About Merging Number Blocks

The Oracle® Intelligent Communication Orchestration Network allows you to split and merge number blocks. The number blocks you want to merge must be adjacent and from the original block that you split. You cannot merge any of the numbers into a different number block.

Suppose you have a number block of 112230-112239, which is ten numbers.

First, you split the block into 112230-112232 (three numbers) and 112233-112239 (seven numbers).

Next, you split the seven number block into 112233-112236 (four numbers) and 112237-112239 (three numbers)

Now you have three number blocks.

• 112230-112232

• 112233-112236

• 112237-112239

Suppose you try to merge block 112230-112232 with block 112237-112239 .

The system will display a warning message that you cannot merge those blocks because they are not adjacent.

Merge Number Blocks

After you split number blocks, you can merge some or all of the numbers you split off back into the original block.

Context
The number blocks you want to merge must be adjacent and from the original block. You cannot merge any of the numbers into a different number block.

Procedure

1. Go to the **Number Blocks** page and find the number block you want to merge in the **Starting Number** column.

2. At the end of the row in the table, click the ellipses, and click **Merge Block**.

    Oracle® Intelligent Communication Orchestration Network displays the Merge Split Number Blocks drawer with numbers adjacent to the starting number you selected.

3. Select the Starting Number you want from the list, and click **Merge**.

    Oracle® Intelligent Communication Orchestration Network displays a confirmation message and updates the Block Size column on the Number Blocks page to show the block size of the merged block.

Move Number Blocks to a Service

You can move number blocks from one communications service to another, for example, from Carrier Service to MS Teams.

Context
The service you move the number block to must use the same carrier.

Procedure

1. Go to the **Number Blocks** page and locate the block you want to move.

2. On the Number Blocks page, go the **Actions** column for the number block you want to move and click **Move to Service**.

    Oracle® Intelligent Communication Orchestration Network displays the Move Number Block to Service drawer.

3. In the Move Number Block to Service drawer, **select the service** site from the drop-down list, and click **Move**.

    Oracle® Intelligent Communication Orchestration Network closes the drawer and displays a confirmation message. Allow a few moments for the move to take effect. You may need to refresh the page to see that the service status becomes active.

Move Number Blocks to Another Site

You can move number blocks from one site to another, for example, when you relocate your offices from one municipality to another.

Context
The number block you move must use the same format as the destination site uses.

> ⓘ **Note**
>
> You cannot move a number when it is the last number assigned to the service or when it is assigned as the CLI default identifier.

Procedure

1. Go to the **Number Blocks** page and locate the block you want to move.

2. On the Number Blocks page, go the **Actions** column for the site you want to move and click **Move to Site**.

    Oracle® Intelligent Communication Orchestration Network displays the Move Number Block to Another Site drawer.

3. In the Move Number Block to Another Site drawer, select the **site** from the drop-down list, and click **Move**.

    Oracle® Intelligent Communication Orchestration Network closes the drawer and displays a confirmation message. Allow a few moments for the move to take effect. You may need to refresh the page to see the update.

4. On the Number Blocks page, locate the number block and click **Set Active** on the action menu.

Remove Number Blocks from Active Use

When you want a Service to temporarily avoid using certain number blocks, you can remove the number blocks from active use while maintaining their assignment to the Service. You can also move number blocks that you no longer want assigned to a Service into the Inventory for future assignment, including reassignment to the Service where they were once assigned.

Context
In the following procedure, you can choose to keep number blocks that you remove from service on the current site or you can move them to your inventory.

Procedure

1. Go to the **Number Blocks** page and click the **Actions** menu in the row of the number you want to remove.

2. Click **Remove From Service**.

    Oracle® Intelligent Communication Orchestration Network displays a confirmation dialog.

3. In the confirmation dialog, select one of the following from the drop-down list.

    • Keep on site

    • Move to inventory

4. Click **Remove**.

    Oracle® Intelligent Communication Orchestration Network displays a confirmation message.

Remove Number Blocks from an Account

You can remove inactive number blocks from an account and return them to the provider. For example, you might want to return inactive number blocks to reduce your usage and costs.

Removing numbers from an Account removes them from Oracle® Intelligent Communication Orchestration Network .

Before You Begin

- If the any of numbers you want to remove were split from the original number block, you must merge them all back into the original number block. You can only remove a whole number block.

- Confirm that the number you want to remove is in the INACTIVE state.

Context

Removing a number block cancels the numbers and returns them to the provider. You cannot recover a removed number block.

Procedure

1. Go to the **Number Blocks** page and locate the block you want to remove.

2. On the Number Blocks page, go the **Actions** column for the number block you want to remove and click **Remove from Account**.

   Oracle® Intelligent Communication Orchestration Network displays a confirmation message.

3. Click **Remove**.

5

Services

The Services page displays a map of the services that you connected through the Oracle® Intelligent Communication Orchestration Network . The connections include SIP trunks to PSTN carriers, on-premises devices, UCaaS and CCaaS providers, and voice gateways.

Topics:

• [Services Page Display and Operations](#)

• [Add Services](#)

• [Services Management](#)

Services Page Display and Operations

In the Oracle® Intelligent Communication Orchestration Network , you configure Services as logical objects that connect carriers to the voice, video, and media streaming services you use. The Services page provides tools to configure and manage SIP Trunk connections.

The Services page initially displays no information because there are no SIP Trunk Services configured. As you configure SIP Trunk Services, the page builds and displays a map of your services with a table listing attributes for each one. The following screen capture shows an example of the Services map with carriers on the left and media services on the right. The map will show all your connections, but you may have to move it with your mouse to see them all when there are many. The Services page displays the menu icon at the top-left and the Add Service button at the top-right.
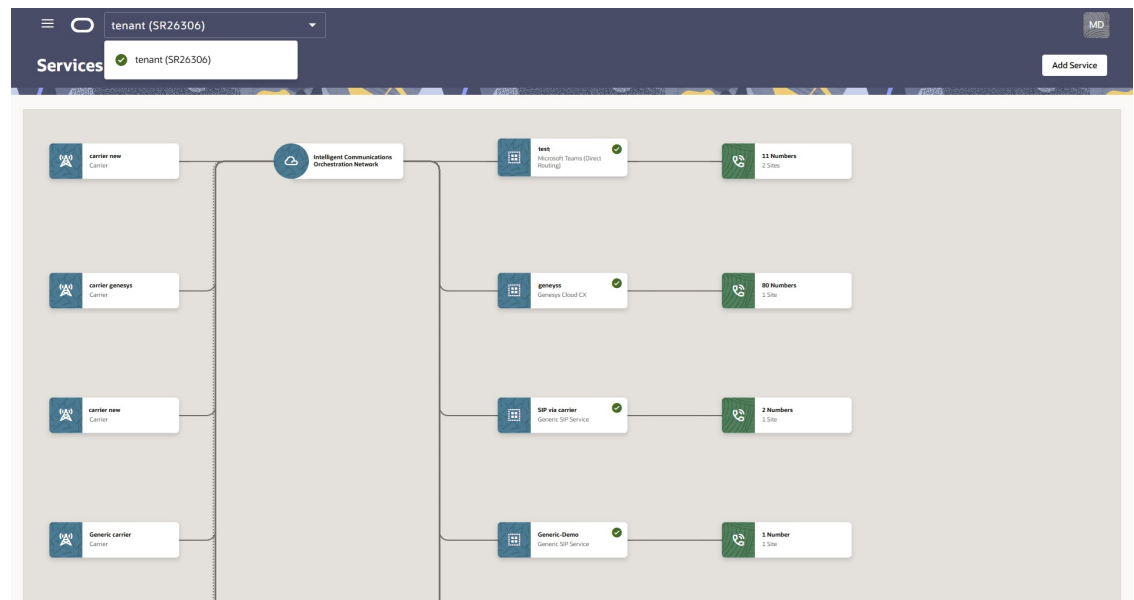
SIP Trunk Services Table Columns

Service Name—The name you created for the service.

Profile—The communication type profile you selected for the service. For example, Carrier Service, and Generic SIP Service.

Group (Optional)—The group of trunks you created to provide redundancy to help overcome service outages. By combining multiple trunks into a single group with various endpoints that automatically switch to a backup trunk when the active trunk becomes unavailable, you can achieve continuous operation during a service interruption.

Sites—The number of sites associated with the service.

Numbers—The total number of phone numbers associated with the service.

Status—The state of the service, such as New | Feasibility Checked | Reserved | Active | Inactive | Pre-Suspended | Suspended | Processing | Paused | Terminated.

Date Added—The date you added the service.

Actions—The Actions menu located at the end of each row. Use to Pause or Delete individual services for non-carriers. For carriers, only Delete is available.

Voice Gateways Table Columns

Service Name—The name you created for the service.

Voice Channels—The number of voice channels you set.

Voice Bots—The number of voice bots configured for the voice gateway.

Sites—The number of sites associated with the voice gateway.

Numbers—The total number of phone numbers associated with the voice gateway.

Status—The state of the voice gateway, such as New | Feasibility Checked | Reserved | Active | Inactive | Pre-Suspended | Suspended | Processing | Paused | Terminated.

Actions—The Actions menu located at the end of each row. Use to Pause or Delete individual voice gateways.

Action Buttons

The Services page displays the following buttons for adding services:

Add Service—Use to add individual services. The button launches the work flow where you select a service profile, assign number blocks, and configure service settings.

Add Service Group—Use to launch the work flow where you select a service profile, select a carrier trunk, assign number blocks, and configure service settings.

Actions on the Services Page

On the Services page, you can use the following actions to manage the services you use with Oracle® Intelligent Communication Orchestration Network .

Pause—Use to temporarily prevent active Services from transmitting or receiving call traffic.

Resume—Use to enable a paused Service to resume transmitting and receiving call traffic.

Add Services—Use to add services one-by-one. Click to display the Select Your Service Profile page where you select a communication service. When you click the communication service, Oracle® Intelligent Communication Orchestration Network displays a unique profile of attributes for you to set for the selected service. You can return to edit the profile at any time.

Service Groups—Use to create groups of communication services bundled to provide redundancy for business continuity during an outage or other event. Click to display the Service Group Details drawer.

Add Services

The high-level process for adding services to Oracle® Intelligent Communication Orchestration Network is similar regardless of the service you select, but some of the configuration fields vary from one service to another. Use the following topics to see the details of the configuration for the service you want to add.

> ⓘ **Note**
>
> After you provision a service, please allow up to 24 hours for all DNS services to resolve the URL.

- The Process for Connecting Services
- Connect the Carrier Service
- Connect the Cisco WebEx Calling or Contact Center Service
- Connect the Generic SIP Service
- Connect the Genesys Cloud CX Service
- Connect the Microsoft Teams (Direct Routing) Service
- #unique_69
- Connect a Voice Gateway

The Process for Connecting Services

Connecting services to your Oracle® Intelligent Communication Orchestration Network deployment requires a multi-step process that varies in details depending on the service you select.

The process for connecting services includes the following work flow that you begin on the Services page. See Add Services for links to instructions for each service you can add to Oracle® Intelligent Communication Orchestration Network .

1. Go to the Services page—Click Add Service. Oracle® Intelligent Communication Orchestration Network displays the Select Service Profile page.

2. Select a service profile—Select the service you want and click Continue. Oracle® Intelligent Communication Orchestration Network displays the Set Up a Service page, which varies according to the service selected.

3. Follow the guided set up work flow—Complete the steps provided in the navigation pane to the right of the set up pane. Each time you complete a step and click Continue, the work flow advances to the next step.

> ⓘ **Note**
>
> After you provision a service, please allow up to 24 hours for all DNS services to resolve the URL.

The following screen capture shows an example of the Select Your Service Profile page with a list of services and descriptions. When you click a service and click Continue, Oracle® Intelligent Communication Orchestration Network displays the next page in the work flow.
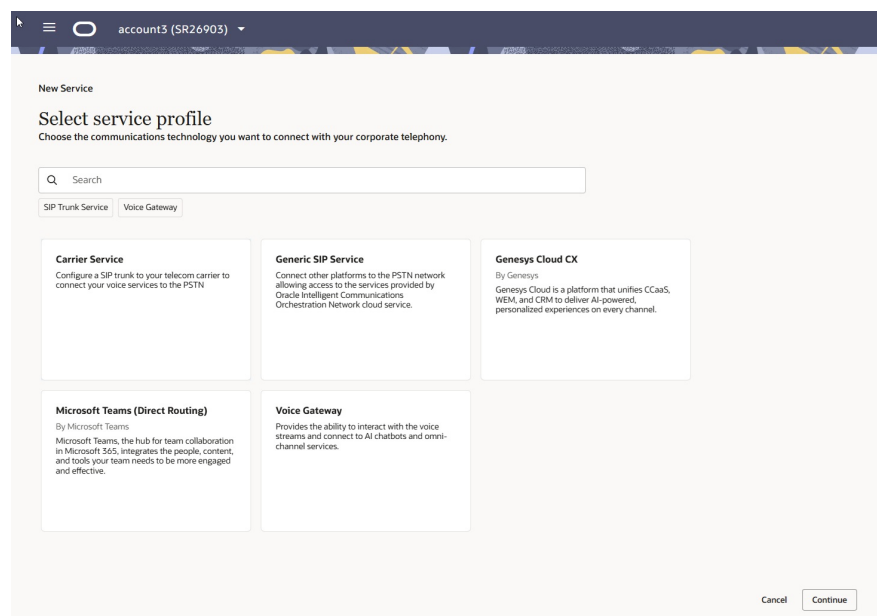
Add a Service Group

You might want to create a group of services to provide redundancy during a service outage to support continued communications for business continuity. Within the service group, you can set the fail over priority. See Add Service Groups.

Connect the Carrier Service

Use the Carrier service to increase flexibility and scalability compared to traditional phone lines. Carrier service may reduce costs and can enhance your business continuity plan by enabling alternate call routing during an outage.

Context
You can connect a SIP trunk from Oracle® Intelligent Communication Orchestration Network to your telecom carrier to connect your voice services to the Public Switched Telephone Network.

> ⓘ **Note**
>
> After you provision the service, please allow up to 24 hours for all DNS services to resolve the URL.

Procedure

1. Go to **Services**, and click **Add Service**.

2. On the Select Service Profile page, click the SIP Trunk Service filter chip and select UCaaS or CCaaS.

3. On the Select Service Profile page, click the **Carrier Service** card, and click **Continue**.

4. On the Configure Service Settings page, do the following:

Hide Default Values	Toggle to show or hide the default values.
Service Name	Enter the name you want for the service.
Service Region	Select the physical location for the service you are connecting from the drop-down list.
SIP Signaling Transport Method	Select a SIP transport method from the drop-down list.
SIP Termination Method	Select a termination method from the drop-down list.
ACLs	Set the number of Access Control Lists to use. Valid values: 1-100.

IP Address	Enter the IP address of the service. You must define the Classless Inter-Domain Routing (CIDR) using the first IP address of the network. If you use any other IP within the sub net as the base for CIDR, Oracle Intelligent Communication Orchestration Network returns an error.
	
	Example: Use
	
	`192.168.12.0/24`
	
	instead of
	
	`192.168.12.1/24`
	
	Format the CIDR with an IP address followed by the number of network address prefix bits after the slash. For example: 192.168.1.0/32.

Inbound Server URI	Enter the end-point address for incoming calls.
Enable PII Data Masking	Enable to hide Personally Identifiable Information to comply with data privacy laws.
Number of Channels	Enter the upper limit of the number of connections to allow at one time to enable handling multiple calls simultaneously.
Maximum CAPS	Enter the number of Call Attempts Per Second you want to allow. Valid values: 5-50.

5. Click **Submit**.

Oracle® Intelligent Communication Orchestration Network adds Carrier Service to the diagram on the Services page.

Connect the Cisco WebEx Calling or Contact Center Service

Use the following procedure to connect the Cisco WebEx Calling Service to the Cisco WebEx Contact Center Service to the Oracle® Intelligent Communication Orchestration Network .

Before You Begin

- Review the following procedure in advance, so you can get the necessary information from the WebEx Control Hub before you begin. For example, you need the outbound proxy address, the WebEx line or port number, the trunk group (OTG-DTG), and the destination trunk group.

Procedure

1. Go to **Services** and click **Add Service**.

2. On the Select Service Profile page, click the SIP Trunk Service filter chip.

Oracle® Intelligent Communication Orchestration Network moves the filter chip into the Search field.

3. (Optional) On the Select Service Profile page, right-click the SIP Trunk Service filter chip and select one of the following:

- UCaaS—For integrating video conferencing, messaging, video conferencing and other team collaboration tools.

- CCaaS—For contact center functionality, such as interactive voice response systems, analytics, and call routing.

4. On the Select Service Profile page, click the Cisco WebEx Calling card and click **Continue**.

5. On the Select Carrier Trunk page, select the carrier SIP trunk to which you want to route outbound Webex calls or add a carrier and click **Continue**.

6. On the Assign Number Blocks page, select or add the numbers you want to assign to the selected service and click **Continue**.

> ⓘ **Note**
>
> The assigned numbers are the only ones allowed to pass through the service.

7. On the Configure Service Settings page, enter the following information:

Service Name	Enter the name you want for the service. For example, WebEx Calling North America 01.
Service Region	Select the physical location for the service you are connecting from the drop-down list.
Service Time Zone	Select the time zone where the end user caller is located. Oracle Intelligent Communication Orchestration Cloud Service

	uses the time zone Call Detail records and other reporting.
SIP Signaling Transport Method	Select TLS from the drop-down list.
SIP Termination Method	The system sets Third-party Registration as the SIP termination method.
Enable On-Net Calls	When enabled, the system routes outbound calls from Webex directly within the Oracle Intelligent Communications Orchestration Network Cloud Service, if the destination number is managed by the cloud service, instead of routing back to the PSTN.
Enable Bursting	Enable to allow concurrent call volume to exceed the configured channel capacity. Bursting is limited to up to 50% above the configured channel capacity
Enable PII Data Masking	Enable to hide Personally Identifiable Information to comply with data privacy laws. Enabling masks the last two digits of an outbound call in all Call Detail Records.
Number of Channels	Enter the maximum number of channels (concurrent calls) allowed for this SIP trunk. Values: Minimum 5 | Maximum 5,000.
Maximum Calls Accepted Per Second	Enter the maximum CAPS limit for this SIP Trunk. Valid values: 5-50.
User Name	Enter the WebEx tenancy user's name.
Password	Enter the WebEx tenancy password.
Registrar Domain	Enter the Registrar Domain from the Webex Control Hub.
Trunk Group	Enter the region-specific IP address that corresponds to your IVP service region: US1 — 141.148.94.123. AU1 or UK1 — 132.226.133.10. IP addresses will also function. Using the region-matched IP ensures optimal call routing performance and minimizes latency between IVP and Webex.
Line and Port	Enter the Line or Port from the Webex Control Hub.
Outbound Proxy Address	Enter the outbound proxy address from the WebEx Control Hub. **Important**: You must use the following suffix: `-:8934;transport=tls`

Default Outbound CLI	Select the phone number to use as the default outbound CLI displayed when a CLI is not provided by Webex.
CLI Error Handling	Select an error handling type from the drop-down list. Values: Reject Invalid | Overwrite Invalid | Always.
Call Forwarding Destination	(Optional) Enter the destination phone number you want for forwarded calls.
Call Forwarding Rule	Select a call forwarding rule from the drop-down list. Values: Always | On Failure.

8. Click **Submit**.

   Oracle® Intelligent Communication Orchestration Network adds the Cisco WebEx Calling Service to the diagram on the Services page.

Connect the Generic SIP Service

Use the Generic SIP Service with Oracle® Intelligent Communication Orchestration Network instead of traditional phone lines for cost reduction, scalability, and integration with communication channels such as video, messaging, and voice.

Before You Begin

• Prepare a list of number blocks to add, if needed.

Context
To connect a communications service for use with Oracle® Intelligent Communication Orchestration Network you must select the service, assign number blocks to the service, and configure the service settings.

> ⓘ **Note**
>
> After you provision the service, please allow up to 24 hours for all DNS services to resolve the URL.

Procedure

1. Go to **Services**, and click **Add Service**.

2. On the Select Service Profile page, click the SIP Trunk Service filter chip and select UCaaS or CCaaS.

3. On the Select Your Service Profile page, click the Generic SIP Service card and click **Continue**.

4. On the Select Carrier Trunk page, select the carrier SIP trunk to which you want to route outbound Generic SIP calls or add a carrier and click **Continue**.

5. On the Assign Number Blocks page, select or add the numbers you want to assign to the selected service and click **Continue**.

6. On the Configure Service Settings page, enter the following information:

Hide Default Values	Toggle to show or hide the default values.

Service Name	Enter the name you want for the service.
Service Region	Select the physical location for the service you are connecting from the drop-down list.
Service Time Zone	Select the time zone where the caller and callee are located, not necessarily the site time zone.
SIP Signaling Transport Method	Select a SIP transport method from the drop-down list.
SIP Termination Method	Select a termination method from the drop-down list.
ACLs	Enter the port to open for traffic coming from the service to Oracle Intelligent Communication Network Cloud Service
IP Address	Enter the IP address of the service.
Inbound Server URI	Enter the Uniform Resource Identifier (URI) to which Oracle Intelligent Communication Orchestration Network Cloud Service sends inbound calls to the platform and voice service. Typically provided by the third-party platform or voice service provider. Use the simple IP address. Examples: 52.252.xx.xx. 52.252.xx.xx:5080.
Outbound Server URI	Automatically assigned by Oracle Intelligent Communication Orchestration Network Cloud Service.
Enable Bursting	Enable to temporarily allow more calls than initially provisioned to handle unexpected spikes in call traffic for a small amount of time at a premium rate.
Enable PII Data Masking	Enable to hide Personally Identifiable Information to comply with data privacy laws. Enabling masks the last two digits of an outbound call in all Call Detail Records.
Number of Channels	Enter the upper limit of the number of connections to allow at one time to enable handling multiple calls simultaneously.
Default Outbound CLI	Enter the number you want for the default outbound calling line identifier. Note: The number must be in the block you assigned to the service. When you use a number that is not in the block, the number will display unless you select Reject Invalid Number from CLI Call Handling.

CLI Error Handling	Select an error handling type from the drop-down list. Values: Reject Invalid | Overwrite Invalid | Always.
Call Forwarding Destination	(Optional) Enter the phone number you want for the call forwarding destination.
Call Forwarding Rule	(Optional) Select a call forwarding rule from the drop-down list. Always | On Failure.

7. Click **Submit**.

   Oracle® Intelligent Communication Orchestration Network adds Generic SIP Service to the diagram on the Services page.

Connect the Genesys Cloud CX Service

Use the Genesys Cloud CX Service to take advantage of the Cloud's scalability and flexibility and to help keep control of your carrier costs. Genesys Cloud CX helps simplify global deployments and meet regional regulations.

Before You Begin

- Prepare a list of number blocks to add, if needed.

Context
To connect the Genesys Cloud CX service with Oracle® Intelligent Communication Orchestration Network , you must select the service, assign number blocks to the service, and configure the service settings.

> ⓘ **Note**
>
> After you provision the service, please allow up to 24 hours for all DNS services to resolve the URL.

Procedure

1. Go to **Services**, and click **Add Service**.

2. On the Select Service Profile page, click the SIP Trunk Service filter chip and select **CCaaS**.

3. On the Select Service Profile page, select **Genesys Cloud CX**, and click **Continue**.

   Oracle® Intelligent Communication Orchestration Network displays the Select Carrier Trunk page.

4. On the Select Carrier Trunk page, select the carrier SIP trunk to which you want to route outbound Genesys Cloud CX calls or add a carrier and click **Continue**.

5. On the Assign Number Blocks page, select or add the numbers you want to assign to the selected service and click **Continue**.

   Oracle® Intelligent Communication Orchestration Network displays the Configure Service Settings page.

6. On the Configure Service Settings page, enter the following information:

Hide Default Values	Toggle to show or hide the default values.

Service Name	Enter the name you want for the service.
Service Region	Select the physical location for the service you are connecting from the drop-down list.
Service Time Zone	Select the time zone where the caller and callee are located, not necessarily the site time zone.
SIP Signaling Transport Method	Select a SIP transport method from the drop-down list. Valid values: TCP | TLS.
SIP Termination Method	Select a termination method from the drop-down list. Valid values: FQDN | Authentication
Authentication (Displays only when you select Authentication for the SIP Termination Method.)	Enter the User Name and Password required for authentication.

Inbound Server URI	Enter the The Uniform Resource Identifier (URI) to which Oracle Intelligent Communication Orchestration Network Cloud Service sends inbound calls to the platform and voice service. Typically provided by the third-party platform or voice service provider.
	
	Use the Fully Qualified Domain Name.
	
	Examples:
	
	`icon-beta-test.byoc.apse2.pure.cloud`
	
	`iconsqa.byoc.usw2.pure.cloud`

Outbound Server URI	Automatically assigned by Oracle Intelligent Communication Orchestration Network Cloud Service.
Enable Bursting	Enable to temporarily allow more calls than initially provisioned to handle unexpected spikes in call traffic for a small amount of time at a premium rate.
Enable PII Data Masking	Enable to hide Personally Identifiable Information to comply with data privacy laws. Enabling masks the last two digits of an outbound call in all Call Detail Records.
Number of Channels	Enter the upper limit of the number of connections to allow at one time to enable handling multiple calls simultaneously. Minimum 5 | Maximum 5,000.
Default Outbound CLI	Enter the number you want for the default outbound calling line identifier. Note: The

	number must be in the block you purchased from your carrier. When you use a number that is not in the block, the number will display unless you select Reject Invalid Number from CLI Call Handling.
CLI Error Handling	Select an error handling type from the drop-down list.
Call Forwarding Destination	Enter the destination phone number you want for all calls.
Call Forwarding Rule	Select a call forwarding rule from the drop-down list. Always | On Failure.

7. Click **Submit**.

   Oracle® Intelligent Communication Orchestration Network adds Genesys Purecloud to the diagram on the Services page.

Connect the Microsoft Teams (Direct Routing) Service

Use the Microsoft Teams Direct Routing Service to connect to your existing phone system to enable users to make and receive calls with their existing phone numbers within your existing infrastructure.

Before You Begin

• Configure your Microsoft Teams account to generate the appropriate Outbound URI validation key. You must enter the key in the following procedure.

• Prepare a list of number blocks to add, if needed.

Context
To connect a service for use with Oracle® Intelligent Communication Orchestration Network you must select a service, assign number blocks to the service, and configure the service settings. In step 5, if the Assign Number Blocks page displays no numbers, or no numbers you want, click Add New Numbers.

> ⓘ **Note**
>
> After you provision the service, please allow up to 24 hours for all DNS services to resolve the URL.

Procedure

1. Go to **Services**, and click **Add Service**.

2. On the Select Service Profile page, click the SIP Trunk Service filter chip and select UCaaS.

3. On the Select Service Profile page, click the **Microsoft Teams (Direct Routing)**, card, and click **Continue**.

4. On the Select Carrier Trunk page, select the carrier SIP trunk to which you want to route outbound Microsoft Teams calls or add a carrier and click **Continue**.

5. On the Assign Number Blocks page, select the number blocks you want to assign to the Microsoft Team (Direct Routing) Service, and click **Continue**.

6. On the Configure Service Settings page, do the following:

Hide Default Values	Toggle to show or hide the default values.
Service Name	Enter the name you want for the service.
Service Region	Enter the geographic region where the service will operate.
Service Time Zone	Select the time zone where the caller and callee are located, not necessarily the site time zone.
SIP Signaling Transport Method	Predetermined. Not editable.
SIP Termination Method	Predetermined. Not editable.
Inbound Server URI	Automatically entered. Hard coded. Not editable.
Enable Bursting	Enable to temporarily allow more calls than initially provisioned to handle unexpected spikes in call traffic.
Enable PII Data Masking	Enable to hide Personally Identifiable Information to comply with data privacy laws.
Number of Channels	Enter the upper limit of the number of connections to allow at one time to enable handling multiple calls simultaneously.
Default Outbound CLI	Select a number from the drop-down list to use as the default Calling Line Identification number.
CLI Error Handling	Select an error handling type from the drop-down list. Val-use: Reject Invalid | Overwrite Invalid | Always.
Microsoft Teams Domain Validation Key	Enter the value in this format: MS=ms#######
Call Forwarding Destination	Enter the phone number you want for the call forwarding destination.
Call Forwarding Rule	Select a call forwarding rule from the drop-down list. Always | On Failure.

7. Click **Submit**.

Oracle® Intelligent Communication Orchestration Network adds Microsoft Teams to the diagram on the Services page.

Connect the NICE CXone Mpower Service

Use the NICE CXone Service for voice and data connectivity that enables your contact center to communicate over the internet with your carrier's network.

Procedure

1. Go to **Services**, and click **Add Service**.

2. On the Select Service Profile page, click the SIP Trunk Service filter chip and select CCaaS.

3. On the Select Service Profile page, click NICE CXone Mpower and click **Continue**.

4. On the Select Carrier Trunk page, select a carrier from the drop-down list or add a carrier and click **Continue**.

5. On the Assign Number Blocks page, select or add the numbers you want to assign to the selected Service and click **Continue**.

6. On the Configure Service Settings page, enter the following information:

Hide Default Values	Toggle to show or hide the default values.
Service Name	Enter the name you want for the service.
Service Region	Select the geographic location for the service you are connecting from the drop-down list.
Service Time Zone	Select the time zone for the location of the service you are connecting from the drop-down list.
SIP Signaling Transport Method	Read-only. The value is set to TCP.
Inbound Server URI	Enter the Uniform Resource Identifier (URI) to which Oracle Intelligent Communication Orchestration Network Cloud Service sends inbound calls to the platform and voice service. Typically provided by the third-party platform or voice service provider. Use the simple IP address. Examples: 52.252.xx.xx. 52.252.xx.xx:5080.
Enable On-Net Calls	Enable to allow calls to be routed within the platform, avoiding external carrier routing.
Enable Bursting	Enable to temporarily allow more calls than initially provisioned to handle unexpected spikes in call traffic for a small amount of time at a premium rate.
Enable PII Data Masking	Enable to hide Personally Identifiable Information to comply with data privacy laws. Enabling masks the last two digits of an outbound call in all Call Detail Records.

Number of Channels	Enter the upper limit of the number of connections to allow at one time to enable handling multiple calls simultaneously.
Maximum CAPS	Set the maximum number of calls allowed per second.
Default Outbound CLI	Select the phone number you want for the Outbound Calling Line Identifier from the drop-down list.
CLI Error Handling	Select an error handling type from the drop-down list. Values: Reject Invalid | Overwrite Invalid | Always.
Call Forwarding Destination	(Optional) Enter the phone number you want for the call forwarding destination.
Call Forwarding Rule	(Optional) Select a call forwarding rule from the drop-down list. Always | On Failure.

7. Click **Submit**.

   The Oracle® Intelligent Communication Orchestration Network adds NICE CXone to the diagram on the Services page.

Connect a Voice Gateway

Oracle® Intelligent Communication Orchestration Network provides the option to use a Voice Gateway and Voice Bots for your call center. You can add a Voice Bot now, in this procedure, or you can add one later.

Before You Begin

- Add any number blocks you want to assign to the voice gateway you will choose in the following procedure, if they are not already listed. Number blocks must be assigned to a site other than Inventory.

Context
After you click Add Service on the Services page, the user interface guides you through the process to add a Voice Gateway and, optionally, a Voice Bot. To add a Voice Bot, you must enter the same Secret Key and Bot ID you set when you established the Voice Bot service with the provider.

Procedure

1. Go to the **Services** page and click **Add Service**.

2. On the Select Your Service Profile page, click the **Voice Gateway card** that you want and click **Continue**.

3. On the Configure Voice Gateway Settings page, do the following:

   - Enter the name you want for the service. Valid values: 1-30 characters.

   - Enter the number of channels you want to allocate to the service. Valid values: 1-5,000.

4. Click **Continue**.

5. (Optional) On the Add a Voice Bot page, click a **Voice Bot card** and click **Continue**, if you want to add a Voice Bot now. You can add Voice Bots later.

6. On the Assign Number Blocks page, **select the number blocks** you want to use with the gateway and click **Continue**.

    Oracle® Intelligent Communication Orchestration Network displays the Configure Voice Bot settings page with the fields required by the voice bot you selected.

7. On the Configure Voice Bot Settings page, **complete the fields**, which may vary per provider.

    Note: Regardless of the voice bot you select, the Speech Configuration section displays Use Voice Bot Provider Speech-to-Text Engine and Use Voice Bot Provider Text-to-Speech Engine with a toggle to enable or disable each one. At this time, the toggles are set to the enabled position and cannot be changed.

8. Click **Submit**.

    Oracle® Intelligent Communication Orchestration Network displays the newly added voice bot in the map on the Services page.

Services Management

After you add Services to Oracle® Intelligent Communication Orchestration Network , you can manage them through the Services page.

The following topics provide instructions for managing Services.

- [Edit Services](#)
- [Pause Services](#)
- [Resume Services](#)
- [Delete Services](#)
- [Add Service Groups](#)
- [Edit Service Groups](#)
- [Delete Service Groups](#)
- [View and Update a Service Configuration](#)

Edit Services

When you want to update or edit the attributes of a Service, you can do so from the Services page.

Context
Allow a few moments for the update to take effect after you perform this procedure. You may need to refresh the page.

Procedure

1. Go to the **Services** page and locate the service you want to edit.

2. On the Services page, **click the name** of the Service you want to edit.

    Oracle® Intelligent Communication Orchestration Network displays the details page for the selected Service.

3. On the Service Details page, click **View Configuration**.

    Oracle® Intelligent Communication Orchestration Network displays the settings drawer.

4. In the settings drawer, edit the attributes as needed and click **Update**.

Oracle® Intelligent Communication Orchestration Network displays a confirmation message.

Pause Services

When you want to temporarily prevent a Service from transmitting or receiving calls, you can pause the Service.

Before You Begin

- Confirm that the Service status is Active.

Context
Allow a few moments for the Status to change after you perform this procedure. You may need to refresh the page.

Procedure

1. Go to the **Services** page and locate the Service you want to pause.

2. At the end of the row that lists the Service, click the ellipses in the **Actions** column.

   Oracle® Intelligent Communication Orchestration Network displays the Actions menu.

3. In the Actions menu, click **Pause**.

   Oracle® Intelligent Communication Orchestration Network displays a confirmation dialog.

4. In the dialog click **Pause**.

   Oracle® Intelligent Communication Orchestration Network changes the Status to Paused and adds Resume to the Actions menu.

Resume Services

When you want to resume a paused service, you can do so from the Services page.

Before You Begin

- Confirm that the Service status is Paused.

Context
Resume reactivates the Service and enables call transmission and reception. Allow a few moments for the Status to change after you perform this procedure. You may need to refresh the page.

Procedure

1. Go to the **Services** page and locate the Service you want to resume.

2. At the end of the row that lists the Service, click the ellipses in the **Actions** column.

   Oracle® Intelligent Communication Orchestration Network displays the Actions menu.

3. In the Actions menu, click **Resume**.

   Oracle® Intelligent Communication Orchestration Network displays a confirmation dialog.

4. In the dialog, click **Resume**.

   Oracle® Intelligent Communication Orchestration Network changes the Status to Active and adds Pause to the Actions menu.

Delete Services

When you want to delete a Service from your deployment, you can do so from the Services page.

Context

When you delete a Service, Oracle® Intelligent Communication Orchestration Network sets all associated number blocks to INACTIVE and moves the Service out of any associated Service Group. Allow a few moments for the Status to change after you perform this procedure. You may need to refresh the page.

> ⚠ **Caution**
>
> You cannot recover a deleted Service.

Procedure

1. Go to the **Services** page and locate the service you want to delete.

2. At the end of the row that lists the service, click the ellipses in the **Actions** column.

   Oracle® Intelligent Communication Orchestration Network displays the Actions menu.

3. In the Actions menu, click **Delete**.

   Oracle® Intelligent Communication Orchestration Network displays a confirmation dialog.

4. In the dialog, click **Delete**.

   Oracle® Intelligent Communication Orchestration Network changes the Status of the Service to Terminated and deactivates the Actions menu.

Add Service Groups

To provide business continuity in a service outage, you can deploy Services to Oracle® Intelligent Communication Orchestration Network in groups to support continued communications with redundancy.

Before You Begin

- Confirm that your deployment includes multiple services.

Procedure

1. Go to the **Services** page and click **Add Service Group**, located below the map. If the map is deep, you may need to scroll down to find the Add Service Group button.

   Oracle® Intelligent Communication Orchestration Network displays the Service Group Details drawer.

2. In the **Service Group Details** drawer, do the following:

   - Enter a **Name** for the group.

   - Select the group type. End-point services or Carriage services.

   - Select the service group routing mode from the drop-down list.

   Oracle® Intelligent Communication Orchestration Network displays the Select Service drawer.

3. Click **Continue**

4. In the Select Services drawer, select the services you want in the group and click **Continue**.

   Oracle® Intelligent Communication Orchestration Network displays the Prioritize Services drawer.

5. In the Prioritize Services drawer, **drag and drop the services** where the service at the top of the list has first priority for handling calls, and click **Add**.

   Oracle® Intelligent Communication Orchestration Network Displays the SIP Trunk Services page with the new service group at the top of the list.

Edit Service Groups

When you want to edit an Oracle® Intelligent Communication Orchestration Network Service Group, use the following procedure by way of the Services page.

Context
In the following procedure you can perform any combination of steps 2, 3, and 4. You do not need to change every setting. You can change only one setting, if that serves your purpose.

Procedure

1. Go to the Services page and click the Group link in the Group column.

   Oracle® Intelligent Communication Orchestration Network displays the Service Group Details drawer.

2. In the Service Group Details drawer, edit the Service Group Name, and click **Continue**.

   Oracle® Intelligent Communication Orchestration Network displays the Select Services drawer.

3. In the Select Services drawer, select one or more different services, and click **Continue**.

   Oracle® Intelligent Communication Orchestration Network displays the Prioritize Services drawer.

4. In the Prioritize Services drawer, reset the priority.

   Oracle® Intelligent Communication Orchestration Network displays a success message and the SIP Trunk Services page.

5. Click **Update**.

Delete Service Groups

When you want to delete a Service Group from Oracle® Intelligent Communication Orchestration Network , use the following procedure by way of the Services page.

Context
When you delete a service group, Oracle® Intelligent Communication Orchestration Network removes all services from the group.

Procedure

1. Go to the Services page, and click the link in the Group column.

   Oracle® Intelligent Communication Orchestration Network displays the Service Group Details drawer.

2. In the Service Group Details drawer, click **Delete Service Group**.

   Oracle® Intelligent Communication Orchestration Network displays a confirmation dialog.

3. Click **Delete**.

Oracle® Intelligent Communication Orchestration Network displays the Services page and a success message.

View and Update a Service Configuration

To view or update a service configuration in Oracle® Intelligent Communication Orchestration Network , go the Services page and perform the following procedure.

Context
You can update any of the attributes in the Carrier drawer, unless the service is paused. You can only view a paused service.

Procedure

1. Go to the **Services** page and click the **Service Name** you want to view.

Oracle® Intelligent Communication Orchestration Network displays the Service Details page.

2. On the Service Details page, click **View Configuration**.

Oracle® Intelligent Communication Orchestration Network opens the service configuration drawer.

3. In the drawer, update any of the attributes you want to change.

4. Click **Update**.

Oracle® Intelligent Communication Orchestration Network displays the Number Blocks page with a success message.

6
Voice Gateways

The Oracle® Intelligent Communication Orchestration Network Voice Gateway enables speech intelligence and AI-powered Bot services to seamlessly integrate with voice services.

Topics:

- [About Voice Gateways](#)
- [Advanced Call Control](#)
- [Call Transfer](#)
- [IVA Initiated Hangup](#)
- [Speech Services Integration](#)
- [Connect a Voice Gateway](#)

About Voice Gateways

The Oracle® Intelligent Communication Orchestration Network uses a voice gateway to connect telephony to Intelligent Virtual Assistants (IVA) to enable any IVA or Chatbot platform to use telephony without the need for businesses to develop and implement a telephony stack as part of the platform.

The Voice Gateway provides capabilities to interwork between the VoIP telephony protocols used by the PSTN and Communications Services with Intelligent Voice Agents through their APIs.

The voice gateway supports Voice Gateway Markup Language to enable more natural sounding and customizable synthesized speech for your IVA system. You can control the pronunciation, intonation, and other parts of speech synthesis to provide a more natural experience for your customers.

The voice gateway also provides text-to-speech capability to enable storing and reusing previously generated speech. Reused speech can speed the verbal response time from the IVA system to provide a better experience for the caller.

The following diagram illustrates how the voice gateway works.

1. The incoming call goes to the carrier.

2. The carrier routes the call to Oracle through a SIP trunk to the voice gateway.

3. The voice gateway translates between voice and text iterations.
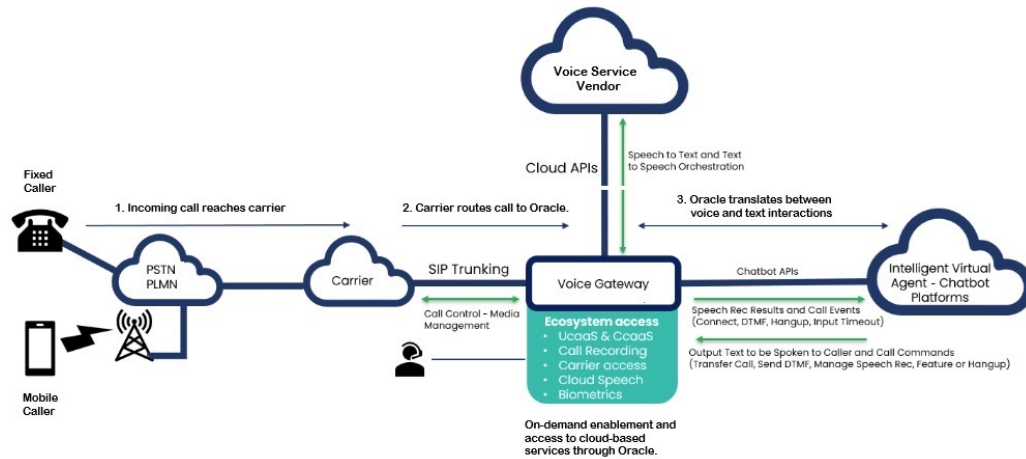
The Oracle® Intelligent Communication Orchestration Network voice gateway removes the complexity of handling voice-based telephone interactions by converting phone calls into a series of API interactions with the IVA and Bot Platform.

> ⓘ **Note**
>
> Oracle® Intelligent Communication Orchestration Network supports only one configured voice gateway at a time. When you want to use a different voice gateway, you must delete the one in use before configuring the new one.

Advanced Call Control

The Oracle® Intelligent Communication Orchestration Network advanced call control supports SIP header Integration and Metadata Persistence.

SIP Header Integration and Metadata Persistence

To support the exchange of call-related metadata with other SIP-based platforms, the voice gateway enables the Intelligent Virtual Assistant (IVA) to retrieve information from, or insert information into, SIP headers exchanged in the call setup and transfer process during SIP signaling.

Inbound Calls

When configured to do so, the voice gateway can retrieve values stored in specified SIP headers in a SIP INVITE during the establishment of an inbound call. The voice gateway can send the values to the IVA at the beginning of a new interaction. For example, you might want to make a specified SIP header available to the IVA for interaction logs, Call Detail Records, or to identify the call when interacting with other systems.

Outbound Calls, Conference Calls, and Transfers

When configured to do so, the IVA can request the voice gateway to set one or more SIP headers to specified values when initiating an outbound call, transfer, or conference. The voice gateway can send the values in the initial SIP message associated with the action and pass information about the call to another platform to help identify the call or to provide call context information. For example, in a call center you might want to insert a unique call identifier and some context information to link the inbound call to the IVA and a call transferred to an agent

together and ensure that any context or state information is available in the IVA. The information might inform the agent that the caller has been authorized and what the call is about.

Call Transfer

The Oracle® Intelligent Communication Orchestration Network provides the ability to transfer a call to another telephone number or human agent to assist with the interaction.

Overt Transfers

The need to transfer calls often occurs in a self-service or contact center environment in the following scenarios:

- The Intelligent Virtual Assistant (IVA) cannot handle the caller's request.
- The IVA cannot understand the caller due to poor call quality, background noise, or other impediments.
- The caller asks to speak to a human agent.

To support the need to transfer calls, the voice gateway enables the IVA to initiate a transfer to a specified destination with the ability to use SIP headers to send attached metadata to the recipient of the transferred call.

The voice gateway also provides the ability for the IVA to remain an active participant in the call after completing the call transfer. The IVA can continue monitoring the call and perform analytics, sentiment monitoring, or provide the human agent with information to assist with handling the call.

Blind Transfers

The voice gateway supports transferring a call from the initial recipient to another party without confirming the ability of the next recipient to receive the call or providing a verbal hand off to the caller before connecting the call to the new party.

Additional services and support include allowing the IVA to

- send attached metadata to the recipient to help provide an informed hand off.
- specify a secondary action if the hand off is unsuccessful, rather than dropping the call.

IVA Initiated Hangup

The Oracle® Intelligent Communication Orchestration Network voice gateway supports the ability for the Intelligent Virtual Assistant (IVA) to disconnect a call at any time during the call.

When configured to do so, the voice gateway can also provide the reason why the IVA disconnected a call.

Speech Services Integration

The Oracle® Intelligent Communication Orchestration Network voice gateway can integrate and coordinate the speech services required to convert voice-based interactions to and from text-based Intelligent Virtual Assistants.

The Oracle® Intelligent Communication Orchestration Network voice gateway supports major cloud-based speech services, multiple languages, and access to custom speech models that you might already use. Customers may configure the voice gateway to use their own accounts they established with the speech services providers.

Speech to Text (STT)

Speech-to-Text is the process where the voice gateway transcribes a voice stream into a text-based format that contains spoken words. The Oracle voice gateway integrates real-time streaming with supported STT engines to minimize the delays sometimes occurring with Cloud-based STT services.

Grammar and Context Hints

The Oracle voice gateway allows Intelligent Virtual Assistants that provide such support to include metadata in the form of hints to the speech to text engine to aid the recognition process.

Text to Speech (TTS)

The text to speech process Oracle® Intelligent Communication Orchestration Network provides converts a string of text into a computer generated stream of speech. Intelligent Virtual Assistants depend on text to speech operations to convert text-based output into speech they can use in voice-based telephony interactions.

Voice Gateway Markup Language

The Voice Gateway Markup Language (VGML) is a proprietary mechanism for exchanging information between the Voice Bot and the Voice Gateway, which can include Speech Synthesis Markup Language (SSML) to provide interaction with the Speech to Text (STT) and Text to Speech (TTS) services.

- VGML enables you to tell the Oracle® Intelligent Communication Orchestration Network to do something.

- SSML enables you to tell the STT and TTS platforms to do something.

- VGML can pass SSML through to the SST and TTS platforms.

Caching

The Oracle® Intelligent Communication Orchestration Network voice gateway supports the ability to cache text to speech output. Caching enables the platform to use speech previously generated by the text to speech engine for use in common Intelligent Virtual Assistant output. In this way, the platform does not need to request and wait for common output for each use, which can speed up the interaction with the caller.

Voice Gateway Details Page

When you click the Name of a Voice Gateway on the Services page, Oracle® Intelligent Communication Orchestration Network displays the Voice Gateway Details page. The page displays tables with information about the Voice Gateway with an actions menu for each table.

Each table includes an Add button and the page displays the View Configuration button.

Voice Bots

The Voice Bots table displays the following columns:

Voice Bot Name	The name configured for the Voice Bot.
Provider	The name of the company that provides the Voice Bot.
Platform	The name of the Voice Bot service.

Speech Engine	The name of the speech engine provider.
Voice Channels	The number of channels available for the Voice Bot.
Numbers	The number of number blocks assigned to the Voice Bot.
Status	The life cycle state of the Voice Bot. Active | Paused | Processing.
Date Added	The date when the Voice Bot was added.
Actions	The only action is Delete.

Add Voice Bot button—Click to display the Select Voice Bot page, where you can add a Voice Bot.

Number Blocks

The Number Blocks table displays the following columns:

Starting Number	The first phone number in the number block. Click the number to open the Number Block drawer where you can view all the numbers in the block and their status.
Block Size	The number of phone numbers in the number block. For Mobile phone numbers, the only block size is 1. For Landlines, block sizes include 1, 10, and 100.
Type	The type of telephone connection, either Mobile or Landline.
Site Name	The name of the site hosting the number block. Click the site name to launch the Site Details page, where you can edit the site attributes and perform actions on the number blocks.
Voice Bot Name	The name you configured for the Bot.
Status	The life cycle state of the number block. Active | Inactive | Paused | Processing.
Date Added	The month, day, and year the number block was added.
Actions	The actions available for the number block. Actions in black are available for the number block. Actions in gray are not. Available actions depend on the status. Actions: Pause | Split Block | Merge Block | Move to Service | Move to Site | Remove from Service | Remove from Account.

Add Number Blocks button—Click to display the Select Number Blocks page, where you can select existing number blocks, add new ones, and select a voice bot. Note that the page displays only number blocks not assigned to a service.

View Configuration

When you click the View Configuration button, Oracle® Intelligent Communication Orchestration Network opens the Voice Gateway drawer where you can edit the Service Name and reset the Number of Voice Channels.

Voice Gateway Management

After you add voice gateways to Oracle® Intelligent Communication Orchestration Network you can manage them through the Services page.

Use the following procedures to manage your voice gateways.

- Connect the Microsoft Azure AI Bot Service
- Connect the Microsoft Copilot Studio Bot
- Connect the Google Dialogflow CX or ES Voice Bot to a Voice Gateway
- Edit Voice Bots

Connect the Microsoft Azure AI Bot Service

When you want to add the Microsoft Azure AI Bot Service to a Voice Gateway already connected to the Oracle® Intelligent Communication Orchestration Network , use the following procedure.

Before You Begin

- Review the following procedure in advance, so you can collect the necessary information from your Microsoft Azure AI Bot Service profile before you begin.

Procedure

1. Go to **Services** and click the name of the target Voice Gateway.

2. On the Voice Gateway Details page, click **Add Voice Bot**.

3. On the Select Voice Bot page, click **Microsoft Azure AI Bot Service** and click **Continue**.

4. On the Assign Number Blocks page, select the numbers you want, and click **Continue**.

5. On the Configure Voice Bot Settings page, do the following:

Bot Name	Enter the name of your Voice Bot.
Provider	The Oracle Intelligent Communication Orchestration Network Cloud Service automatically inserts the provider's name.
Azure Bot Services Direct Line Secret Key	Enter the Azure Bot Services direct line secret key from your Azure Bot account.
Azure Bot Services Bot ID	Enter the Bot ID from your Azure Bot account.
Voice Channels	Set the number of channels reserved for this voice bot. The number cannot exceed the capacity of the voice gateway.

Use Voice Bot Provider Speech-to-Text Engine	Not adjustable at this time. Is set to enabled.
Use Voice Bot Provider Text-to-Speech Engine	Not adjustable at this time. Is set to enabled.

6. Click **Submit**.

Connect the Microsoft Copilot Studio Bot

When you want to add the Microsoft Copilot Studio Bot to a Voice Gateway already connected to the Oracle® Intelligent Communication Orchestration Network , use the following procedure.

Before You Begin

- Review the following procedure in advance, so you can collect the necessary information from your Microsoft Copilot Studio profile before you begin.

Procedure

1. Go to Services and click the name of the target Voice Gateway.

2. On the Voice Gateway Details page, click **Add Voice Bot**.

3. On the Select Voice Bot page, click **Microsoft Copilot Studio Bot**, and click **Continue**.

4. On the Assign Number Blocks page, select the numbers you want, and click **Continue**.

5. On the Configure Voice Bot Settings page, do the following:

Bot Name	Enter the name of your Voice Bot.
Provider	The Oracle Intelligent Communication Orchestration Network Cloud Service automatically inserts the provider's name.
Copilot Studio Direct Line Secret Key	Enter the master key from your Copilot Studio account.
Copilot Studio Bot ID	Enter the Bot ID from your Copilot Studio account.
Voice Channels	Set the number of channels reserved for this voice bot. The number cannot exceed the capacity of the voice gateway.
Use Voice Bot Provider Speech-to-Text Engine	Not adjustable at this time. Is set to enabled.
Use Voice Bot Provider Text-to-Speech Engine	Not adjustable at this time. Is set to enabled.

6. Click **Submit**.

Connect the Google Dialogflow CX or ES Voice Bot to a Voice Gateway

When you want to add the Google Dialogflow CX or ES Voice Bot to a Voice Gateway already connected to the Oracle® Intelligent Communication Orchestration Network , use the following procedure.

Before You Begin

- Review the following procedure in advance, so you can collect the necessary information from your Google DialogFlow profile before you begin.

- Confirm that the Voice Gateway you want to add the Voice Bot to is already connected to Oracle® Intelligent Communication Orchestration Network .

Procedure

1. Go to **Services** and click the name of the target Voice Gateway.

2. On the Voice Gateway Details page, click **Add Voice Bot**.

3. On the Select Voice Bot page, click **Google Dialogflow CX or ES**, and click **Continue**.

4. On the Assign Number Blocks page, select the numbers you want, and click **Continue**.

5. On the Configure Voice Bot Settings page, do the following:

Bot Name	Enter the name of your Voice Bot.
Provider	The Oracle Intelligent Communication Orchestration Network Cloud Service automatically selects the provider.
Email	Enter the Google service account address.
Project ID	Enter the project ID from your Google Cloud console for the DialogFlow voice bot you are connecting. For example, US-East.
Service Account Key	Enter the Service Account Key from your Google Cloud console for the DialogFlow voice bot you are connecting.
Region ID (CX-only)	Select the physical location for the DialogFlow voice bot you are connecting from the drop-down list.
Agent ID (CX-only)	Enter the agent ID from your Google Cloud console for the DialogFlow voice bot you are connecting.
Voice Channels	Set the number of channels reserved for this voice bot. The number cannot exceed the capacity of the voice gateway.
Use Voice Bot Provider Speech-to-Text Engine	Not adjustable at this time. Is set to enabled.
Use Voice Bot Provider Text-to-Speech Engine	Not adjustable at this time. Is set to enabled.

6. Click **Submit**.

   Oracle® Intelligent Communication Orchestration Network creates a connection between the voice gateway and your Google DialogFlow voice bot on the Services page diagram, and adds the voice bot to your Voice Gateway list.

Edit Voice Bots

When you want to change certain configuration parameters or edit number blocks used with a Voice Bot, you can open the Voice Bot editing drawer from the Settings page.

1. Go to the **Services** page.

2. On the services page, under Voice Gateways, go to the Service Name column and click the name of the service that hosts the Voice Bot you want to edit.

   Oracle® Intelligent Communication Orchestration Network displays the Voice gateway Details page.

3. On the Voice gateway Details page, go to the Voice Bot name column and click the name of the Voice Bot you want to edit.

   Oracle® Intelligent Communication Orchestration Network opens the Voice Bot drawer, which displays the Configuration tab and the Numbers tab.

4. On the Configuration tab, you can edit:

   • Bot Name—Update the text.

   • Secret Key—Update the text.

   • Bot ID—Update the text.

   • Voice Channels—Select a different number of channels.

   • Use Voice Bot Provider Speech-to-Text Engine

5. On the Numbers tab, you can:

   • Assign a number block with the Assign Number Block button.

   • Edit the starting number by replacing it with another one.

   • Delete a number block, which assigns it from the bot but does not remove it from inventory.

6. Click **Update** to submit the changes.

A

Voice Gateway Markup Language Commands

Voice Gateway Markup Language is used to configure API calls or custom payloads with Oracle® Intelligent Communication Orchestration Network . You can use the Voice Gateway markup Language commands to pass SSML on to your chosen speech provider.

The following links go to topics for each command, which includes descriptions and code samples.

Topics:

- [Attach Data and Transfer Call](#)
- [Chaining Multiple Commands](#)
- [Default Destination Error](#)
- [Configure DTMF Input](#)
- [DTMF-Only Mode](#)
- [Hang Up Call](#)
- [Partial Barge-In](#)
- [Recognition Hint](#)
- [Set Barge-In](#)
- [Set No Input Timer](#)
- [Configure Speech Recognition](#)
- [Configure Speech Synthesis](#)
- [Substitute Value](#)
- [Events](#)

Chaining Multiple Commands

Use the following syntax to chain multiple commands. The Voice Gateway Markup Language allows chaining multiple commands within the JSON array containing the command elements. Oracle® Intelligent Communication Orchestration Network executes the commands in the order specified in the Voice Gateway Markup Language.

```
{
  "voicegateway": [
    {
      "command": {
        "setbargein": {
          "allowed": "false"
        }
      }
    },
    {
      "command": {
```

```
                "say": {
                    "text": "This is a Partial barge in. After you hear limes you can
make your selection!! apples,pears,oranges, grapefruits, mandarins,limes"
                }
            }
        },
        {
            "command": {
                "setbargein": {
                    "allowed": "true"
                }
            }
        },
        {
            "command": {
                "say": {
                    "text": "nectarines, apricots, peaches,plums,
bananas,mangoes,strawberries, raspberries, blueberries, kiwifruit,
passionfruit, watermelons, rockmelons and honeydew melons.!!  Which one do
you want"
                }
            }
        }
    ]
}
```

Attach Data and Transfer Call

Use the Attach Data command to insert the specified data into a SIP Header, which Oracle®
Intelligent Communication Orchestration Network forwards when transferring the call to
another destination so that the receiving endpoint can extract the data from the header to
preserve context:

The Transfer Call Command initiates transferring the call to a third party away from its current
endpoint in the form of a blind transfer.

```
{
    "voicegateway": [
        {
            "command": {
                "attachdata": {
                    "value": "SessionID123456789|CustData1|CustData2|CustData3",
                    "name": "User-To-User"
                }
            }
        },
        {
            "command": {
                "transfer": {
                    "targetNumber": "+61979555005"
                }
            }
        }
```

```
        ]
    }
```

Other options for target numbers include +16035551212@bot, or
+16035551212@company1.byoc.mypurecloud.com. Either one can be used to maintain the
call on net and pass data from Bot to Bot, or from Bot to Genesys. Without the @ symbol the
call will be routed off net and all header information will be stripped.

Default Destination Error

Use the setdefaultdestinaion command to configure the destination number during the
welcome event set up. If an error occurs when connecting to the Bot or Text-to-Speech or
Speech-to-Text engines, the Voice Gateway transfers the call to the configured destination
number. If the transfer fails, Oracle® Intelligent Communication Orchestration Network
disconnects the call.

```
{
    "voicegateway": [
      {
        "command": {
          "setdefaultdestination": {
            "destinationnumber": "+61979555009"
            }
          }
        }
    ]
}
```

Configure DTMF Input

Use the Configure DTMF Input command to configure how Oracle® Intelligent Communication
Orchestration Network collects DTMF-based input.

- The hash (#) character is the default terminating digit.

- After reaching the maximum number of digits, the action is complete regardless of whether
  # is pressed.

- The inter digit timeout is in milliseconds.

- The VG_NO_MATCH event is used if the minimum number of digits is not reached or the
  inter digit timeout is triggered.

- The VG_NO_INPUT event is used if no input is detected.

```
{
  "voicegateway": [
    {
      "command": {
        "setdtmfcapture": {
          "mindigits": "10",
          "maxdigits": "6",
          "interdigittimeout": "3000"
```

```
            }
         }
      }
   ]
}
```

DTMF-Only Mode

Use the setdtmfonlymode command to configure a call to operate in DTMF-only mode, allowing flexibility in managing how the call handles DTMF inputs during its lifecycle.

```
{
  "voicegateway": [
    {
  "command": {
    "setdtmfonlymode": {
      "enable": <boolean>,
      "scope": <enum>
    }
  }
}
```

Hang Up Call

Use the Hangup command to hang up the call from within Oracle® Intelligent Communication Orchestration Network , with an optional reason for the hangup recorded in logging and forwarded as a SIP header when the BYE message is sent.

```
{
    "voicegateway": [{
        "command": {
            "hangup": {
                "reason": "XXX"
            }
        }
    }]
}
```

Partial Barge-In

Use the partial barge-in tag to stop barge-in until this tag is reached. This tag can only be used in a Voice Gateway Markup Language Text response.

```
<speak>Hey there, This is important and you must listen to it.
<mark name='partial_barge_in'/>
You can now barge-in?</speak>
```

Recognition Hint

Use the Recognition Hint command to provide a dynamic grammar hint to the speech recognizer about what to detect, which improves the speed and accuracy of recognition, rather than operating in open recognition mode.

```
{
  "voicegateway": [
    {
      "command": {
        "recognitionhint": {
          "phrases": [
            "cabernet sauvignon",
            "alfalfa"
          ]
        }
      }
    }
  ]
}
```

Say Command

Use the Say command to use a Supported Text to Speech Engine to synthesize and "Say" the provided input on the active call, with input being a plain text string or, optionally, a Voice Gateway Markup Language formatted string. The Voice Gateway Markup Language eables the bot to pass any SSML command to the TTS engine.

> ⓘ **Note**
>
> Voice Gateway Markup Language only influences output where the underlying speech engine supports the language and the specific capabilities requested.

Precedence

"Say" overrides standard bot response text or audioResponse, instructing the Oracle® Intelligent Communication Orchestration Network to synthesize the speech with a nominated speech engine, including Voice Gateway Markup Language.

Speaking Plain Text String

```
{
    "voicegateway": [{
        "command": {
            "say": {
                "text": "Thanks for confirming you want 12345 Items"
            }
        }
    }]
}
```

Speaking an SSML String

```
{
    "voicegateway": [{
        "command": {
            "say": {
                "ssml": "<speak>Thanks for confirming you want <say-as
interpret-as=\"cardinal\">12345</say-as> Items</speak>"
            }
        }
    }]
}
```

Set Barge-In

Use the Set Barge-In command to enable and disable Barge-In at any time during the lifecycle of the call, providing the flexibility to allow or disallow barge-in during the call when required.

```
 {
    "voicegateway": [{
        "command": {
            "setbargein": {
                "allowed": "false"
            }
        }
    }]
}
```

Set No Input Timer

Use the Set No Input Timer Command configure the duration of the No Input Timer, controlling how long the platform will wait for input either through DTMF or Speech before triggering a no input event.

```
{
  "voicegateway": [
    {
      "command": {
        "setnoinputtimer": {
          "seconds": "20"
        }
      }
    }
  ]
}
```

Configure Speech Recognition

Use the Configure Sppech Recognition command to instruct Oracle® Intelligent Communication Orchestration Network to configure the behavior of the Speech Recognizer, including attributes such as the recognition model to use.

Supported attributes:

- Model Name

- Language Code

- Dumping Utterance Audio to Disk

```
{
  "voicegateway": [
    {
      "command": {
        "setspeechrec": {
          "modelname": "latest_long"
        }
      }
    },
    {
      "command": {
        "setspeechrec": {
          "singleutterance": "true"
        }
      }
    },
    {
      "command": {
        "setspeechrec": {
          "languagecode": "en-AU"
        }
      }
    }
  ]
}
```

Configure Speech Synthesis

Use the Speech Synthesis command to configure the default behavior of the speech synthesizer when speaking plain text strings received from the bot during Voice Gateway interactions.

The speech synthesis command does not validate any of the arguments, such as voice name, and assumes the value provided is valid for the selected speech engine.

Voice Gateway Markup Language attributes such as voice will override speech synthesis and the Voice Gateway Markup Language specified voice will be used instead of the configured voice at a Voice Gateway session level.

```
{
    "voicegateway": [{
        "command": {
            "setspeechsynth": {
                "voicename": "en-AU-Wavenet-A"
            }
        }
    }
```

```
            ]
        }
```

Substitute Value

Use the Substitute Value command to configure a runtime variable substitution within the Voice Gateway Markup Language before it is sent to the Speech Synthesizer, allowing the replacement of strings with a specific value at runtime.

```
{
   "voicegateway": [
      {
         "command": {
            "substitute": {
               "token": "$$FILE_PATH_MCP$$/ifyourdonejustsaythatsall.wav",
               "value": "https://www.myurl.com/tech/piano2.wav"

            }
         }
      },
      {
         "command": {
            "substitute": {
               "token": "$$FILE_PATH_PHONE_BOT$$/OrSayThatsAll.wav",
               "value": "https://www.myurl.com/tech/piano2.wav"
            }
         }
      }
   ]
}
```

Events

The Voice Gateway supports the following events:

- VG_WELCOME—Used on the initial call arrival.
- VG_NO_INPUT—Used when no input is detected.
- VG_NO_MATCH—Used when the DTMF digits do not meet the minimum length requirement.
- VG_RECORDING—Used when a recording event is completed.
- VG_ERROR—Used when an error occurs within the Voice Gateway while handling a call. Includes include a parameter with further information about the errors.