VOSS-4-UC
Business Admin Portal Guide

Release 20.1.1 **Early Field Trial**

Jan 28, 2021

Legal Information

Please take careful note of the following legal notices:

Security Information

This product may contain cryptographic features that may be subject to state and local country laws that govern the import, export, transfer and use of such features. The provision of this software does not imply that third-party authorization to import, export, distribute or use encryption in your particular region has been obtained. By using this product, you agree to comply with all applicable laws and regulations within your region of operation. If you require further assistance, please contact your dedicated VOSS support person.

Contents

1 What's New

2 Update a User Role and Log in

1. Log in to the VOSS-4-UC admin interface with hcsadmin or entadmin (depending on installation type).
2. From the **Roles** menu, select the role you want to enable for access to Business Admin Portal.
3. Add a new custom interface with the following details:
   - Interface Type: InterfaceBusinessAdminPortal
   - Name: default
4. As a user with the selected role, navigate to the Business Admin Portal login page:

   `https://<IP>/portal/#/login`

   and login with your administrator credentials.

You now have access to the Business Admin Portal Interface.

Note:

- The default access to the Business Admin Portal Interface is read-only. To assign a user role with a different administration profile, refer to the Business Admin Portal Custom Interface topic in the Core Feature Guide.
- If the administrator has set the "Change Password on Next Login" for a Business Admin Portal admin user credential policy, the Change Password prompt page is loaded.

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3 Overview of Business Administration Portal

The Business Administration Portal runs in parallel to the current administrative portal. It provides controlled access to all of your Unified Communications (UC) features and settings from a single window. Details about an item without leaving the page.

The intuitive, simplified user interface enables you to carry out common UC tasks such as adding, modifying or deleting subscribers, phones and lines, as well as associated subscriber and phone services and features such as Voicemail, WebEx, Single Number Reach (SNR), Mobility, Jabber and Speed Dials.

VOSS-4-UC Business Admin Portal

3.1. Accessing the Business Admin Portal

Note:

- The Business Admin Portal uses the same base address (URL) as the Admin Portal. The base address is then suffixed with BAP specific login details (see below). Your username and password are the same.
- If you are configuring a proxy server to access the Business Admin Portal endpoint /business-admin, the following paths should all be added to your server configuration to point to the root server path (without this endpoint):
  - /api
  - /noninteractivelogin
  - /logout
  - /login
  - /account

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1. Browse to the appropriate website address, for example:

   https://<Hostname>/business-admin

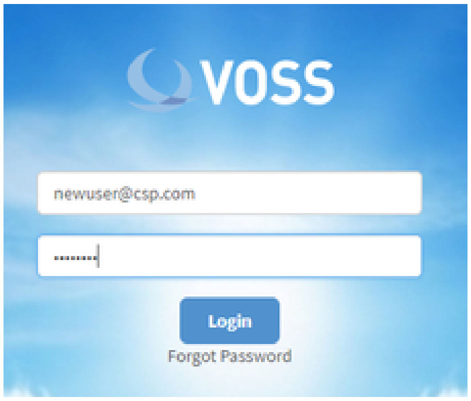
   You will be redirected to:

   https://<Hostname>/portal/#/business-admin (login) .

   If a theme is applied to the login screen, use:

   https://<Hostname>/portal/#/login?targetAppMode=business-admin&theme=<theme_name>

2. Enter your username and password in the appropriate fields.



3. Click **Login** or press **Enter** to login to the Business Admin Portal. Once you have logged in, your landing page is displayed.

The appearance of your landing page depends on the roles defined in the Admin Portal.

Click the **Forgot Password** hyperlink if you have forgotten your password.

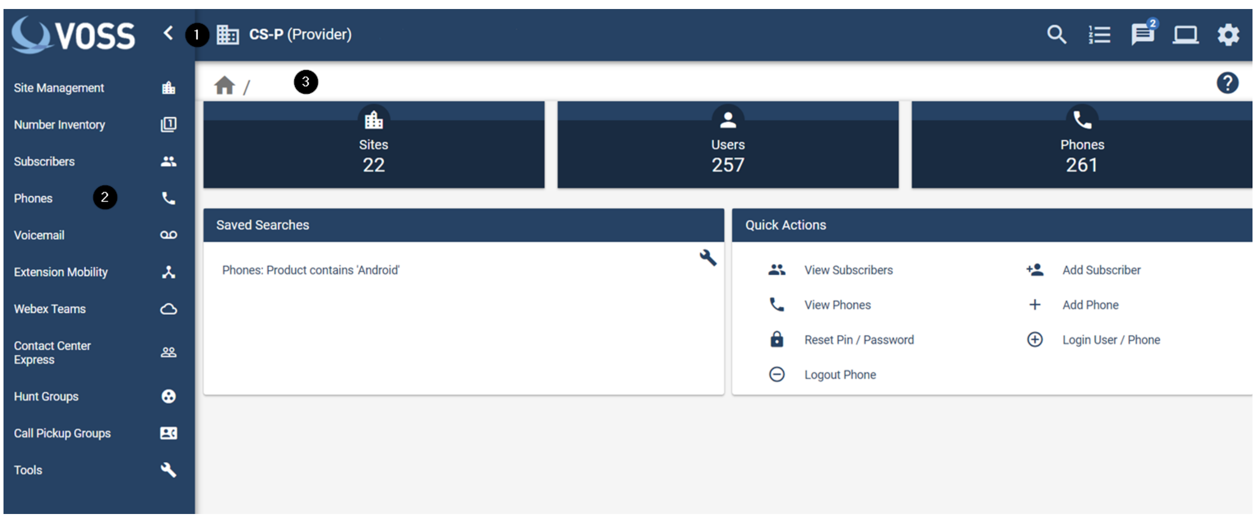
4 Understanding the User Interface

4.1. Administrator User Interface

Note: The Business Administration Portal (BAP) interface menus and functionality is defined as an interface type in VOSS-4-UC, along with the required role based access.

A default interface type is provided, but menus, features and functionality described here may not be available if your administrator has created a Business Admin Portal Custom Interface for you.

Refer to the Core Feature Guide for details.



The interface is divided into three main functional areas:

1. **Top Menu Bar** containing:

   - **Company Brand and Menu Labels Toggle**. Displays your company brand as well as a **Toggle** switch that either exposes or hides the side menu labels. When set to ‘<’, the labels are always visible, when set to ‘>’, the labels are ‘hidden’.
   - **Organization Selection** icon. Opens a pop up that allows you to navigate to a specific level in the organization. See: *Organization Navigation*. If site level is selected, the associated Customer is displayed next to the Site to provide context.
   - **Search** icon. Allows you to search for a specific item in the system. See: *Carry Out a Search*.
   - **Transaction Log**. Link to the **Transaction** page, which lists the most recent transactions in your system. See: *Transactions List View*.

- **Messages**. Link to the **Messages** slide out page, which lists the most recent notification messages and transactions, for example:

  "There have been no failed login attempts since your last successful login on August 10, 2020 at 3:00:25 PM Central Standard Time".

  It also provides links to clear the list and to "See all transactions".

- **Application Mode**. Opens a dialog box, which allows you to select either **Administration** or **Business Administration** mode (only if you have access to both modes).

- **Settings**. A drop-down menu showing:

  - The logged in User, which links to:

    * an **Account Settings** card showing user details such as **Username**, **Email Address**, **Last Login**, etc.

    * a **Quick Actions** card allowing you to, for example, **Change Password** or **Sign Out**

    * a **Preferences** card allowing you to change the default application mode to either **Administration** or **Business Administration** (only if you have access to both modes).

  - An **About** menu with release and version details.

  - A **Sign out** option

2. **Side Menu Bar**. Provides menus *according to your custom interface setting*. Selecting a menu directs you to the relevant menu default dashboard.

3. The **Home Page** is the first page that is displayed when you access the Business Admin Portal. It provides you with a summary view of your entire system.

   - **Home**. Upper bar icon that redirects you to the home page for your organization level from anywhere within the interface.

     A navigation path is shown next to this icon that can be used to for example navigate from an instance view to the list of instances - see Organization Level and Controls under *List View*.

   - **Dashboard Widgets** and **Help** icons.

   - **Counters**. Displays the total number of **Sites**, **Users** (Subscribers) and **Phones** at the selected organization level. Each counter also serves as an active hyperlink, which redirects you to the associated menu landing page.

   - **Quick Actions**. Provides hyperlinks to common tasks such as, **View Subscribers**, **Add Subscriber**, **View Phones**, **Add Phone**, **Reset Pin/Password**, **Login User/Phone**, and **Logout Phone**.

   - **Saved Searches**. Provides hyperlinks to a user configurable list of previously saved common searches.

   - **MACDs Per Day**. Provides a graph indicating the number of move, add and delete transactions performed at the specified organization level over the past week. Note that graphs are only displayed if there is available data.

Notifications are also displayed on the interface:

- A session expiry notification will display if the **Idle Session Timeout (minutes)** value in the credential policy associated with the user role has been reached. The notification has the format:

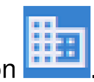
  "Your session will expire in <n> seconds."

  Use the **stay Logged In** button to remain logged in. For details on the topics of credential policies and session timeouts, refer to the Core Feature Guide.

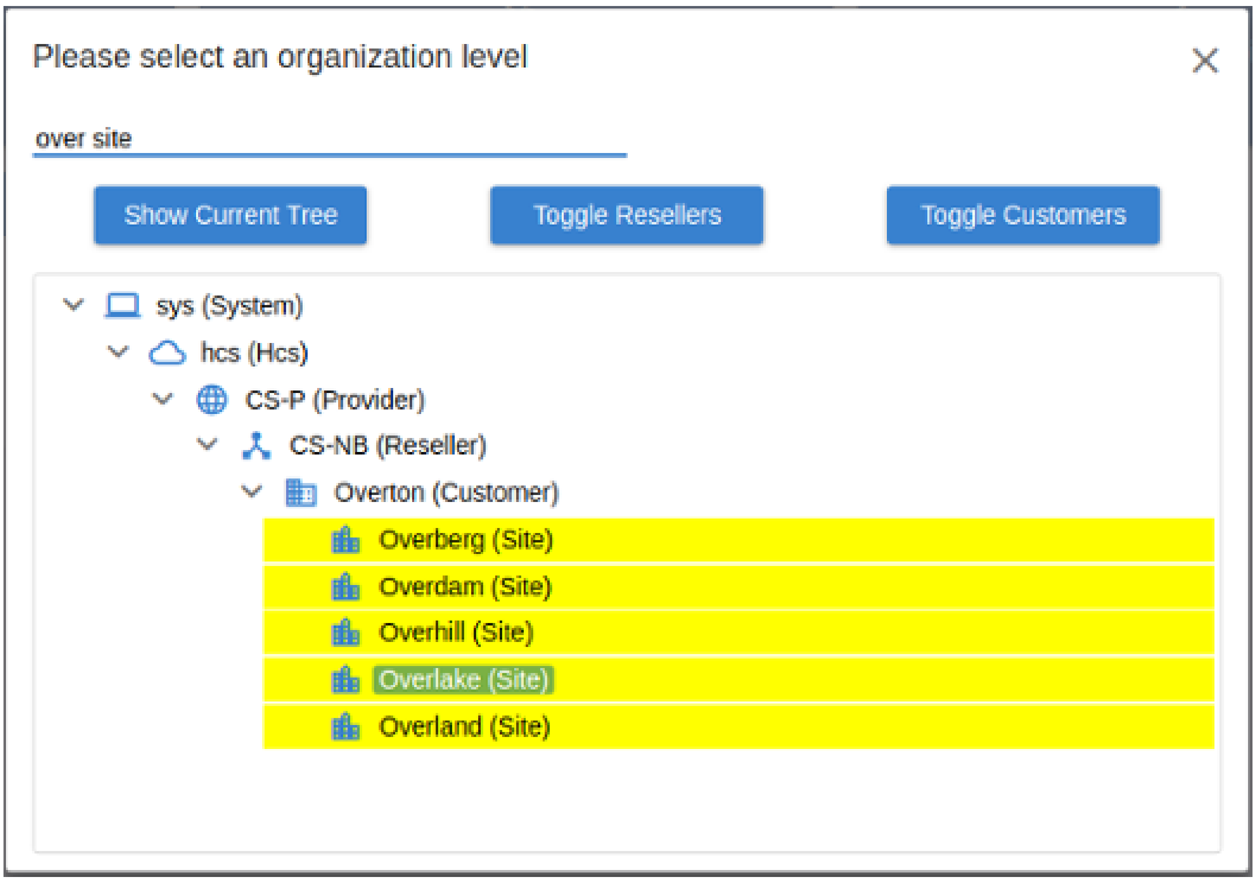
- If a form is submitted with missing required fields, a message “Please check that all fields are filled in:” is shown, followed by the list of missing fields.

Refer to *User Interface Controls* in Appendix A for a description of the controls and indicators used in the User Interface.

4.2. Organization Navigation

To access organization navigation from the top menu bar, click the **Organization Selection** button .

The Organization Selection widget provides a tree view of the organization as well as a number of features to navigate, filter and search the organization tree.



- Use the Expand (>) and Contract (V) tree view icons to show or hide elements under the selected tree.
- The **Filter** text box can be used to search for and filter organization labels by multiple phrases contained in the tree name (“contains” and logical AND of phrases)

  Filter results are highlighted in the tree.
- The **Toggle Resellers** and **Toggle Customers** buttons can be used to expand or contract the tree under each of these organization types.

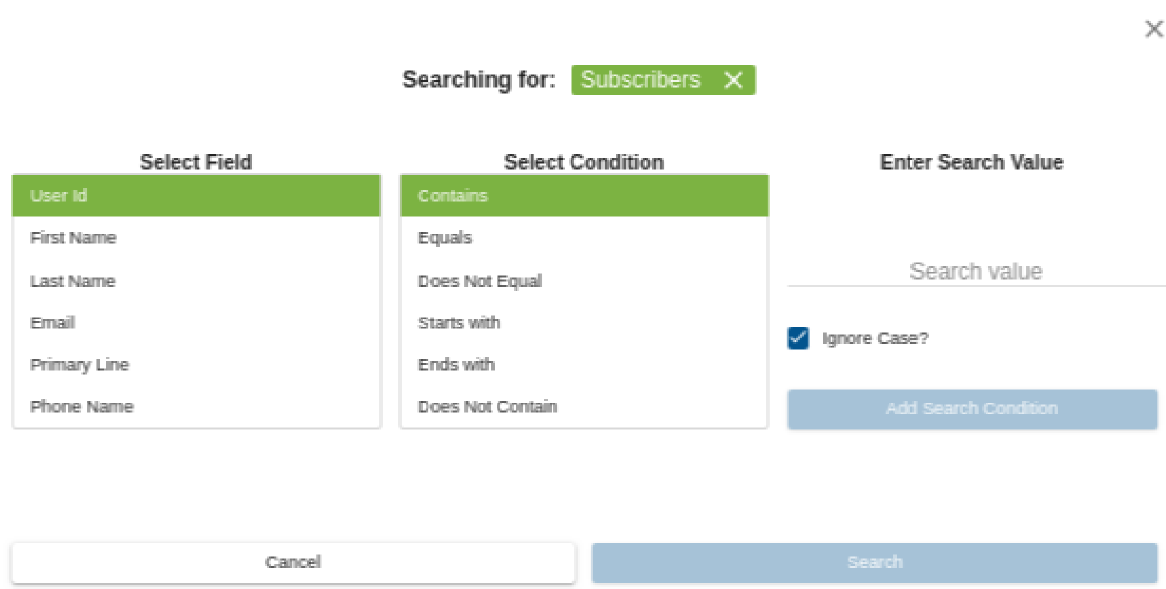
Note: If a node in the tree organization is selected and highlighted, nodes on the same level are hidden.

Use the **Show Entire Tree** button to expand the entire tree and to show any branches in the tree have been hidden

4.3. Carry Out a Search

1. Click the **Search** icon (magnifying glass) at the top-right of the top menu bar to open a pop-up interface with a **What would you like to search for?** drop-down box where you can choose a feature or service, such as:
    - Subscribers
    - Phones
    - Lines
    - Internal Number Inventory
    - Hunt Groups
    - Sites
    - Voicemail

   The options available are those 'allowed' for you by your administrator.
2. Upon selecting a drop-down item, you are presented with selection boxes for:
    - **Select Field**: the item's attributes, for example for **Subscriber** you can choose **User ID**, **Phone Name** and so on.
    - **Select Condition**: a match operator to be applied to a search value.



3. Type into the **Enter Search Value** box and choose string case sensitivity.
4. Select **Add Search Condition** to add the search criteria or additional criteria. An option is also available to remove an added condition before carrying out the search.
5. Click **Search** to carry out the search.

The search results list header will show the search condition that was carried out and the search also shows as column filters in the list.

Note:

- To search for rows with no value in a selected Column, choose any Filter Type option, select the **Ignore Case** check box and type `None` in the Value. This works for all list views except Subscriber
- The **Located At** column will only filter on the actual hierarchy name and not the displayed text next to it, for example "site", "customer", and so on.
- When sorting, a blank value appears as if the value was "None" in terms of alphabetical order
- With no search filter applied, sort will work on any column in the list view.
- With a search filter applied to a single column, sort will work on the search filtered column only.
- With a search filter applied to more than one column, the sort functionality will not work.
- The sorting of columns (ascending or descending) by clicking column headers while a search filter is applied, is only supported for Starts With search filters.
- Leading spaces on a field in the list view are dropped when rendering the list view, so this may affect the sort order.

4.4. Search in a Drop-Down List

4.4.1. Overview

The existing search results (using 'Contains' search criteria) on a drop-down is limited to a maximum of 1000 items.

A new paginated, drop-down pop-up form is now available that allows a user to search and paginate through the list search results (using 'Starts with' search criteria) in order to select a specific item. This is particularly useful when search results in a drop-down exceed 1000 items, or if you require a more granular filtering capability. Note that both types of drop-down searches are case insensitive.

The new pop-up form is available on various forms such as; Add or Modify Subscriber, Line Search, Reset UC Password, and so on.

4.4.2. Using the Drop-Down Search

The drop-down search capability works the same on all forms.

The following example illustrates use when searching for and adding a **Line** for a **Directory Number**:

1. Click the **Search** icon next to the **Directory Number** drop-down list ().
2. A pop-up table opens displaying all directory numbers at the selected hierarchy. Multiple pages may be presented depending on the quantity of directory numbers.
3. Search for, and then select the required Directory Number.
   - Click '<' or '>' to scroll through the pages.

- Enter a value in the **Filter (starts with)** text box. The pop-up form filters the form results on the entered text.

Note: You can also enter a new **Directory Number** in the **Filter (starts with)** text box.

4.5. Transactions List View

The Transaction list provides auditing information for each transaction, and can be accessed by:

- Choosing **Transactions** from the menu if available
- Clicking the **Transaction Log** button on the top menu bar .

By default, the **Transaction** list view (default menu **Administration Tools > Transaction**) shows all parent transactions in progress or executed. This is indicated in the **Status** column of the list. If transactions are running, click the **Refresh** button to update the **Status** field.

If you also want to see the child transactions (sub-transactions) in the list view, filter the list (see Transaction List Filtering), and select the **Include Sub Transactions** check box.

Select **Select to exclude system transactions in results** to show the transaction filter result list rows where the **Username** column with value `system` is *excluded*. By default, these are included in the filter result list.

For completed transactions, the **Status** column displays either **Success**, **Success With Async Failures**, or **Fail**. Failed transactions are highlighted in red by default, but this can be overridden in the Theme if required. An exclamation icon is also displayed next to the word **Fail**.

The **Detail** column provides additional details on the transaction if available. Note that the contents of the Detail column of transaction lists are not localized.

4.5.1. Transaction List Filtering

- Use the **Filter** button to open the pop up dialog with which you can filter the transaction list
- A transaction filter is a logical AND operation over a number of active search criteria related to column values that are entered in the **Filter** pop-up form
- Select **Include Sub Transactions** to also see sub-transactions in the list - the **Id** is displayed as indented and listed above the parent on an unsorted **Id** column.
- Use the **My Transactions** button to filter the transaction list to the current user
- A filter on the list of transactions is displayed on the list header as a link. Use the link to see or modify a filter.

Note: To clear a filter, click the **Clear filter** (red X) icon located next to the filter details at the center above the column headers.

Select a transaction from the list to see details of the transaction.

4.6. Features and Services Interfaces

The Business Administration Portal (BAP) allows you to easily view and manage the features or services located at any level of your organization.

Features and services that may be available on your side menu according to your role and that can be managed, include:

- Sites and Site Defaults (*Site Management*)
- Number Management, i.e. internal and external numbers (including number associations), and Lines (*Number Inventory*)
- Subscribers (Users) (*Subscribers*)
- Phones (*Phones*)
- Voicemail (*Voicemail*)
- Extension Mobility (*Extension Mobility*)
- Webex Teams (user and license management - *Webex Teams Dashboard*)
- Contact Center (agents, teams, skills and resource groups - *Contact Center Management*)
- Hunt Groups (members and groups - *Hunt Groups Dashboard*)
- Call Pickup Groups (members and groups - *Call Pickup Groups Dashboard*)

4.6.1. Manage a Feature or Service

Note: The Business Administration Portal (BAP) interface menus and functionality is defined as an interface type in VOSS-4-UC, along with the required role based access.

A default interface type is provided. Menus, features and functionality described here may not be available if your administrator has created a Business Admin Portal Custom Interface for you.

Field Display Policies for features on Business Admin Portal Custom Interface are available to manage the available panels on the detail feature dashboard.

Common feature management tasks such as listing, adding, deleting and editing can be carried out by navigating to the required organization selection and selecting the feature menu.

You may be prompted to select a organization level from the pop up. Otherwise, click **Organization Selection** and choose the organization level. See: *Organization Navigation*.

4.6.2. Menu Landing Page

Selecting the menu opens the **Menu Landing Page**.

The menu landing page dashboard provides an entry point to easily manage a feature or service.

The following types of controls may be available:

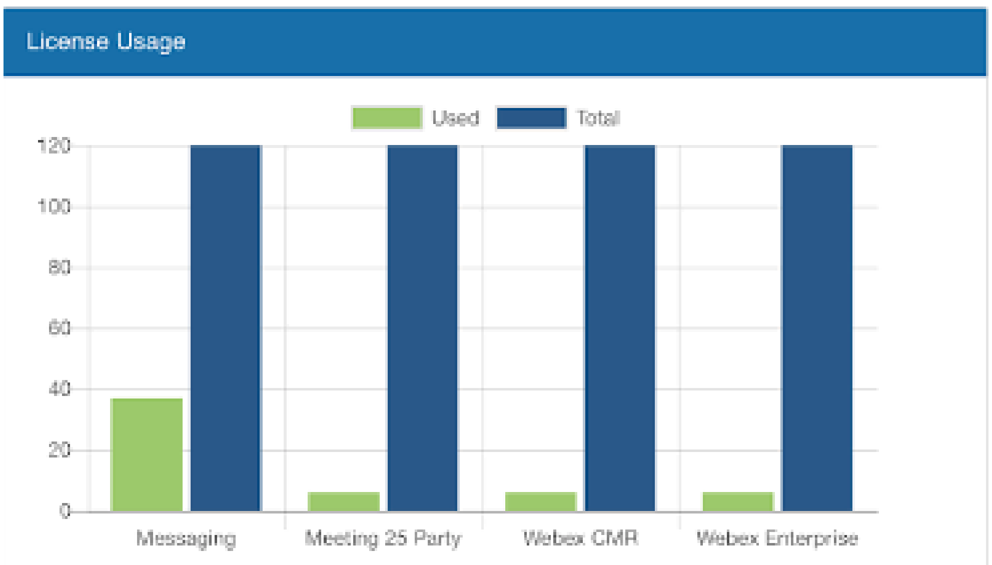
- **Counters** item counts, for example the number of Sites, Internal Inventory, External Inventory, Lines, Subscribers, etc. Click on the counter to access the list view for that item.

- **Quick Actions** - a group of links to carry out feature management.

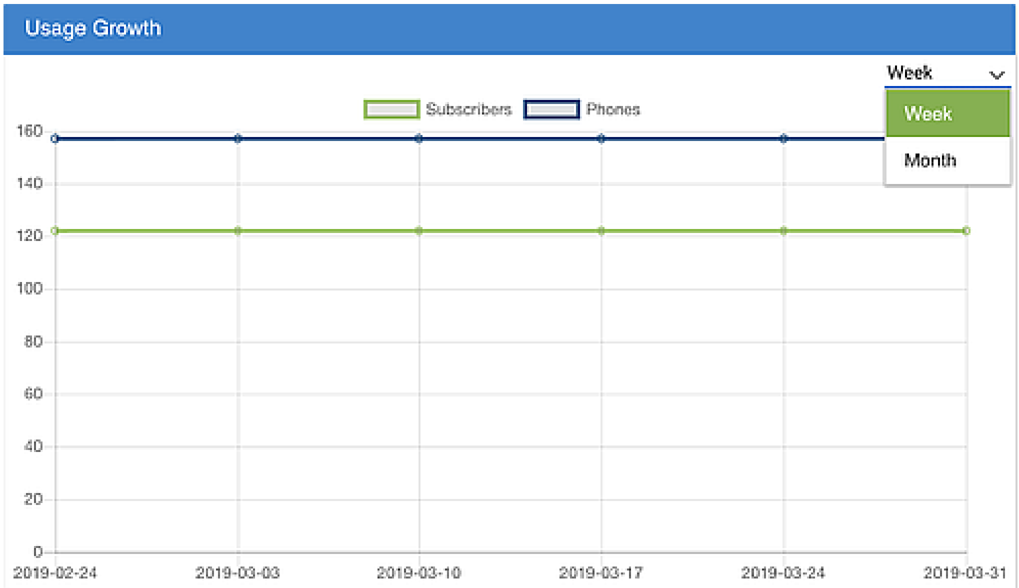
  Some feature details can be managed from a pop up launched from a Quick Action or panel link (for example, Delete). If available, the **View** hyperlink (for example View Sites, View Internal Inventory, and so on) also provides access to the list view for that item and its associated controls.

  Select a feature Quick Action or panel link to manage the feature item, for example Add, Delete, Edit.

- **Graphs and Charts** - only when data is available, visual displays provide you with a quick view of metrics of the feature, for example the **License Usage** for the **Webex teams** feature at an organization level.



  On Usage charts that illustrate time periods, for example **Usage Growth**, you can configure the chart to display in either weeks or months using a drop-down located in the top right-hand corner of the chart.



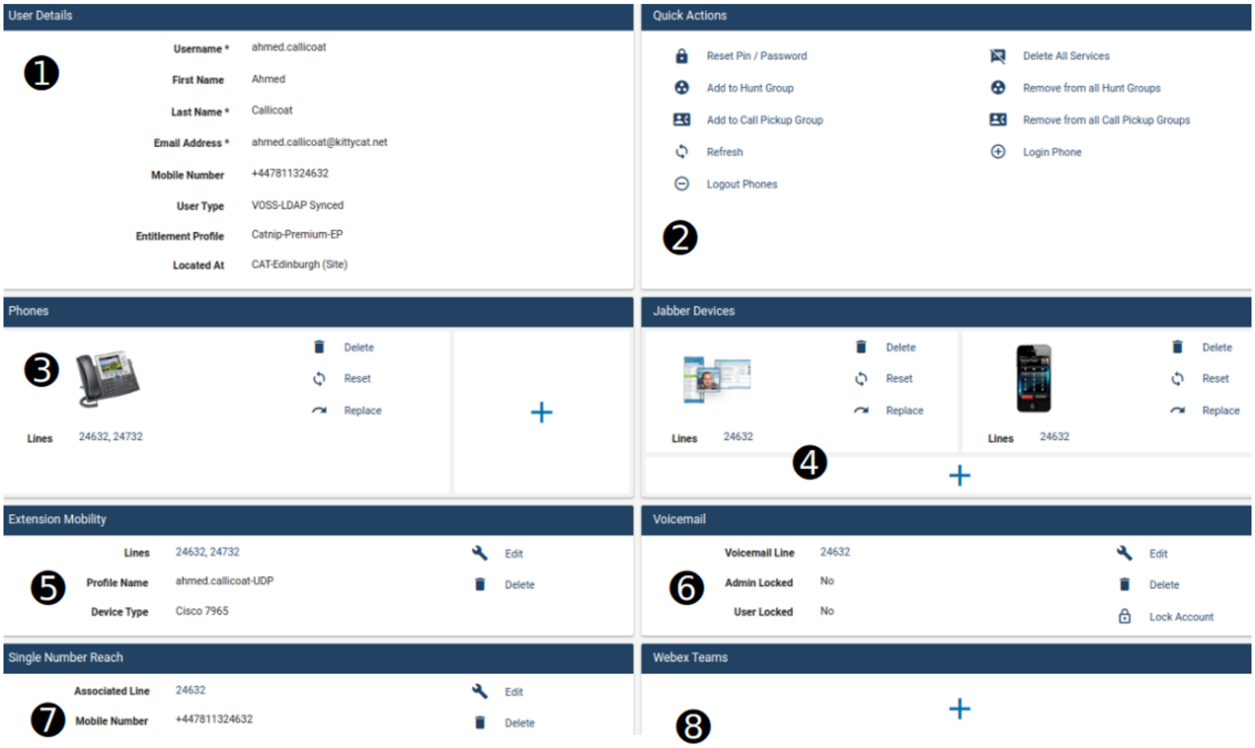
- For details on a *general* feature management, see: *User Interface Controls*.
- For details on a *specific* feature management, see: *Feature Detail Dashboard* and topics on the specific feature.
- For the **List View** of a feature, see: *List View*.

4.6.3. Feature Detail Dashboard

This topic describes the common controls and functionality that you may find when you select an individual instance row in the list view. To see details on a *specific* feature or device, refer to the topics for it.

The dashboard interface shows components of a feature in a *panel layout*, for example a panel layout of **Subscribers** services, with:

1. User Details
2. Quick Actions
3. Phones
4. Jabber Devices
5. Extension Mobility
6. Voicemail
7. Single Number Reach
8. Webex Teams



The available panels may vary according to the custom interface and Field Display Policy applied to your role. Component Device or Service management panels as well as a Quick Action panel with tasks to carry out on the instance are available to offer a single overview of the feature or device.

- When editing an *existing* instance:

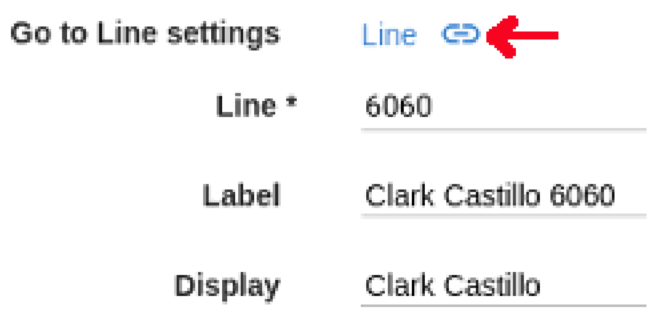
  The navigation header row shows the organization level and instance name as endpoint.

- When adding a *new* instance:

  The navigation header organization endpoint shows as /**New Record** until the instance is named and saved.

Some panels allow you to edit contents inside it, for example a subscriber's User Details. Other panels may be a table or a control that opens a pop-up input form. Hover over the input box or control on the form to see its tooltip if available. Fields on a form that cannot be edited, are greyed out and when you move off a mandatory input field without completing it, a "required" notification shows in red. Panels may also show hyperlinks to further properties so that you can for example easily inspect Line details when inspecting one or more lines on a Phone.

Some detail forms also show a hyperlink to further properties so that you can for example easily inspect Line details when inspecting a line on a Phone.



Note: When you add or update details on the **Feature Detail Dashboard**, or you are about to navigate away from it, a pop-up notice will remind you to save your changes before you navigate away from the feature detail dashboard.

Panels on the dashboard that allow you to add one or more devices or services may also show a "**+**".

Otherwise, where details allow for multiple properties, (for example **Lines** for a Phone), the panel control can be presented as a table with controls so that rows can be reordered (by dragging, dropping and saving), cloned or deleted.

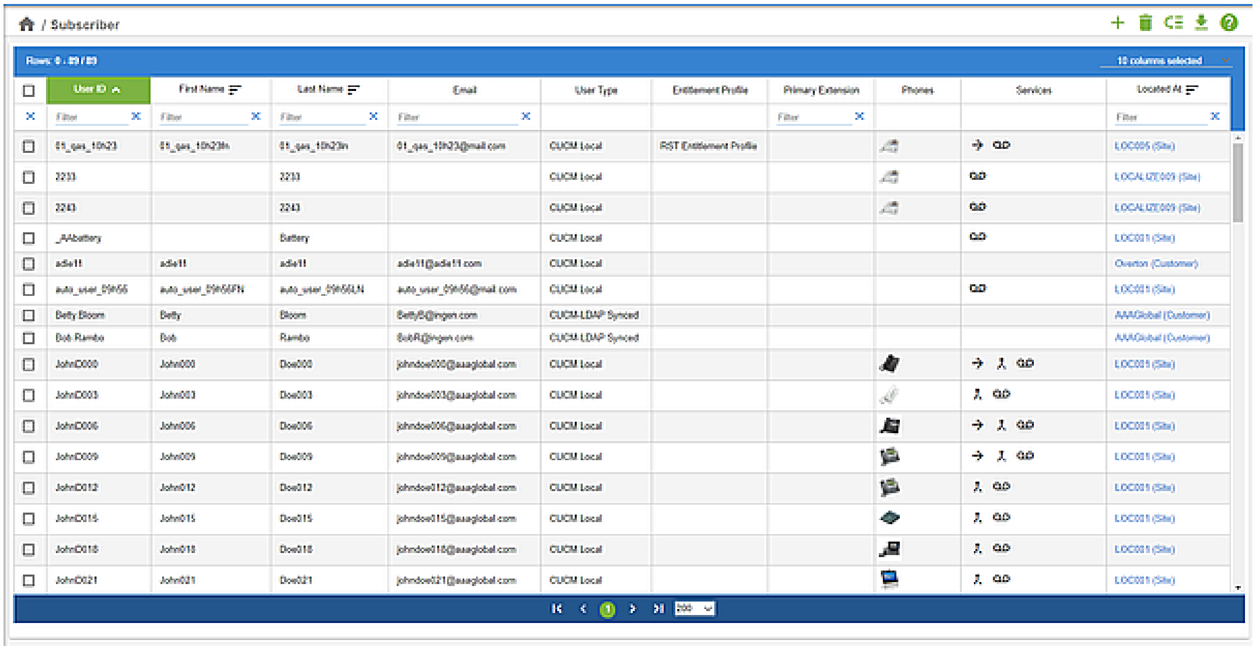
Lines

	Line	Label	Display	+
	88001006	82010006	82010006	
	88001007		Brad	

4.7. List View

4.7.1. Organization Level and Controls

The list view displays data according to your organization selection and feature.

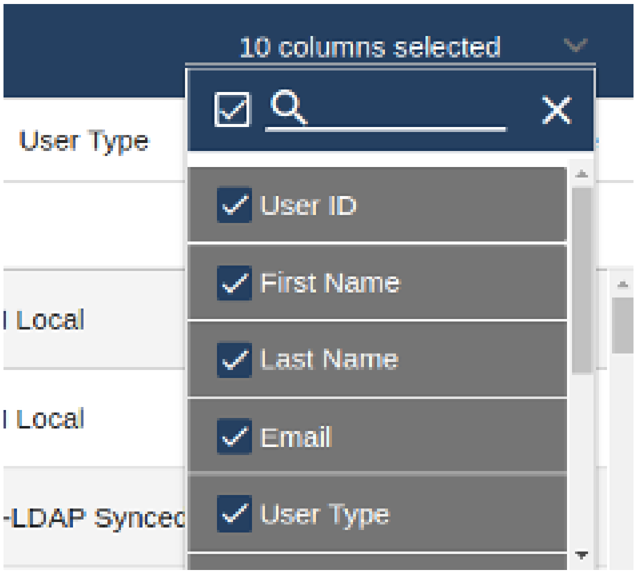


- The **Home** organization selection icon to navigate to the home page.
- The *path* to and name of currently selected feature. You can also use this path to navigate the organization level.
- According to the *allowed actions* on the feature, additional icons are available on the top list view bar to obtain information or to manage the feature or service, for example:
  - Add: 
  - Delete: 
  - Move: 
  - Export: 
  - Help: 

4.7.2. Viewing, Paging and Sorting Lists

The list header:

- shows the number of displayed rows of total rows
- provides a *n columns selected* control to show or hide columns



The selected columns are retained for a user, even between sessions.

- columns can be resized by dragging the column divider

The list footer provides list page navigation controls and a drop-down to set the number of displayed rows per page. Up to 2000 items can be shown on a single page of a list, but since this can take some time, a warning is raised if a value higher than 200 is selected.

By default, the data in the first column is sorted in descending order, as indicated by the column highlight and order direction chevron (“^”).

Columns that also show the sort icon, can be sorted.

4.7.3. Icons in Columns

Where columns contain device or service references, these are indicated as icons.

- Hover over the icon to see its details.
- Click the icon to edit it directly.

4.7.4. Located At in Columns

If a **Located At** columns is available, organizational level location name and type (for example, “Overton (Customer)”) is shown as a hyperlink that can be used to show the list items for the selected organizational level. This organizational level will then also be shown above the list view.

4.8. Saving Searches

1. Once a filter is saved, a table header above the header rows displays the filter with a proposed name and a “Save this filter” hyperlink, for example:

```
Filter:  Device Name contains 'BAT'(Save this filter)
```

Select the **Save this filter** link to save this filter as a saved search that will then be available on the **Saved Searches** panel on the landing page.

Note: Additional filter options (such as "Start with" and "Equals" instead of only "Contains") are available when using the **Search** control - see *Carry Out a Search*.

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2. Rows that match a filter on the organizational level are displayed per page, up to the paging number in the footer row drop-down of the page.

Note: If there is an active filtered list, column sort can only be applied to a the filtered column.

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5 Menu Items

5.1. Site Management

For common details on managing a feature, see: *Manage a Feature or Service* and *Feature Detail Dashboard*.

The **Site Management** landing page provides an overview of the items and tasks available at the **Organization Selection** level:

- **Counter** that indicates the number of **Sites** at the selected level.
- **Quick Actions** that provide the following hyperlinks:
  - View Sites - Also provides an option to add and delete sites.
  - *Site Defaults* - Lists all site default values available at the selected level.

5.1.1. Site Defaults

Site Defaults provide the default values for many tasks undertaken while onboarding, and are not limited to the Subscriber Management tasks. When a site is created, a site defaults instance is created on that site with the same name as the site. Many of the attributes in this data model contain default values when this instance is created.

When a Cisco HCS site dial plan is created, the site defaults on that site are updated. The updated defaults are dial plan-related attributes that are affected by the site dial plan that was deployed. If these specific site defaults attributes already had values before the site dial plan was deployed, they are overwritten. When the site dial plan is removed, these same attributes are reset (set to empty string) in the site defaults.

Modify Site Defaults

Access the relevant view, add, or edit form as described in *Features and Services Interfaces*.

Take note of the following additional information for the fields on the tabs below:

General Defaults Tab

Field	Remarks
Name	Should be the same name as the site. Only one instance of site defaults exists for a site.
Default Network Locale	Contains a definition of the tones and cadences that the phones and gateways use at the specific location.
Default User Locale	Identifies a set of detailed information to support users at the specific location, including language and font.
Default CUC Subscriber	Populated by the Voice Mail Template workflow when a Voice Mail pilot number is associated with a site. Likewise, the field is reset (Empty) when the Voice Mail pilot number is disassociated from a site.
Default CUC Phone System	Populated by the Voice Mail workflow when a Voice Mail pilot number is associated with a site. Likewise, the field is reset (Empty) when the Voice Mail pilot number is disassociated from a site.

Device Defaults Tab

Field	Remarks
Default CUCM Phone Line E164 Mask	
Default CUCM Device Profile Line E164 Mask	These E164 mask values will be applied as a default when devices have not been configured with static values.
Default CUCM Remote Destination Profile Line E164 Mask	

CUC Defaults Tab

Option	Default Value
Default CUC Phone System	Populated by the Voice Mail workflow when a Voice Mail pilot number is associated with a site. Likewise, the field is reset (empty) when the Voice Mail pilot number is disassociated from a site.
Default CUC Subscriber Template	Populated by the Voice Mail workflow when a Voice Mail pilot number is associated with a site. Likewise, the field is reset (empty) when the Voice Mail pilot number is disassociated from a site.
Default CUC TimeZone	You can manually enter a valid timezone index value in this field, for example 035 for (GMT-05:00) Eastern Time (US and Canada). Note that the code entered must already be installed on the Cisco Unity Connection server associated to this site.
Default CUC Language	You can manually enter a valid Locale ID (LCID) value for the language in this field, for example 1036 for French - France. Note that the code entered must already be installed on the Cisco Unity Connection server associated to this site.

5.2. Number Inventory

For common details on managing a feature, see: *Manage a Feature or Service* and *Feature Detail Dashboard*.

The **Number Inventory** landing page provides an overview of the items and tasks available at the **Organization Selection** level:

- **Counters** that indicate the number of items located at the selected level, for example: **Internal Inventory**, **Available Internal Inventory**, **External Inventory**, and **Lines**.

  Click the appropriate counter to open the list view for that item.

- **Quick Actions** that provide the following hyperlinks:
  - **View Internal Inventory** - List all internal numbers available at the selected level (customer or site). See also **View Lines** / **Line Usage** below.
  - **Add Internal Inventory** - Allows you to add internal numbers.
  - **View External Directory** - List all external numbers available at the selected level (customer or site)
  - **Add External Directory** - Define external numbers available to users.
    - The **Starting Number** * must be prefixed with a '+', followed by the country code for the selected country, and then completed by the external number itself.
    - The format of the **Ending Number** is the same as the **Starting Number** and is optional. If not provided, the single number specified as the **Starting Number** is added. If provided, the range of external numbers is added: Starting Number to Ending Number inclusive. A maximum of 1000 numbers can be added at a time.
    - The **Number Type** is informational only, and may be hidden.
  - **View Lines** - Click a specific line to view the line details.

    The **Line Usage** panel is a central point that shows where the line is used throughout the system, including hyperlinks to those areas, such as:
    - Subscribers
    - Phones
    - Extension Mobility Profiles
    - Voicemail Boxes
    - Phones
    - Hunt Pilot
    - Call Pickup Group

Note: If the same number is shared by multiple devices/services of the same type, using different partitions, only the first 10 instances will be displayed.

  - **Associate Internal/External Inventory (One-to-many)** - If you create the association at a site, you can mix customer-level DNs and external (E.164) numbers with site-level DNs and E.164 numbers.

You can optionally specify a primary E.164 number to associate with the DN. This step can be useful when you perform a DN-to-E.164 translation (for example, when provisioning translation rules for LBO gateways) and the DN is associated to more than one E.164 presentation.

Note: You cannot associate numbers if Number Management has been disabled for the customer. Only DNs or E.164 numbers that are not currently associated are available for association.

- **E164 Range** * - The range values you select map to the mask value when the association translation pattern is created. For example, when 1 is selected all external numbers and directory numbers are listed, when 10 is selected, all external numbers and directory numbers that end in 0 are listed. The mask affects all digits 0 to 9, so you can't start the mask on a nonzero number. Likewise, when 100 is selected, the external numbers and directory numbers end in two zeros. This pattern results in a mask of XX.
- **E164 Number** * - Choose the starting number of the range of E.164 numbers from the drop-down menu. For a customer-level association, only customer-level E.164 numbers are available. For a site-level configuration, both customer-level and site-level E.164 numbers are available.
- **Primary E164** - The primary E.164 number to associate with the DN. Make sure the E.164 number you enter starts with '+' and falls within the range you specified in the **E164 Range** drop-down.

– **Associate Internal/External Inventory (Many-to-many)** - These associations create Direct Dial Inward (DDI) associations so that incoming PSTN numbers are routed to directory numbers. If you create the association at a site, you can mix customer-level DNs and external (E164) numbers with site-level DNs and E164 numbers.

- **Range** - The range values you select map to the mask value when the association translation pattern is created. For example, when 1 is selected all external numbers and directory numbers are listed, when 10 is selected, all external numbers and directory numbers that end in 0 are listed. The mask affects all digits 0 to 9, so you can't start the mask on a nonzero number. Likewise, when 100 is selected, the external numbers and directory numbers end in two zeros. This pattern results in a mask of XX.
- **E164 Number** * - Choose the starting number of the range of E.164 numbers from the drop-down menu. For a customer-level association, only customer-level E.164 numbers are available. For a site-level configuration, both customer-level and site-level E.164 numbers are available.
- **DN Number** * - Choose the starting extension number from the drop-down menu. Note that you cannot associate extension numbers that begin with the prefix '*' (asterisk) or '#' (hash).

5.3. Subscribers

For common details on managing a feature, see: *Manage a Feature or Service* and *Feature Detail Dashboard*.

The **Subscribers** landing page provides an overview of the items and tasks available at the **Organization Selection** level:

- **Counters** that indicate the number of subscribers and services at the selected level, for example: **Subscribers**, **End Users**, **Phones**, **Extension Mobility Profiles**, **Voicemail Boxes**, and **Webex Teams**.

  Click the appropriate counter to open the list view for that item.

- **Quick Actions** that provide the following default hyperlinks (dependent on how your administrator has configured your system):
  - **View All Subscribers** - Opens a list view showing all subscribers at the selected level. Click a specific subscriber to edit the subscriber and to view their detail dashboard. See *Feature Detail Dashboard* for general information about detail dashboards.

    When editing a subscriber, panels for services are shown. New services can be added by clicking "+" on a panel.

    Certain fields on selected services are pre-populated based on the selected **Quick Add Group** and other configuration templates selected on the Subscriber Add panel, e.g. 'Default Webex Teams User Template'.
  - **Add Subscriber** - Opens a panel to add a subscriber.
    - The subscriber is added with the details entered on the **Subscriber Detail** panel. On the panel, the following minimal details can be added: mobile number, optionally a phone name and one line.
    - A check box called **Send welcome email** is displayed when you type in a user email address *only if* the following configuration has been made and is enabled:
      - An SMTP server has been set up (refer to the SMTP server topic in the Core Feature Guide)
      - The **Allow email to be sent to user after Quick Add Subscriber** on **Email** tab of the **Global Settings** is set to **Yes** for the relevant hierarchy. (refer to the Global Settings topic in the Core Feature Guide)

      A welcome email is then sent to the subscriber email address using the configured "Quick Add Subscriber" HTML email template that applies to the hierarchy. (refer to the Email topic in the Core Feature Guide)
    - Features and services assigned to the subscriber by the selected **Subscriber Profile** see *Subscriber Profiles*.
  - **Bulk Add Subscribers** - Click this hyperlink to bulk add more than one subscriber from a single page.

    Note: The **Default** subscriber profile (if present) can only be deleted by a System Administrator at sys (System) level .

    The following input fields are exposed for **Bulk Add Subscribers**:
    - **User ID**
    - **First Name**
    - **Last Name**
    - **Email Address**
    - **Mobile Number**
    - **Profile** : the selected subscriber profile determines features and services available during the bulk add.

    Values for the following are automatically generated or assigned:
    - Phone Name: generated - format is `BAT<random number>`.

      Generate Phone Name = True

* Line - assigned as next available and unused number from the internal number inventory.

  Use next available line = True

– **Move Subscribers** (see *Move Subscriber*) - Provides a customer administrator (or higher) with the ability to move a subscriber from customer level to a site, as well as from one site to a different site under the same customer. Moving the subscriber from one site to another site on a different Unified CM cluster and CUCxn cluster is also supported.

5.3.1. Subscriber Profiles

A subscriber profile allows for quick provisioning of subscribers with the same (or similar) set of features and services.

Click this hyperlink to open the **Subscriber Profiles** list view showing the subscriber profiles available at the selected hierarchy level.

Subscriber profiles can be created by an administrator using either the Administration GUI or the Business Admin Portal (BAP).

Created profiles will be available in the BAP **Subscriber Profile** drop-down at that hierarchy level (and below) only, and can be assigned to a subscriber when the subscriber is added using the **Subscriber Detail** panel.

See "Subscriber Profiles" in the Core Feature Guide for more details about the available options and fields.

Considerations when a service is enabled in the Subscriber Profile:

- Extension Mobility - The device types available in the drop-down, are determined by the extension mobility profile template, which in turn determines the device configuration settings. The **Line** drop-down default is the first subscriber line. The **Line Label** and **Line Display** are derived from the subscriber.

  Only one device profile can be added for extension mobility in VOSS-4-UC. If a subscriber is associated with more than one extension mobility profile on the Unified CM, and you sync with VOSS-4-UC, only the first extension mobility profile is displayed on the **Subscribers** list view in VOSS-4-UC.

- Voicemail - If enabled by the subscriber profile, and when adding this service, the subscriber can be added as a voicemail user. See also *Voicemail*.

- Single Number Reach - You cannot add more than one remote destination profile for single number reach.

  If a mobile number has already been configured for a subscriber, it is used to pre-populate the **Mobile Number** field when adding Single Number Reach (SNR) for that subscriber. You can enter a different mobile number for SNR if required.

- Webex Teams - If enabled by the subscriber profile, and when adding this service, the subscriber can be added as a webex teams user. See also *Webex Teams Dashboard*.

- Contact Center Express - If enabled by the subscriber profile, and when adding this service, a panel shows the subscriber default extension and depending on the selected controlled device type, (phone or extension mobility) the phone or device profile for the subscriber. An **Agent Profile** can be selected. For details, see *Contact Center Management*.

5.4. Move Subscriber

This feature allows a customer administrator (or higher) to move a subscriber:

- from provider level to a site (must be logged in as provider administrator)
- from customer level to a site
- from one site to a different site under the same customer
- from one site to another site on a different Unified CM cluster and CUCxn cluster

This is done using the **Move Subscriber** form (default menu **Subscriber Management > Move Subscriber**) as follows:

5.4.1. Subscriber Configuration

- When moving a subscriber, the subscriber, phones, device profiles, SNR, voicemail, and VOSS-4-UC data are processed in the move.
- When moving a subscriber to a different Unified CM cluster, you need to select a **New CUC User Template**.
- The subscriber will be updated with a new primary extension where appropriate. The services associated to the selected subscriber that will be moved with the subscriber are shown on the **Existing Services** card (see below).
- The subscriber role at the 'move to' hierarchy is selectable via a drop-down.
- A device pool at the hierarchy is mandatory. You can select either the default device pool at the 'move to' hierarchy or choose a different device pool from a drop-down list.
- An optional user template `MoveUpdateUserCustom_CFT` can be selected to make custom subscriber updates. You can clone and customize this template if required. The available user templates are listed on the **Configuration Templates** form (default menu **Customizations > Configuration Templates**).

  If a user template is *not selected*, VOSS-4-UC will automatically fall back to the user template specified in the Site Defaults doc.

5.4.2. Desk Phone Configuration

- Desk phones can either remain at the old site or move with the subscriber. Existing softphone devices, such as Jabber or Dual Mode devices will always be moved, but can be configured by the Jabber/Dual Mode configuration templates (see *Jabber/Dual-Mode Device Configuration*).
- The default operation is to move all phones, i.e. **Move Desk Phones** check box = **Selected**. If the desk phones are not moved, they remain at the original site and are disassociated from the subscriber.
- A new phone can be created at the 'move to' hierarchy by selecting the **Create New Phone** check box.
  - When also selecting **Use Existing Phone Configuration**, the existing phone configuration can be used as a template, and the **Phone Configuration Source**, **Desk Phone Profile** and **Phone Name** can be selected from drop-down lists.
    - The **Phone Configuration Source** drop-down displays a list of the subscriber's existing phones. If an existing phone is selected, the new phone will be created using the configuration of the existing phone.

    * The **Desk Phone Profile**, which defines the phone type (and associated configurations), and the **Phone Name** available in the drop-downs are those displayed on the **Phone Configuration Mapping** form (default menu **Customizations > Phone Configuration Mapping**).

      Default phone configuration mappings are available per hierarchy and are used at the selected hierarchy and below.

      See "Configuration Mapping Files" in the Core Feature Guide for more details.

  - For new phones, when *not* selecting **Use Existing Phone Configuration**, the user should choose:

    * The **Desk Phone Profile**, which defines the phone type (and associated configurations),and the **Phone Name** available in the drop-downs are those displayed on the **Phone Configuration Mapping** form (default menu **Customizations > Phone Configuration Mapping**).

    * The **Desk Phone Feature Template** is available for the selection of a template from the first Phone Mapping Configuration found up the hierarchy tree.

      The Move Subscriber process applies the newly created phone with the desk phone profile and then on top of it the details from the chosen Feature Template.

5.4.3. Jabber/Dual-Mode Device Configuration

- Jabber and Dual Mode devices are automatically moved with the Subscriber.
- The device configuration is derived from the device profile selected in the associated **Profile** drop-down, i.e. Android, CSF, Tablet, iPhone, Carrier Integrated Mobile and CTI Remote Device. The default device profiles are found on the **Phone Mapping [Default]** form (default menu **Customizations > Phone Configuration Mapping**).
- You can clone and save a profile if required, and customize the relevant settings, e.g. **Basic Phone CFT** in order to apply different settings to the device.

See "Configuration Mapping Files" in the Core Feature Guide for more details.

5.4.4. Line Configuration

Creating Lines

When moving to another Unified CM cluster, new lines must be defined.

When a new line is defined, a **Line Template** can be selected for the new line. One line template may apply to all lines.

The CSS's for the new lines can be defined, and a configuration template `MoveUpdateLineCustom_CFT` is available to make custom line updates.

The system performs a check to ensure that the first line across devices is common. All new lines created (or existing lines moved) in the move, will be assigned to SNR. For example, if a Subscriber with 3 lines and a Phone, SoftPhone, DeviceProfile, SNR is moved, all these services will be associated with the 3 lines. The only exception to this is for Voicemail, where the first line is always selected as the Voicemail line.

Moving Lines

Important:

- **Moving of lines functionality is neither exposed nor supported by VOSS-4-UC**. If you want to assume the risk of moving lines, contact VOSS support to expose the move line functionality.
- Lines can only be moved if your system is using a type 4 dial plan, and only *if the move is on the same cluster*. Make sure that the customer dial plan supports moving of lines between sites before attempting to move the line.
- SLC based dial plans (types 1, 2 and 3) do not support moving of lines between sites.

If the move is between sites hosted on the same Unified CM cluster, the subscriber data is moved to the new hierarchy and updated as above. It is assumed that the CUCxn (if used) will remain.

If the move is between different Unified CM clusters, the specific move data as defined above is re-provisioned on the new cluster and deleted on the original cluster, except for the Unified CM subscriber. When the Unified CM subscriber is local, the old subscriber is removed.

In the case of an LDAP user, the VOSS-4-UC subscriber is purged. The user is removed from the `device/cucm/User` model of the source Unified CM in VOSS-4-UC. The home cluster flag is maintained such that it is only set to true on the Unified CM cluster hosting the subscriber, even if the subscriber exists on other Unified CM clusters.

When moving between clusters, the CUCxn server can be retained. In this case, the model instances are moved. In the case that the CUCxn server changes, a new CUCxn subscriber is created against a chosen subscriber template. This will not copy custom settings for the CUCxn subscriber or any recorded prompts and messages.

5.4.5. Caveats

- The first line on all devices must be common prior to the move. Replacing lines creates the same line layout on all devices.
- When moving cross cluster, the Unified CM cluster is changed. The CUCxn cluster may be retained or changed, based on the new site NDL. If the CUCxn cluster is changed, only basic voicemail is created - user customized configuration, as well as prompts and messages are not moved to the new CUCxn cluster.
- CUCxn cluster moves are only supported where the Unified CM cluster changes.

5.4.6. Existing Services

The following existing services associated to a subscriber will also be moved:

- phones (and associated lines)
- devices
- device profiles
- single number reach
- voicemail

- webex
- webex teams
- contact center

5.5. Phones

For common details on managing a feature, see: *Manage a Feature or Service* and *Feature Detail Dashboard*.

The **Phones** landing page provides an overview of the items and tasks available at the **Organization Selection** level:

- **Counters** that indicate the number of **Phones** and **Unassigned Phones** at the selected level.
- **Quick Actions** that provide the following hyperlinks:
  - **View Phones** - Opens a list view showing all phones located at the selected level. Information for each phone is provided under the following headings; Device Name, Description, Product, Owner User ID, Phone Button Template, Softkey Template, Device Pool, and Location.

    Click on a phone to open the detail dashboard for that specific phone.

    See *Feature Detail Dashboard* for general information about detail dashboard.
  - **Add Phone**
    - Device Type - Available device types are determined by the Phone Template.
    - Phone Description - text will override description in the phone template, or can be combined with phone template data using a macro in the template. Description values could for example include the phone extension.
    - Phone Name - The phone name must include the correct prefix for the specified device type, for instance:
      - Android = BOT
      - Carrier Integrated Mobile = CIM
      - Cisco 69XX, 78XX and 88XX = SEP
      - CTI Remote Device = CTI
      - iPhone = TCT
      - Jabber = CSF or TAB.
    - Phone Template - Determines the available phone types and associated default settings when adding a phone. Additional custom settings are populated using Configuration template values. The **Default** option is always selected unless a different phone template is chosen from the drop-down list.

      Phone settings configured by the phone template and configuration templates can be viewed and edited on the detail dashboard for the phone.
    - Standalone Phone - Select to add a standalone phone only (not associated to a subscriber).
    - Username - If the **Standalone Phone** check box is clear, you must choose a subscriber (username) from the drop-down list.

    Optionally, complete the following fields on the **Lines** panel:

- Line Template - This template configures device attributes from values in the site default that apply to the organization selection.

5.6. Voicemail

For common details on managing a feature, see: *Manage a Feature or Service* and *Feature Detail Dashboard*.

The **Voicemail** landing page provides an overview of the items and tasks available at the **Organization Selection** level:

- **Counters** that indicate the number of **Voicemail Boxes** at the selected level.
- **Quick Actions** that provide hyperlinks allowing the administrator to view and manage voicemail boxes:
  - **View Voicemail Boxes** - Opens a list view showing all Voicemail Boxes located at the selected level.
  - **Add Voicemail Box** - A Voicemail Box is added from the Voicemail Detail Dashboard, which is opened by clicking either this hyperlink **or** by clicking **Add** on the list view.
    - **Unified Messaging Account** - One per subscriber can be added by choosing a service from the **Unified Messaging Service** drop-down.

5.7. Unified Messaging Account

Unified Messaging (Single Inbox) is a Cisco Unity Connection service that enables users to have a single inbox in their e-mail client that is used for their e-mail as well as their Voicemail.

Note:

- VOSS-4-UC only supports either the Exchange or Office 365 Unified Messaging Service, MeetingPlace is **not** supported.
- Only **one** Unified Messaging Account (Single Inbox) per Subscriber can be added by VOSS-4-UC. However, if an existing Cisco Unity Connection subscriber is imported into VOSS-4-UC already has more than one account, then all associated services are imported, and will be available in VOSS-4-UC.
- Administrators must manually sync VOSS-4-UC with Cisco Unity Connection to obtain the required Unified Messaging Services. A manual sync must also be done whenever changes are made to the Cisco Unity Connection server.
- VOSS-4-UC does not automatically integrate Cisco Unity Connection Servers with Microsoft Exchange, the details for that process can be found here: https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/11x/unified_messaging/b_11xcucumgx.html

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The following Cisco Unity Connection settings set to 'True' (On), are included in Unified Messaging:

- EmailAddressUseCorp - Use Corporate Email Address
- EnableMailboxSynchCapability - Synchronize Connection and Exchange Mailboxes (Single Inbox)

The following two models were added to the Model Type List **CUCXN Overbuild Resources** for Unified Messaging:

- device/cuc/ExternalService

- device/cuc/ExternalServiceAccount (the actual Cisco Unity Connection User's model which contains their Unified Messaging Account)

VOSS-4-UC also added a new Model Type list **CUCXN Unified Messaging Services**, and added the same two Models: device/cuc/ExternalService and device/cuc/ExternalServiceAccount.

5.8. Extension Mobility

For common details on managing a feature, see: *Manage a Feature or Service* and *Feature Detail Dashboard*.

The **Extension Mobility** landing page provides an overview of the items and tasks available at the **Organization Selection** level:

- A **Counter** that indicates the number of **Extension Mobility Profiles** at the selected level.
- **Quick Actions** that provide hyperlinks allowing the administrator to view and manage extension mobilty profiles:
  - **View Extension Mobility Profiles** - Opens a list view showing all extension mobility profiles located at the selected level.
  - **Add Extension Mobility Profile** - An extension mobility profile is added from the **Extension Mobility** dashboard, by clicking either this hyperlink *or* by clicking **Add** on the list view.

5.9. Webex Teams Dashboard

For common details on managing a feature, see: *Manage a Feature or Service* and *Feature Detail Dashboard*.

Webex Teams is a Cloud-Based Business Collaboration Service, which allows employees to message, meet, and call instantly in order to strengthen relationships and increase productivity. It combines mobile devices and other communications tools to provide instant communications and live meetings to ensure a professional and effective collaboration experience.

Webex Teams main functionality includes:

- Messaging: Business messaging allows users to prepare, share, and repeat content. It facilitates one-on-one or team messaging facilities in virtual rooms.
- Meeting: Connect teams and meet customers easily with the added benefits of messaging and content sharing before, during, and after the meeting.
- Call: The service enables voice and video communications via mobile, desktop, and room-based devices. Connect your existing PSTN1 services to Webex Teams to enjoy one-touch directory dialing and join meetings from anywhere on any device. Mobile users get features such as single number reach, single voicemail service, video services, and the ability to seamlessly move between devices during a call.

The **Webex Teams Dashboard** provides an overview of the items and tasks available at the **Organization Selection** level:

- A **Counter** that indicates the number of **Users**.
- **Quick Actions** that provide the following hyperlinks:
  - **View Users** (including manage)

    Add or manage a user's:

        * User account details
        * Services
        * Roles

    The Webex Teams User fields, **Login Enabled** and **Invite Pending** check boxes are read-only and can not be edited.

    Webex users can also be managed from the *Subscribers*.

  - **Sync Users** and **Sync Licenses**

5.10. Contact Center Management

The Cisco Unified Contact Center Express (UCCX) feature in VOSS-4-UC allows administrators to manage Agents and related configuration from a single pane of glass.

In addition to managing these configuration elements directly, the VOSS-4-UC Day 2 features also provide seamless UCCX management.

As a part of Contact Center management, VOSS-4-UC provides the a number of interfaces. The associated Contact Center device models that will also be synced to the Contact Center server (UCCX device) upon a data sync.

- UCCX Server Management:
- Day 2 Integration:
  - When a UCCX device has been added to an organization level and Entitlement Profiles have been added that have Contact Center entitlement enabled, subscribers can be configured as Contact Center Agents.

    Further management can be carried out in VOSS-4-UC.
- Direct Management:
  - **Agents**
  - **Skills**
  - **Teams**
  - **Resource Group**
  - **Contact Service Queues**
- Agent Device association with Unified CM Application users

  Administrators can specify the agent's controlled device via:
  - Subscriber
  - Direct Agent management
- A number of interfaces simplify Contact Center management:
  - **Agent Profiles**
  - **Re-skilling**: skills and their competency levels can easily be managed in bulk (add, remove) by means of a set of side-by-side transfer boxes that are available for:
    * Agents

        * Teams
        * Resource Groups

5.11. Hunt Groups Dashboard

For common details on managing a feature, see: *Manage a Feature or Service* and *Feature Detail Dashboard*.

The **Hunt Groups Dashboard** provides an overview of the items and tasks available at the **Organization Selection** level:

- **Counters** that indicate the number of **Hunt Groups** and **Hunt Pilots**.
- **Quick Actions** that provide the following hyperlinks:
    - **View Hunt Groups** - A list view with controls to manage selected hunt groups.
    - **Add Hunt Group** - A Hunt Group is added or edited on the Hunt Group Details Dashboard on various panels.
        * **Call Behaviour**. The Hunt Pilot Pattern consists of a string of digits (an address) and a set of associated digit manipulations that route calls to a hunt list. Hunt pilots provide flexibility in network design. They work in conjunction with route filters and hunt lists to direct calls to specific devices and to include, exclude, or modify specific digit patterns.
        * **Membership**. The **Line Group Name** is a drop-down list, which allows you to choose an existing line group. The drop-down list displays all existing line groups available at the site.

          This field can also be used as a free text field. To create a new line group, enter a name in this field.

          Make sure that each line group name is unique to the route plan.

          Best practice is to use concise and descriptive names for your line groups. The CompanynameLocationGroup format usually provides a sufficient level of detail and is short enough to enable you to quickly and easily identify a line group.

5.12. Call Pickup Groups Dashboard

For common details on managing a feature, see: *Manage a Feature or Service* and *Feature Detail Dashboard*.

The **Call Pickup Groups Dashboard** provides an overview of the items and tasks available at the **Organization Selection** level:

- A **Counter** that indicates the number of **Call Pickup Groups**.
- **Quick Actions** that provide the following hyperlinks:
    - **View Call Pickup Groups** - Opens a list view showing all Call Pickup Groups at that level.

      Click on a Call Pickup Group to open the selected detail dashboard.
    - **Add Call Pickup Group**

      If you are using partitions with the call pickup numbers, ensure that the directory numbers that are assigned to the call pickup group have a Calling Search Space that includes the appropriate partitions. We recommend using `CU{macro}-PreISR-PT` partition for the call pickup groups added at the customer level.

The **Call Pickup Group Number** drop-down lists the call pickup groups created at the customer and the site level. Select the required call pickup group numbers from both the customer and the site level.

Added members are only seen if the Call Pickup Group and its members are at the same organization level.

Verify the individual Member Line association with the Call Pickup Groups. The Call Pickup Group under the **Lines** list displays associated Call Pickup Groups.

5.13. Tools

5.13.1. Tools Dashboard

- A **Quick Actions** section providing hyperlinks that allow the administrator to:
  - Bulk Load. See:
    - *Bulk Load Sheets*
    - *Bulk Loading a File*
    - *Bulk Load Limitations*
  - Manage user interface themes at a selected organizational level:

    The themes dashboard provides panels to:
    - Enter **Theme Details** text
    - Choose theme colors and upload a logo and background colors.
    - Click **Preview** to see the theme changes.
    - Click **Save** to save the theme.

5.13.2. Bulk Load Sheets

An exported bulk load template is a workbook containing a single sheet and serves as the basis for bulk loading. A workbook can also be created that contains more than one sheet as a tabbed workbook.

For tabbed workbooks, bulk load transactions are carried out from the leftmost sheet or tab to the rightmost. For example, if a site is to be added under a customer, the customer sheet tab should be to the left of the associated site.

The spreadsheet workbook is in Microsoft Excel .xlsx format. Any name can be provided for the workbook and the same filename can be loaded multiple times, although the best practice is to use different names.

To bulk load data, preliminary steps need to be carried out. Verify existing information on the sheet and determine required information in order to complete the required data and prepare the spreadsheet.

5.13.3. Bulk Loading a File

Completed Bulk Load XLS sheets can be loaded immediately, ensure that:

- The file has a valid file extension `.xlsx`. An error message will display on the user interface to indicate that the file does not have a valid file extension.
- Any configuration templates that are referenced, are available.
- Any comments that your spreadsheet application allows you to add (for example showing as a marker in the cell with a pop-up) have been removed. Otherwise, an error message is shown:

  "An error occurred while opening the workbook. For possible resolution, please remove all comments from the worksheets and try again. If the problem persists, contact your administrator for support."

To send empty values for a file, type a space in the cell of the value column on the sheet.

1. Click **Choose** to open the file upload dialog.
2. Click **Bulk Load** on the button bar to carry out the bulk load.
3. Inspect the bulk load in the transaction log if necessary. The **Execute Bulk Load** sub-transaction list shows the transaction for each row of the sheet.

5.13.4. Bulk Load Limitations

The VOSS-4-UC automation templates include a rich set of features that incorporate the use of Configuration Templates, customizable Field Display Policies and GUI rules that are used to enhance the user experience of the user interface.

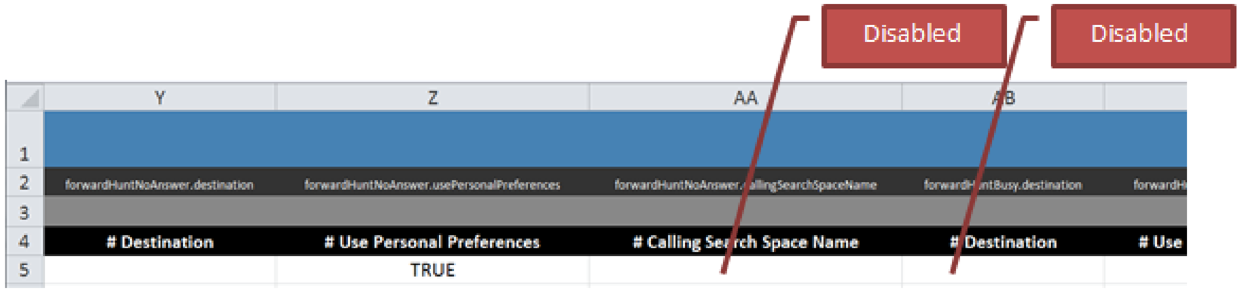
Generated bulk load templates for certain resources that make use of such advanced features are limited in their ability to produce the same provisioning results that can be obtained when using the user interface and as such require additional consideration.

An overview of these limitations is provided below, whilst the implications of these limitations, how they may apply to specific resources in the system as well as how best to use the generated loaders, are documented in the Bulkload Reference Guides under resource specific sheet notes.

- Certain fields are used to link together different resources.

  These fields may not be exposed in the user interface or may, for some resources, be exposed as read-only in the user interface. Such fields are currently exposed as mandatory fields in the generated bulk load templates. The fields and the specific conventions that are used in the template to link the fields together are highlighted in notes specific to the resource. For example, the value for remote destination name should be specified as `RDP-<username>`.
- Certain fields are derived from other data in the system. The notes specific to the resource highlights where to get the possible values for such fields. Examples of this are key-value type fields of a phone's vendor configuration settings.
- GUI Rules defined in the user interface that are not replicated in the backend workflow need to be considered in the loader to get the same provisioning results as the GUI. For example, the GUI rules may:
  - Set a default value for a visible field (fixed value or derived from other data in the system). This column and corresponding value will have to be included in the loader for this to be provisioned.
  - Set a value for a hidden field - This column and corresponding value will have to be included in the loader for this to be provisioned. Note that this means that fields may be included in the loader that would not be visible in the user interface.
  - Make a field visible depending on some condition such as the value of another field (for example, a check box being selected). The column(s) need to be included in the loader and populated under the appropriate conditions.

A GUI Rule may for example disable input fields based on the state of a check box. On the sheet, the ticked check box is represented as TRUE in the column. The columns associated with the disabled fields should not be filled.



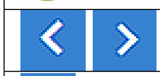
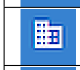
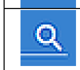
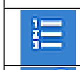
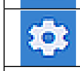
To overcome the complexities introduced by the above limitations, a set of sample bulk load sheets have been generated that enable users to get started quickly and to leverage the best practices developed by VOSS.

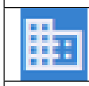
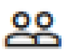
 We appreciate and value your comments. Email: doc-feedback@voss-solutions.com

6 Appendix A

6.1. User Interface Controls

The following controls are available on the New Business Admin Portal User Interface:

Icon	Description
	**Add**. Open the Add input form to add a feature or service.
	**Delete**. Delete the item(s) selected on the list.
	**Move**. Move the selected items to another organizational level.
	**Export**. Export selected items as rows in a spreadsheet or in JSON format.
	**Configuration Template**.
	**Save**. Save data on the current input form. Note that the **Save** button is unavailable during initial loading of the form data, and is replaced by a 'Spinning Wheel'. Once the form data is fully loaded, the 'Spinning Wheel' disappears and is replaced by the **Save** button.
	**Help**. Open the context sensitive help.
	**Toggle Menu**. Hide or show menu label text.
	**Organization Selection**. Navigate the organizational level.
	**Search**. Located next to the **Search** input box. Used to quickly search for specific items.
	**Transaction Log**. Open the transaction log.
	**Messages**. Open the messages notifications list.
	**Application Mode**. Switch between available applications interfaces.
	**Settings**. Access the About or Log out options.
	**Home**. Navigate to the main home dashboard.

Icon	Description
	**Filter**. Filter lists and transactions.
	**My Transactions**. Only show current user transactions.
	**Replay**. Located on some transaction detail views to replay the transaction.
	**Edit and Replay**. Located on some transaction detail views to open the transaction edit form and then to replay it.
	**Organization Selection**. On the top menu bar. Click to open the navigation control.
	Open Search. Located near the top-right of the list view. Opens the search filter box.
	**Voicemail Service**. Located under the **Services** column on the **Subscriber** list view. Opens detailed information about the voicemail service for the relevant user, for example alternate extensions, notification devices, and so on.
	**WebEx Service**. Located under the **Services** column on the **Subscriber** list view. Opens detailed information about the WebEx service for the relevant user, for example status, email address, and so on.
	**Extension Mobility**. Located under the **Services** column on the **Subscriber** list view. Tooltip shows detailed information.
	**Single Number Reach**. Located under the **Services** column on the **Subscriber** list view. Tooltip shows detailed information.
	**Contact Center Express Agent** icon. Agent is located under the **Services** column on the **Subscriber** list view. Opens detailed information about the agent.

Icon	Description
	Number Inventory menu icon.
	Subscribers menu icon.
	Voicemail menu icon.
	Webex Teams menu icon.
	Contact Center Express menu icon.
	Hunt Groups menu icon.
	Call Pickup Groups menu icon.
	Phones. Each icon tooltip shows details of the device.
	Mandatory fields are indicated by pop up next to the field.
	Tooltips are provided for certain fields when adding or editing a feature or service and contain helpful text. Hover your mouse pointer over a field text box or control to display the tooltip text.
Blue icons or text	**Hyperlinks**. Clicking blue icons or blue text opens the target selection in another screen or view.
	Drop-down input box. Use the backspace key to clear the field selection, alternatively select the text and then delete it. Search in drop-down. The **Search** icon next to the drop-down icon opens a paginated pop-up table displaying the search results.

Index