stryker

Vocera Spacelabs CEI Adapter Configuration Guide

Version 1.1.0

Notice

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ADP-spacelabscei-110-Docs build 272

Contents

# Understanding a Vocera Spacelabs CEI Adapter Configuration

Configure a Vocera Spacelabs CEI Adapter to enable the Spacelabs system to communicate with Vocera Platform.

Adapters send information to and receive information from the Vocera Platform, as well as monitor and collect data. Each adapter is configured to allow the Vocera Platform to communicate with a specific type of resource and any devices that resource may control.

For example, the Vocera Spacelabs CEI Adapter integrates alarm details from Spacelabs patient monitors with additional information provided by the facility to deliver a more complete context to caregiver devices responding to patient alerts. Multiple adapter instances are supported, however, each instance requires a separate Spacelabs server host and port

The Vocera Platform's Vocera Spacelabs CEI Adapter connects to the Spacelabs server to enable communication between the Vocera Platform and Spacelabs. By default, the adapter attempts every ten seconds to connect to the Spacelabs server, and sends a server heartbeat every five seconds when connected. Upon disconnect, the adapter attempts to reconnect after two heartbeats without a response.

In the figure below, installers can see how information and data is communicated between systems.
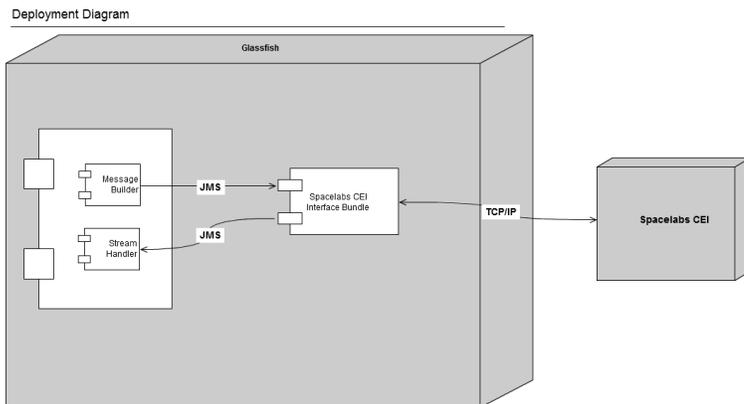
Viewing the Vocera Spacelabs CEI Adapter Requirements

The minimum requirements for a Vocera Spacelabs CEI Adapter installation are described here.

System

This adapter depends on Vocera Platform 6.1.0 and greater.

The Vocera Platform supports the following Spacelabs components::

- Intesys Clinical Suite (ICS) G2 gateway (model 92847)
- Clinical Event Interface (CEI) server
- qube patient monitor (model 91390)

Ports

The Vocera Spacelabs CEI Adapter requires a designated port for communication between the appliance and the Spacelabs server.

Dataset Design

The following dataset entity relationship diagram is defined for the Vocera Spacelabs CEI Adapter. The Clinicals dataset is the starting dataset for all attribute paths used in the Vocera Spacelabs CEI Adapter configuration
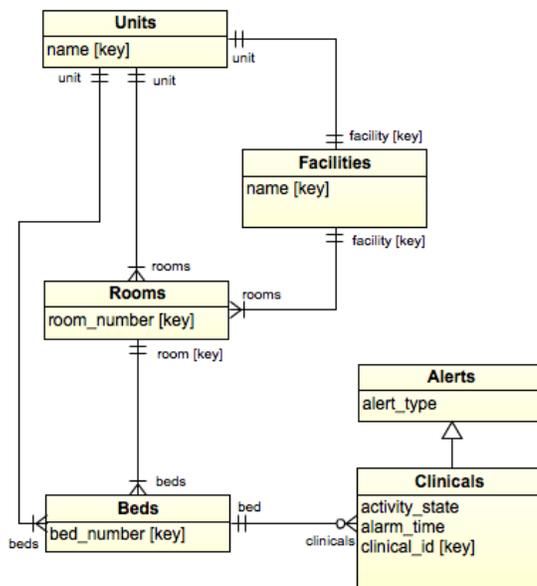
Datasets

An adapter defines a default Dataset structure in order to function. Attributes are organized by Datasets and store the information required by the adapter. Adapters use this data during the process of receiving and sending messages.

Not all adapters require Datasets to function. When an adapter does require Datasets, the system will determine if they already exist. If they do not exist, the system will create the needed Datasets.

When creating or editing an adapter, use the following information to select the appropriate datasets in the Required Datasets section.

- The BEDS Dataset stores all information for beds that are registered.
- The CLINICALS Dataset stores all clinical alert information.
- The FACILITIES Dataset stores all facility information. Represents a physical building location or campus.
- The ROOMS Dataset stores all information for rooms that are registered.
- The UNITS Dataset stores all unit information for a facility. Represents a unique care unit in a facility.
- The WAVEFORMS Dataset stores all the waveform images for a clinical event.

BEDS Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	bed_number	N/A	True	N/A	N/A	String	Attribute that stores the number of the bed.
Link	room	beds	True	False	N/A	Many-to-one	The BEDS Dataset is linked to the ROOMS Dataset, and the link order is n:1 (many beds associated to one room)
Link	clinicals	bed	False	False	N/A	One-to-many	The BEDS Dataset is linked to the CLINICALS Dataset, and the link order is 1:n (one bed associated to many clinicals)

CLINICALS Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	clinical_id	N/A	True	N/A	N/A	String	Attribute that stores the unique identifier for the clinical alert.
Attribute	alert_type	N/A	False	N/A	True	String	Attribute that stores the type of the alert.
Attribute	activity_state	N/A	False	N/A	False	String	Attribute that stores the activity state of the alert. Possible values are active, inactive, and suppressed.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	alarm_time	N/A	False	N/A	False	Date/Time	Attribute that stores the time that the alert was generated by the sending system. This is not the same as the created_at time.
Attribute	priority	N/A	False	N/A	False	String	Attribute that stores the priority description for the alert.
Link	bed	clinicals	False	False	N/A	Many-to-one	The CLINICALS Dataset is linked to the BEDS Dataset, and the link order is n:1 (many clinicals associated to one bed)
Link	waveforms	clinical	False	False	N/A	One-to-many	The CLINICALS Dataset is linked to the WAVEFORMS Dataset, and the link order is 1:n (one clinical associated to many waveforms)

FACILITIES Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	name	N/A	True	N/A	N/A	String	Attribute that stores the unique name for the facility.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	rooms	facility	False	True	N/A	One-to-many	The FACILITIES Dataset is linked to the ROOMS Dataset, and the link order is 1:n (one facility associated to many rooms)
Link	units	facility	False	True	N/A	One-to-many	The FACILITIES Dataset is linked to the UNITS Dataset, and the link order is 1:n (one facility associated to many units)

ROOMS Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	room_number	N/A	True	N/A	N/A	String	Attribute that stores the room number.
Link	facility	rooms	True	False	N/A	Many-to-one	The ROOMS Dataset is linked to the FACILITIES Dataset, and the link order is n:1 (many rooms associated to one facility)
Link	beds	room	False	True	N/A	One-to-many	The ROOMS Dataset is linked to the BEDS Dataset, and the link order is 1:n (one room associated to many beds)

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	unit	rooms	False	False	N/A	Many-to-one	The ROOMS Dataset is linked to the UNITS Dataset, and the link order is n:1 (many rooms associated to one unit)

UNITS Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	name	N/A	True	N/A	N/A	String	Attribute that stores the unique name for a unit in a facility.
Link	facility	units	True	False	N/A	Many-to-one	The UNITS Dataset is linked to the FACILITIES Dataset, and the link order is n:1 (many units associated to one facility)
Link	rooms	unit	False	False	N/A	One-to-many	The UNITS Dataset is linked to the ROOMS Dataset, and the link order is 1:n (one unit associated to many rooms)

WAVEFORMS Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	image	N/A	False	N/A	False	String	Attribute that stores waveform image for a clinical event.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	clinical	waveforms	False	False	N/A	Many-to-one	The WAVEFORMS Dataset is linked to the CLINICALS Dataset, and the link order is n:1 (many waveforms associated to one clinical)

Configuring a Vocera Spacelabs CEI Adapter

These settings enable direct communication between the Vocera Spacelabs CEI Adapter and the Vocera Platform.

Select an empty field and begin typing, or select an existing value and type over it. To keep an existing value, do not edit that field.

1. Access the Vocera Platform Web Console and navigate to the adapters.

   See Navigating the Vocera Platform Adapters on page 22 for instructions.
2. Select **New Adapter** in the Action menu, or select an adapter you wish to configure and then select **Edit**, to display the configuration fields. The configuration fields are the same for new and existing adapters.
3. Navigate to the New Adapter option, or navigate to an existing adapter to edit. See Creating a New Adapter on page 25 and Editing an Adapter on page 24 for instruction as needed.

   The configuration fields are the same for new and existing adapters.

4. Complete the configuration fields as described in the table.

Configuration Field	Description
Component Name	Click the Component Name field to display a list of the systems and devices that the Vocera Platform currently supports. Select the name of the adapter to create.
Reference Name	Enter a short descriptive name in the Reference Name field to uniquely identify an adapter instance. It may demonstrate the adapter function or other information; for example, Production adapter may differentiate a live adapter from a development or "sandbox" adapter.
Enabled	Select the Enabled checkbox to allow the Vocera Platform to use the new adapter. The Vocera Platform ignores the adapter if this option is disabled.

5. Complete the **Datasets Settings** configuration fields as described in the table.

Datasets Configuration Field	Description
Required Datasets	If more than one dataset exists that meets the adapter's requirements, select the appropriate datasets for the new adapter to function correctly. The system searches for the datasets that meet the adapters requirements. If the datasets already exist, the system will use them. If the datasets do not exist, the system will create them automatically.
	Select **Create** in the drop-down menu to create a new dataset to meet the organization's requirements.

6. Complete the **General Settings** configuration fields as described in the table.

General Settings Configuration Field	Description
Server Host Name	Enter the host name of the Spacelabs CEI server from which the adapter will receive Spacelab clinical events. This field is required. Use standard IP address format (xxx.xxx.xxx.xxx, where each xxx is a number from 0-255), or use standard FQDN format, such as smtp.gmail.com. **Note:** Only one server address is supported per adapter. Each Vocera Spacelabs CEI Adapter instance requires its own server host.
Server Port	Enter the number of the Spacelabs CEI server port on which the adapter will receive Spacelab clinical events. This field is required.
Facility	Enter the name of the facility from which Clinical Events will be received. This field is required. This value will be stored to both the "bed.unit.facility.name" and "bed.room.facility.name" attribute paths, as shown in the Bed Regex Mapping field.

General Settings Configuration Field	Description
Alert Type Priority	When more than one clinical event is received within a single message from Spacelabs, clinical events with the same Unit and Room/Bed will be evaluated to identify the event whose alert type is of the highest priority. The highest priority clinical event received within a single message from the Spacelabs CEI for a given Unit and Room/Bed will be compared to recently received events having the same Unit and Room/Bed Info to determine if the new event is of the highest priority.
	If a newly received clinical event is currently the highest priority alert for a given Unit and Room/Bed, then the activity state of the alert shall be stored as ACTIVE. If a newly received clinical event is not currently the highest priority alert for a given Unit and Room/Bed, then the activity state of the alert shall be stored as SUPPRESSED.
	Enter the list of alarm types, ranked in priority from high to low, captured from the event data of a clinical event.

7. Complete the **Location Types** configuration fields as described in the table.

   Although only one location type is required to create the adapter, Implementation Specialists may add, clone, or modify location types as needed. If there are location types configured, one or more can be deleted. Location types can be reordered by dragging and dropping each into the preferred order.

   Select **New Location Type** to define the regular expressions needed to capture unit and bed data.

Location Types Configuration Field	Description
Reference Name	Enter a descriptive name to identify the location type. This field is required.
Active	Select the **Active** checkbox to indicate whether or not the location type is active.
Bed Regex	Enter the regular expression to capture values from the bed data of a clinical event received from the Spacelabs CEI server. This field is required.
Bed Regex Mapping	Enter the regex mapping from the capture groups of the Bed Regex to attribute paths starting from the Clinicals dataset. Both the "bed.bed_number" and "bed.room.room_number" attribute paths must be set in the Bed Regex Mapping field to support suppressing all but the highest priority clinical events.
Unit Regex	Enter the regular expression to capture values from the unit data of a clinical event received from the Spacelabs CEI server. This field is required.

Location Types Configuration Field	Description
Unit Regex Mapping	Enter the regex mapping from the capture groups of the Unit Regex to attribute paths starting from the Clinicals dataset.
Add Location Type	Select **Add** to create additional location types.
Clone Location Type	Select **Clone** to create a duplicate of the selected location type. The reference name of the cloned location type will automatically be unique, and will be set as inactive by default.
Remove Location Type	If one or more location type is created, the ability to remove a location type becomes active. Select **Remove** to delete the location type from the adapter configuration.

8. Complete the **Message Types Settings** configuration fields as described in the table.

   The Vocera Spacelabs CEI Adapter message types include a regex mapping for the event data from the Spacelabs clinical event. The regex mapping stores the event data as a clinical alert. The type of alert is mapped to the attribute alert_type in the Clinicals dataset, and the additional details are mapped to the attributes clinical_details.detail_type and clinical_details.value in the ClinicalDetails dataset.

   Although only one message type is required to create the adapter, the Vocera Spacelabs CEI Adapter is configured to offer five different message types for critical alarm codes. Implementation specialists may add, clone, remove, or modify message types as needed. If there are multiple message types configured, one or more can be deleted. Message types can be reordered by dragging and dropping each into the preferred order. See **Understanding Regular Expressions** for an overview explanation and examples of Regex code and mappings.

   Select **New Message Type** to define the regular expressions needed to capture unit and bed data.

Message Types Configuration Field	Description
Reference Name	Enter a descriptive name for the message type. This field is required.
Active	Select the Active checkbox to indicate whether or not the message type is active.
Regex	Enter the regular expression to capture values from the event data of a clinical event received from the Spacelabs CEI server. This field is required. See **Understanding Regular Expressions** for an overview explanation and examples of Regex code and mappings.
Regex Mapping	Enter the regex mapping from the capture groups of the Regex to attribute paths from the Clinicals dataset. This field is required.

Message Types Configuration Field	Description
Add Message Type	Select **Add** to create additional message types.
Clone Message Type	Select **Clone** to create a duplicate of the selected message type. The reference name of the cloned message type will automatically be unique, and will be set as inactive by default.
Remove Message Type	If one or more message type is created, the ability to remove a message type becomes active. Select **Remove** to delete the message type from the adapter configuration.

9. Select one of the available options to exit the adapter configuration page. See Saving an Adapter on page 26 for details.

Configuring a Spacelabs system for the Vocera Platform

These settings enable direct communication between Spacelabs CEI (Clinical Event Interface) and the Vocera Platform.

Connect the Spacelabs ICS (Intesys Clinical Suite) server, the Spacelabs qube patient monitor, and a standard computer to the network hub or switch. Power on the server and log in with the supplied credentials.

> **Note:** For more information on configuring the Spacelabs Clinical Event Interface, see Section 13 of the Intesys Clinical Suite G2 Administration Manual.

1. Launch the **ICS Administration** tool from the Windows desktop or Program Files menu, and navigate to the **CEI Server** tab.
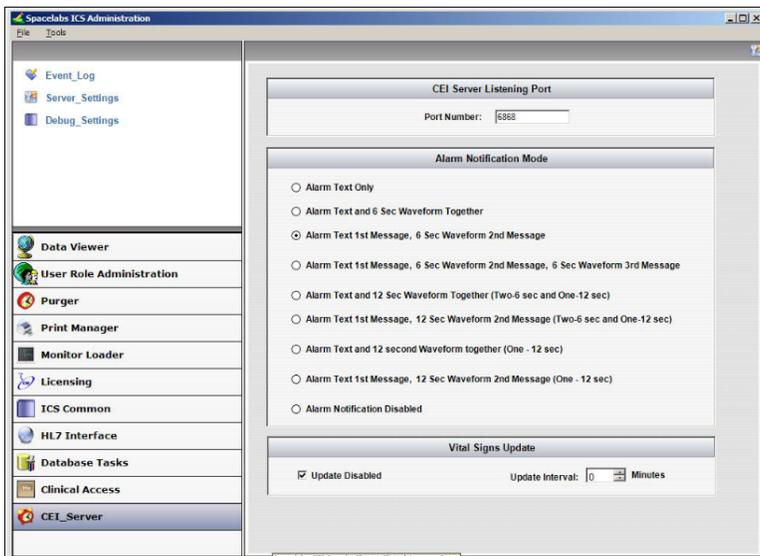
2. Complete the configuration fields as described in the table.

Configuration Field	Description
CEI Server Listening Port	Change the default port (6868) to the CEI server port number entered in the Configuring a Vocera Spacelabs CEI Adapter on page 11. The same port must be used by the CEI server and the Vocera Spacelabs CEI Adapter to enable communication.
Alarm Notification Mode	Select the alarm processing mode for the CEI server. Vocera recommends **Alarm Text Only**, to send alarms while omitting waveforms. Do not select Alarm Notification Disabled, as no alarms will be sent to Vocera Platform.

Configuration Field	Description
Vital Signs Update	Select the **Update Disabled** checkbox. Currently, Vocera Platform does not process vital signs updates.

Understanding the Vocera Spacelabs CEI Adapter Rules

This adapter does not require dataset rule configuration

Understanding Adapter Installation

Adapters are installed on the Vocera Platform in a solution package, or individually as needed by the customer.

The Vocera Platform uses adapters to integrate with external systems and devices. Each adapter is configured by the user to include information that will allow the Vocera Platform to communicate and interact with a specific type of resource and, depending on the adapter, devices that resource may control. Adapters can allow the Vocera Platform to monitor and collect data, as well as send data out, when triggered manually or automatically.

When implementing Vocera Platform at a customer site, use this document to install an adapter that is not supplied in the Gold Image. Otherwise, you will install a needed adapter when instructed in the solution package installation process described in the Vocera Platform Installation Guide.

Recreating a Repository

In the event that the repository reference file has been compromised, you can re-create the platform repository.

This information should be specified on the related adapter's Release Information page in the wiki. See **Releases** and navigate to the needed adapter.

1. Verify that the adapter resides in a repository which is in '**/etc/yum.repos.d/**'.
2. If the **repolist** or **yum** commands fail, verify that the file exists and try again. For example, use the following code to verify the repository exists on the Vocera Platform appliance:

   ```
   [tpx-admin@engage log]$ cat /etc/yum.repos.d/vocera.repo
   ```
3. Verify the output appears as shown.

   ```
   #-------------------------------------------------------------------------------
   # NOTICE: Only use the General Availability (platform-6.X-ga) repository for customer
    deployments.
   # Use of Controlled Release (platform-6.X-cr) or Software Quality Assurance
    (platform-6.X-sqa) in
   # accordance to process QOP-75-01 Production Work Order and History Record, contact
    your
   # manager for questions.
   #-------------------------------------------------------------------------------
   [Platform-6.0]
   name=Platform-6.0
   baseurl=https://box.voceracommunications.com/Platform-6.0-GA
   enabled=1
   gpgcheck=0
   ```

Installing an Adapter

Install or uninstall a Vocera Platform adapter at a customer site on a Vocera system for a customer.

Execute the following steps using the system's command prompt.

1. Verify that the adapter resides in a repository which is in '**/etc/yum.repos.d/**'.
2. Run the following commands:

```
sudo yum clean all
sudo yum check-updates
```

3. Verify that the rpm package to be installed is available using the following command:

```
sudo yum list available | grep extension
```

4. Install the adapter by specifying its rpm package name in place of <package-name> in the code below. (This information should be specified on the related Release Information page in the wiki; see **Release Notes**.)

```
sudo yum install <package-name>
```

5. Uninstall an adapter by specifying its rpm package name in place of <package-name> in the code below. (This information should be specified on the related Release Notes page; see **Release Notes**.)

```
sudo yum remove <package name>
```

Practicing an Adapter Installation

Replicate these steps using the needed adapter package, in order to install adapters other than the example given here.

1. Verify the repo file contains the repos up to and including the release of interest.

```
[tpx-admin@engage log]$ cat /etc/yum.repos.d/vocera.repo
#----------------------------------------------------------------------------
# NOTICE: Only use the General Availability (platform-6.X-ga) repository for customer
 deployments.
# Use of Controlled Release (platform-6.X-cr) or Software Quality Assurance
 (platform-6.X-sqa) in
# accordance to process QOP-75-01 Production Work Order and History Record, contact
 your
# manager for questions.
#----------------------------------------------------------------------------
[Platform-6.0]
name=Platform-6.0
baseurl=https://box.voceracommunications.com/Platform-6.0-GA
enabled=1
gpgcheck=0
```

2. Execute the following commands:

```
[tpx-admin@engage log] $ sudo yum check-updates
Loaded plugins: langpacks, product-id, subscription-manager
This system is not registered to Red Hat Subscription Management. You can use
 subscription-manager to register.
Quartz
                                                | 3.6 kB  00:00:00
(1/2): Quartz/group_gz
                                                |  483 B  00:00:00
(2/2): Quartz/primary_db
                                                |  29 kB  00:00:00
```

3. Verify the package is available, using the following command:

```
[tpx-admin@engage log] $ sudo yum list available | grep extension
   extension-navicare-interface.x86_64                    1.3.6-0              Platform 5.0
```

4. Install the needed adapter; in this example, install the Navicare adapter:

```
[tpx-admin@engage log] $ sudo yum install extension-navicare-interface
Loaded plugins: langpacks, product-id, subscription-manager
This system is not registered to Red Hat Subscription Management. You can use
 subscription-manager to register.
Resolving Dependencies
--> Running transaction check
---> Package extension-navicare-interface.x86_64 0:1.3.6-0 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

================================================================================
 Package                              Arch
 Version                    Repository                        Size
================================================================================
Installing:
 extension-navicare-interface                         x86_64
 1.3.3-0                    Quartz                            59 k

Transaction Summary
================================================================================
Install  1 Package

Total download size: 59 k
Installed size: 62 k
Is this ok [y/d/N]: y
Downloading packages:
extension-navicare-interface-1.3.6-0.x86_64.rpm
                                          |  59 kB  00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : extension-navicare-interface-1.3.6-0.x86_64
                                                             1/1
  Verifying  : extension-navicare-interface-1.3.6-0.x86_64
                                                             1/1


Installed:
  extension-navicare-interface.x86_64 0:1.3.6-0


  Complete!
```

5. This completes the steps to install an adapter.

Navigating the Vocera Platform Adapters

Access the Adapters tab and use the filter or search tools to display a specific adapter.

This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

1. Access the Vocera Platform Web Console and sign in with your system credentials.
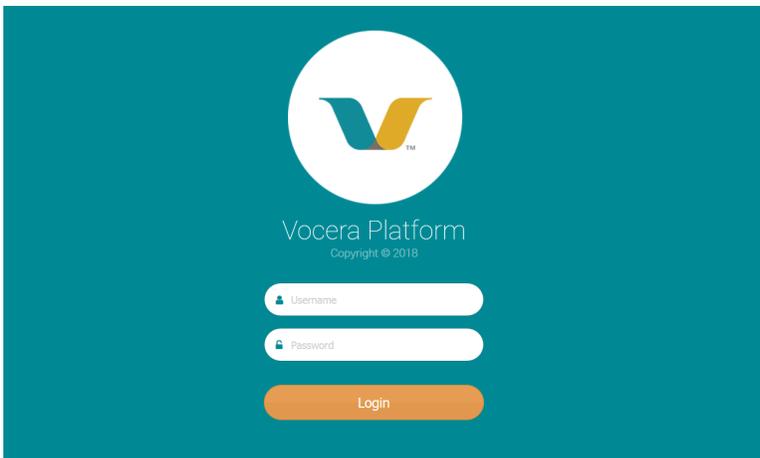
2. Select **Settings > Adapters** in the navigation menu.
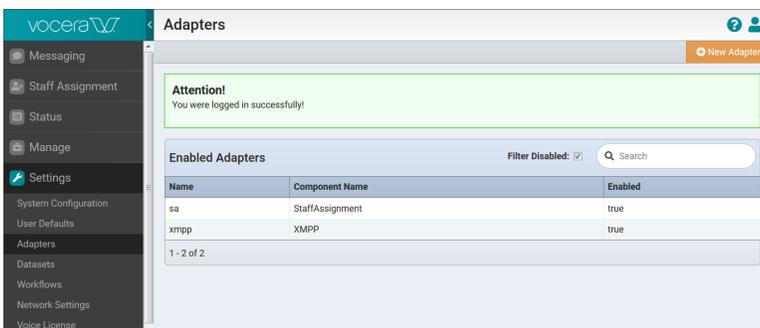
   The **Adapters** page displays.

3. Select an adapter to work with from the list displayed in the grid, or select the New Adapter Action option to create a new adapter.

   On the **Adapters** page you can identify adapters by their name or component name. The Enabled column (displaying a true or false status) indicates whether the adapter is active on the system, or disabled.

   The bottom row of the grid reports the number of adapters displayed, of the available adapters.

   The Filter Disabled box is checked by default, and displays only the enabled adapters that are configured on the Vocera Platform.
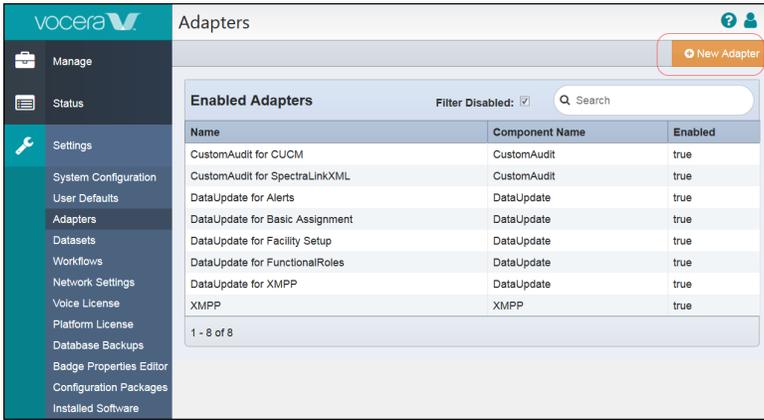
4. Uncheck the **Filter Disabled** box to display all the adapters that have been installed, including those that are not currently enabled. The column title now displays **All Adapters**.

The Filter Disabled box is checked by default.
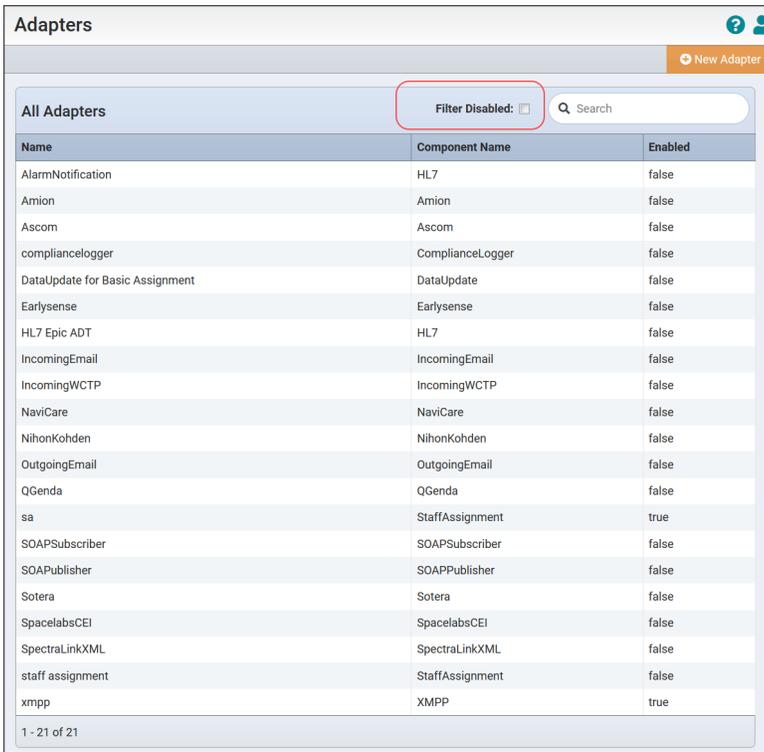
5. Enter a term in the **Search** field to locate a needed adapter on the system.

The search field is identified by a text field with a magnifying glass icon. The search is performed on the Name and Component Name columns.

When results are returned, the column header displays **Adapters Search Results** and an **x** icon allows you to clear the search field.
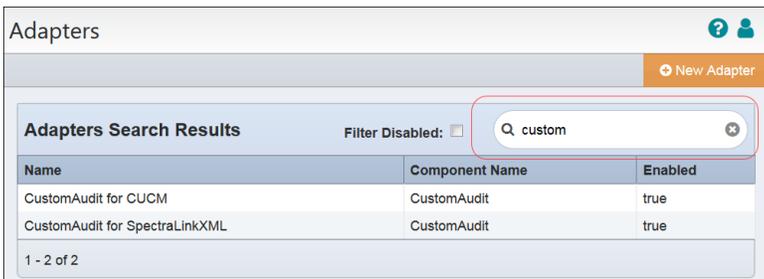
Editing an Adapter

Edit an adapter that has been installed on the Vocera Platform.

This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

1. Access the Vocera Platform Web Console and navigate to the adapters.

   See Navigating the Vocera Platform Adapters on page 22 for instructions.

2. Select the adapter to edit in the **Adapters** list.
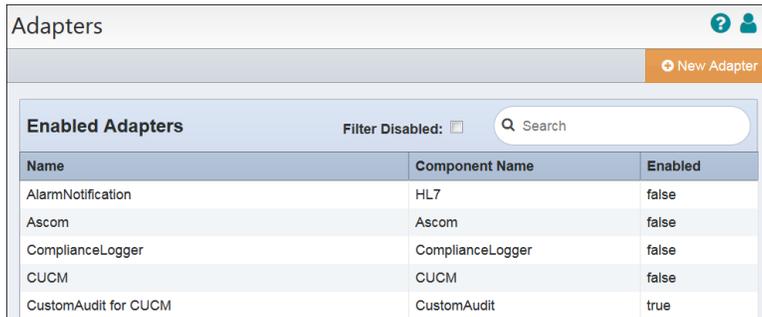
3. Select **Edit** in the adapter's menu.
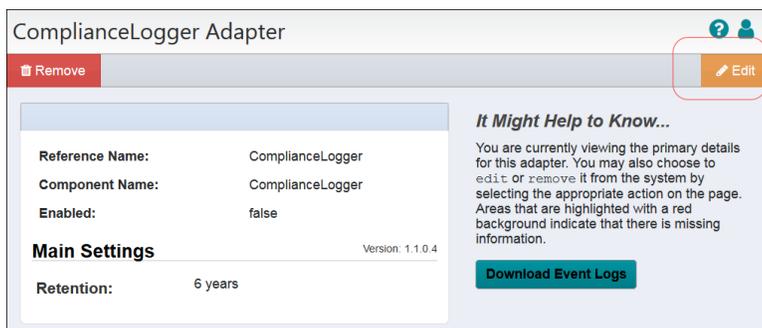
   The **Update Adapter** page for the adapter displays.

4. Edit the adapter's settings to revise the configuration as needed. See the adapter-specific configuration page for details on working with settings for this adapter.

   Select an empty field and begin typing, or select an existing value and type over it. To keep an existing value, do not edit that field.
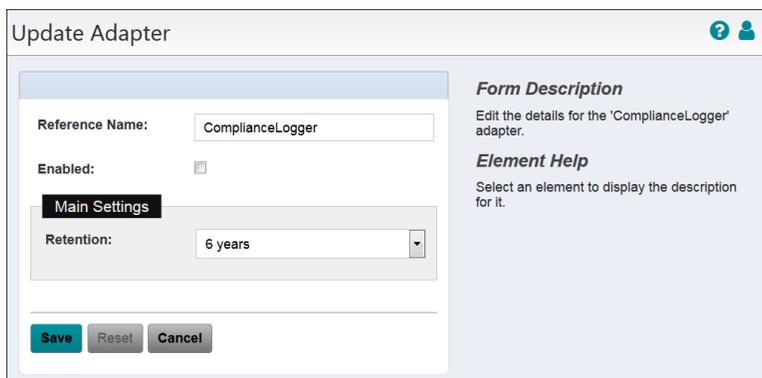
5. Select one of the options to exit the **Update Adapter** page. See Saving an Adapter on page 26 for details.

Creating a New Adapter

Access the Vocera Platform Web Console to work with adapters, or create a new adapter when prompted in the package import process.

This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

1. Access the Vocera Platform Web Console and navigate to the adapters.

   See Navigating the Vocera Platform Adapters on page 22 for instructions.
2. Select **New Adapter** in the Action menu on the Adapters page.
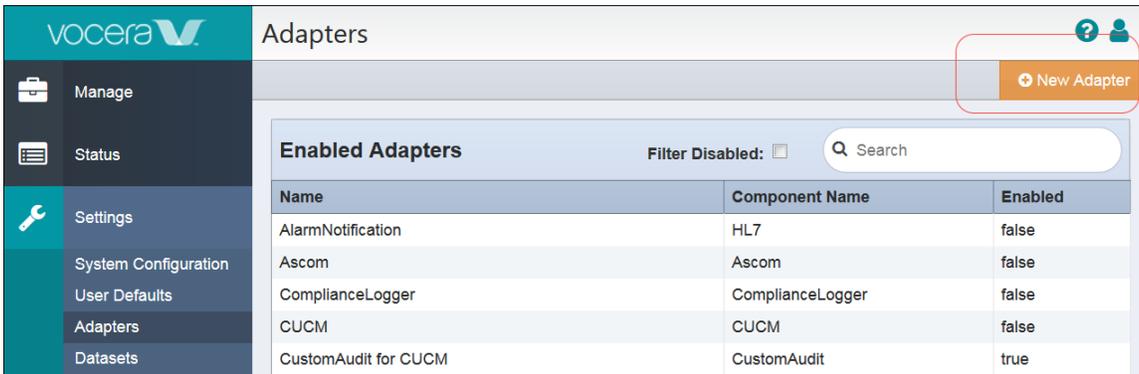
   The **Create a New Adapter** dialog displays.
3. Complete the configuration fields.
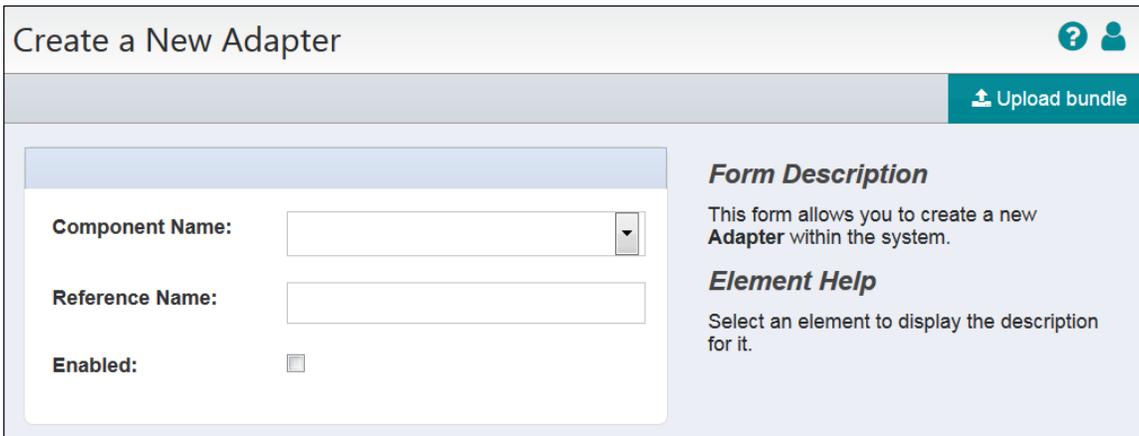
Name	Description
Component Name *	Select the Component Name field dropdown arrow to display a list of the systems and devices that Vocera currently supports. Select the name of the adapter to create.
Reference Name	Enter a short descriptive name in the Reference Name field to uniquely identify an adapter instance. It may demonstrate the adapter function or other information; for example, Production adapter may differentiate a live adapter from a development or "sandbox" adapter.
Enabled	Select the Enabled check box to allow Vocera Platform to use the new adapter. Vocera ignores the adapter if this option is disabled.

4. Select **Upload Bundle** in the Action menu to install a package on a Vocera Platform.

   Use the Upload Bundle feature to install when the adapter is not available in the Component Name dropdown list, and you have downloaded the needed adapter bundle to a storage location.
5. Click on **Browse** to navigate to the bundle to install.
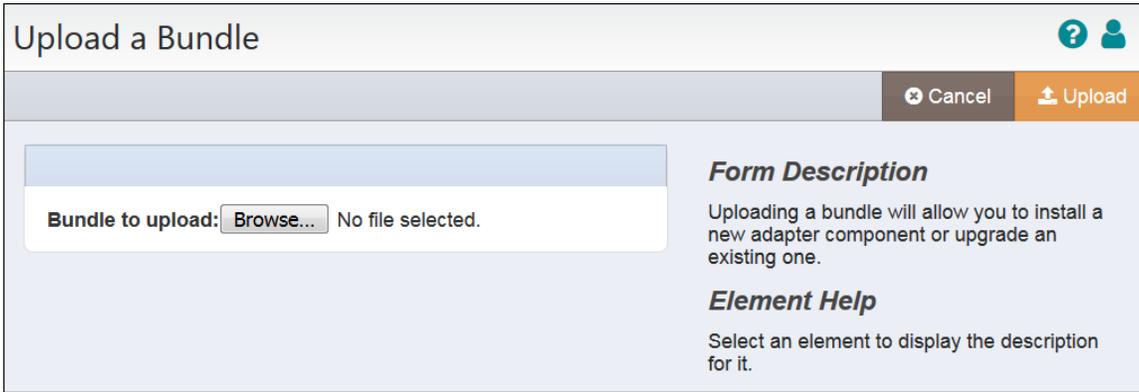
6. Select one of the Action options to exit from the Upload a Bundle dialog.
   - **Upload**: Upload the selected bundle to the appliance.
   - **Cancel**: Close the Upload a Bundle dialog without making a change to the system.

Saving an Adapter

Close an adapter configuration dialog using the Save, Reset, or Cancel options.

This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

When creating a new adapter, the options at the bottom of the adapter configuration page are Save, and Cancel.

When editing an existing adapter, the options are Save, Reset, and Cancel.

Choose an option to close the dialog:
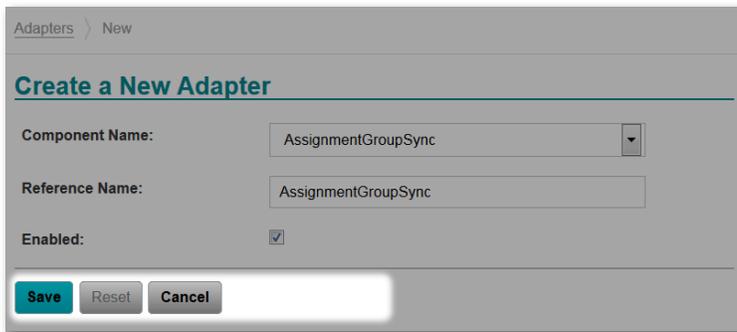
Option	Description
Save	Select Save to store the adapter configuration in the system, when the fields are set to desired specifications.
Cancel	Select Cancel to close the configuration window without saving your changes to the system.
Reset	Select Reset to clear all fields without closing the window, in order to select other specifications for the adapter's settings.

Deactivating an Adapter

Temporarily deactivate an adapter to avoid unintentional use of it in an implementation.

This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

1. Access the Vocera Platform Web Console and navigate to the adapter to deactivate.

   See Navigating the Vocera Platform Adapters on page 22 for instructions.
2. Select **Edit** in the Actions menu to access the Update page for the adapter.

3. Un-check the **Enabled** box to temporarily deactivate the adapter.

   When deactivated, the Vocera system will ignore the adapter. You can easily enable or disable the adapter at any time.

4. Select one of the options to exit the **Update Adapter** page. See Saving an Adapter on page 26 for details.

Removing an Adapter

Permanently remove an adapter from the Vocera system.

This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

Use the remove function to permanently delete the adapter from the system. Alternatively, you can disable an adapter and the Vocera system will ignore it.

⚠️ **Warning:** Remove cannot be undone. If any system features use this adapter, removing the adapter prevents the features from functioning.

1. Access the Vocera Platform Web Console and navigate to the adapter to remove.

   See Navigating the Vocera Platform Adapters on page 22 for instructions.
2. Select **Remove** in the Actions menu to permanently delete the adapter.

3. Click **Ok** in the confirmation window.

Before You Click Ok...
Removing this adapter may cause unexpected results in the system. Please make sure that you really want to perform this action before pressing 'Ok'. Once the adapter has been removed there will be no way of retrieving its data.
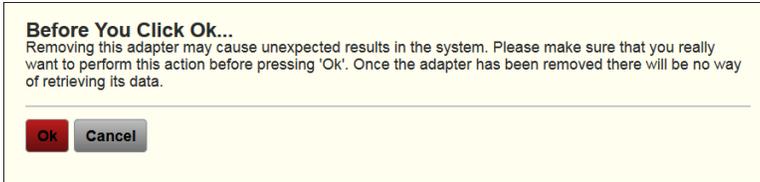
Ok   Cancel

- **Ok**: Confirm the choice to remove the adapter from the system.
- **Cancel**: Return to the adapter page without making a change.

4. Confirm that the adapter no longer displays in the Adapters list view, when a success message displays.

Adapters   ❓ 👤

⊕ New Adapter

Attention!
The adapter was removed from the system successfully.