

Vocera Hillrom Subscriber Adapter Configuration Guide

Version 2.0.8

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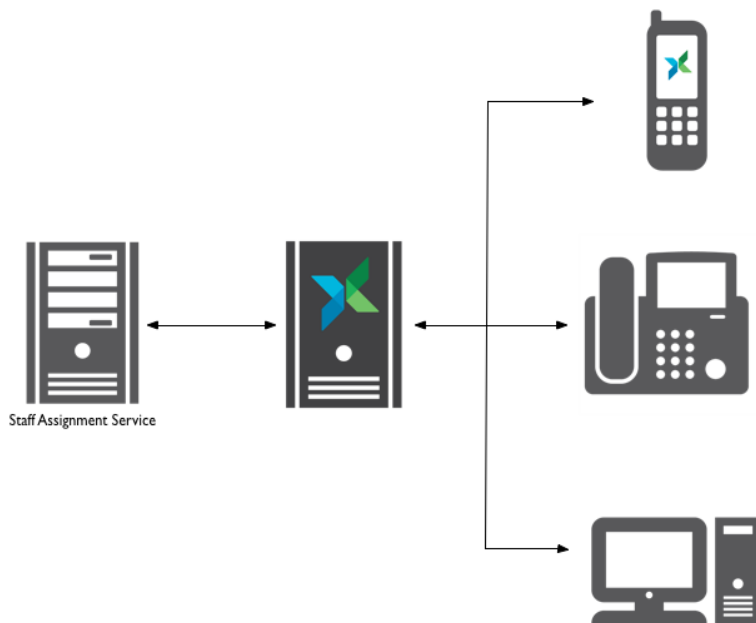
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Understanding a Vocera Hillrom Subscriber Adapter Configuration

A Hill-Rom clinical staff API publishes assignment data which is used by Vocera Platform to manage staff duty assignments.

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

The Vocera Hillrom Subscriber Adapter consumes the clinical staff assignment data published by the Hill-Rom Clinical Staff API to leverage a single point of administration for staff duty assignments in a clinical environment. The participating web services are designed with REST, and the Hill-Rom integration can be configured to use plain text communication for sending or receiving.



Viewing the Vocera Hillrom Subscriber Adapter Requirements

The minimum requirements for an Vocera Platform installation are described here.

In order to use this Vocera Hillrom Subscriber Adapter, the facility requires an enterprise email system, such as Outlook.

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 **ASSIGNMENTS Dataset** stores all assignments for staff. These are used to determine who to send alerts to.
- The **BEDS Dataset** stores all information for beds that are registered.
- The **DEVICES Dataset** stores all details of every device registered with Vocera. Each device to which Vocera can send a message must be listed in this dataset.
- The **FACILITIES Dataset** stores all facility information for a site. Represents a physical building location or campus.
- The **FUNCTIONAL_ROLES Dataset** stores all roles for assignments. These are used to determine the activities users can perform.
- The **IDENTITIES Dataset** stores the user's system and interface identities.
- The **INTERFACES Dataset** stores the information about all configured Vocera adapters.
- The **LINES Dataset** stores each telephone line reported by a device when it is registered.
- The **LOCATIONS Dataset** stores all locations. These represent a bed or group of beds to which assignments are made.
- The **PRESENCE_UPDATE Dataset** stores records created to update a users presence.
- The **ROOMS Dataset** stores all information for rooms that are registered.
- The **UNITS Dataset** stores all unit information for a site. Represents a unique care unit in a facility.
- The **USERS Dataset** stores all Vocera users.

ASSIGNMENTS Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	assignment_id	N/A	True	N/A	N/A	String	Attribute that stores the unique identifier for the assignment.
Attribute	interface_id	N/A	True	N/A	N/A	String	Attribute that stores the identifier for the interface owning this assignment.
Attribute	level	N/A	True	N/A	N/A	String	Attribute that stores the level of the assignment.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	assigned_at	N/A	False	N/A	False	Date/Time	Attribute that stores the timestamp at which the assignment was assigned to the user.
Attribute	ends_at	N/A	False	N/A	False	Date/Time	Attribute that stores the timestamp at which the assignment is scheduled to end.
Attribute	external	N/A	False	N/A	False	String	Attribute that stores whether or not the assignment came from an external system.
Attribute	starts_at	N/A	False	N/A	False	Date/Time	Attribute that stores the timestamp at which the assignment is scheduled to start.
Attribute	state	N/A	False	N/A	False	String	Attribute that stores the state of the assignment. Possible values are active, next, expired, and deleted.
Link	location	assignments	False	False	N/A	Many-to-one	The ASSIGNMENTS Dataset is linked to the LOCATIONS Dataset, and the link order is n:1 (many assignments associated to one location)

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	role	assignments	False	False	N/A	Many-to-one	The ASSIGNMENTS Dataset is linked to the FUNCTIONAL_ROLES Dataset, and the link order is n:1 (many assignments associated to one functional_role)
Link	usr	assignments	False	False	N/A	Many-to-one	The ASSIGNMENTS Dataset is linked to the USERS Dataset, and the link order is n:1 (many assignments associated to one user)

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	locations	beds	False	False	N/A	Many-to-many	The BEDS Dataset is linked to the LOCATIONS Dataset, and the link order is m:n (many beds associated to many locations)

DEVICES 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 name that identifies the device, often based upon the MAC address of the device.
Attribute	status	N/A	False	N/A	True	String	Attribute that stores the current registration status of the device. Possible values are Registered, Disconnected, Virtual, or Unregistered.
Attribute	vendor	N/A	False	N/A	True	String	Attribute that stores the vendor of the device. For example, Cisco or XMPP.
Attribute	ip_address	N/A	False	N/A	False	String	Attribute that stores the current IP address of the device. In some cases Engage needs to keep track of the IP address of a device, such as with a Cisco phone.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	priority	N/A	False	N/A	False	String	Attribute that stores the priority level of the most recent message sent to a device. Required by the device management library, but not set by the XMPP adapter. It is used as a filter to prevent less important messages from being sent to a user currently handling a critical issue.
Attribute	token	N/A	False	N/A	False	String	Attribute that stores a special identifier needed by some devices, such as smart phones, in order to deliver a message.
Link	lines	devices	False	False	N/A	One-to-many	The DEVICES Dataset is linked to the LINES Dataset, and the link order is 1:n (one device associated to many lines)

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	usr	devices	False	False	N/A	Many-to-one	The DEVICES Dataset is linked to the USERS Dataset, and the link order is n:1 (many devices associated to one user)

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 of the facility.
Link	locations	facility	False	True	N/A	One-to-many	The FACILITIES Dataset is linked to the LOCATIONS Dataset, and the link order is 1:n (one facility associated to many locations)
Link	roles	facility	False	True	N/A	One-to-many	The FACILITIES Dataset is linked to the FUNCTIONAL_ROLES Dataset, and the link order is 1:n (one facility associated to many functional_roles)
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)

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
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)

FUNCTIONAL_ROLES 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 name of the role.
Link	facility	roles	True	False	N/A	Many-to-one	The FUNCTIONAL_ROLES Dataset is linked to the FACILITIES Dataset, and the link order is n:1 (many functional_roles associated to one facility)
Link	assignments	role	False	False	N/A	One-to-many	The FUNCTIONAL_ROLES Dataset is linked to the ASSIGNMENTS Dataset, and the link order is 1:n (one functional_role associated to many assignments)

IDENTITIES 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 name of the user's identity.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	interface	identities	False	False	N/A	Many-to-one	The IDENTITIES Dataset is linked to the INTERFACES Dataset, and the link order is n:1 (many identities associated to one interface)
Link	usr	identities	False	False	N/A	Many-to-one	The IDENTITIES Dataset is linked to the USERS Dataset, and the link order is n:1 (many identities associated to one user)

INTERFACES Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	reference_nan	N/A	True	N/A	N/A	String	Attribute that stores the interface's identifying name.
Link	identities	interface	False	False	N/A	One-to-many	The INTERFACES Dataset is linked to the IDENTITIES Dataset, and the link order is 1:n (one interface associated to many identities)

LINES Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	number	N/A	True	N/A	N/A	String	Attribute that stores the number of the line.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	devices	lines	False	False	N/A	Many-to-one	The LINES Dataset is linked to the DEVICES Dataset, and the link order is n:1 (many lines associated to one device)

LOCATIONS Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	location_id	N/A	True	N/A	N/A	String	Attribute that stores the unique identifier for the location.
Attribute	name	N/A	False	N/A	False	String	Attribute that stores the name of the location.
Link	facility	locations	True	False	N/A	Many-to-one	The LOCATIONS Dataset is linked to the FACILITIES Dataset, and the link order is n:1 (many locations associated to one facility)
Link	assignments	location	False	False	N/A	One-to-many	The LOCATIONS Dataset is linked to the ASSIGNMENTS Dataset, and the link order is 1:n (one location associated to many assignments)

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	beds	locations	False	False	N/A	Many-to-many	The LOCATIONS Dataset is linked to the BEDS Dataset, and the link order is m:n (many locations associated to many beds)
Link	units	locations	False	False	N/A	Many-to-many	The LOCATIONS Dataset is linked to the UNITS Dataset, and the link order is m:n (many locations associated to many units)

PRESENCE_UPDATE Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	timestamp	N/A	True	N/A	N/A	Date/Time	Attribute that stores the time this PresenceUpdate record was created.
Attribute	show	N/A	False	N/A	False	String	Attribute that stores the show of the presence to set.
Attribute	status	N/A	False	N/A	False	String	Attribute that stores the status of the presence to set.
Link	usr	presence_upd	True	False	N/A	Many-to-one	The PRESENCE_UPDATE Dataset is linked to the USERS Dataset, and the link order is n:1 (many presence_updates associated to one user)

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)
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)

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	locations	units	False	False	N/A	Many-to-many	The UNITS Dataset is linked to the LOCATIONS Dataset, and the link order is m:n (many units associated to many locations)
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)

USERS Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	login	N/A	True	N/A	N/A	String	Attribute that stores the login name of the user.
Attribute	first_name	N/A	False	N/A	False	String	Attribute that stores the first name of the user.
Attribute	last_name	N/A	False	N/A	False	String	Attribute that stores the last name of the user.
Attribute	middle_initial	N/A	False	N/A	False	String	Attribute that stores the initials of any middle names of the user.
Attribute	presence_show	N/A	False	N/A	False	String	Attribute that stores the current presence show value for the user.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	presence_status	N/A	False	N/A	False	String	Attribute that stores the current presence status message for the user.
Link	assignments	usr	False	False	N/A	One-to-many	The USERS Dataset is linked to the ASSIGNMENTS Dataset, and the link order is 1:n (one user associated to many assignments)
Link	devices	usr	False	False	N/A	One-to-many	The USERS Dataset is linked to the DEVICES Dataset, and the link order is 1:n (one user associated to many devices)
Link	identities	usr	False	False	N/A	One-to-many	The USERS Dataset is linked to the IDENTITIES Dataset, and the link order is 1:n (one user associated to many identities)
Link	presence_updates	usr	False	True	N/A	One-to-many	The USERS Dataset is linked to the PRESENCE_UPDATE Dataset, and the link order is 1:n (one user associated to many presence_updates)

Configuring a Vocera Hillrom Subscriber Adapter

Description of the settings that enable direct communication between the Vocera Hillrom Subscriber 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 27 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 30 and [Editing an Adapter](#) on page 29 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.

Create a New Adapter

Component Name:

HillRomStaff

Reference Name:

Hill-RomStaffAssignment

Enabled:

☒

Required Datasets

Assignments:

Assignments

Beds:

Beds

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.

Configuration Field	Description
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.
Required Datasets	<p>If more than one dataset exists that meets the adapter's requirements, select the appropriate datasets for the new adapter to function correctly.</p> <p>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.</p> <p>Select Create in the drop-down menu to create a new dataset to meet the organization's requirements.</p>

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

The screenshot shows a 'General Settings' window with the following fields and values:

- URL:** http://10.42.22.152/ClinicalInterfaceWeb/api
- Heartbeat Period:** 60
- Expect Pending Assignments:** ☒
- Assignment Adapter Identifier:** HillRomStaff
- User and Location Identification:** Unique by Adapter
- Managed Line Regex:** [0-9]+
- Managed Device Vendors:** Ascom, CUCM, SpectraLinkXML, Vocera
- Devices:** Phone

The General Settings described here provide the Vocera Platform with the explicit information required to communicate with the customer's servers, such as URL information.

General Settings Configuration Field	Description
URL	Enter the URL of the Clinical Staff Assignment service to communicate with this adapter. The Vocera Platform appliance will connect to this address on the Hill-Rom server.
Heartbeat Period	Enter the amount of time in minutes that should pass between the sending of heartbeat messages to the Clinical Staff Assignment service.
Expect Pending Assignments	Select this checkbox when the staff assignment service is expected to send assignments with a future timestamp (a pending assignment). Select this option if state transitions will be handled by another process, and the staff assignment service can send pending assignments.

General Settings Configuration Field	Description
Assignment Adapter Identifier	Enter the identifier to use in assignments created by this adapter. This can be used to identify this adapter's identifiers to Assignment Manager if it is in use. By default, this uses the adapter's ID number. Once assignments have been created, changing this value will require updating the existing assignments' adapter identifier.
User and Location Identification	<p>Select the appropriate choice from the dropdown list to specify how the adapter should use the Staff and Location IDs in creating identifiers for the Users, Locations, and Assignments. Changing this identifier after objects have been added by this adapter requires updating the existing identifiers to match.</p> <p>The choices displayed in the dropdown list are:</p> <ul style="list-style-type: none"> • Legacy: Uses the prefix and object ID; this is not recommended for new instances. • Unique by Adapter: Uses the adapter ID as part of the key to make them truly unique. • Staff ID as Login: Uses the adapter ID as part of the key to make them unique, except the staff ID is assumed to be the user's login.
Managed Line Regex	Enter a regex (see Understanding Regular Expressions) to match the lines that should be managed by this adapter when assigning users to lines. This is useful where the Clinical Staff Assignment service is not sending line numbers in the device ID. For example, it may be supplying user names as device numbers.
Managed Device Vendors	<p>Enter a list of device vendor types to be managed by this adapter when assigning users to lines. If another adapter is managing user-to-device assignment, do not list that vendor type here.</p> <p>For example, when "Associate Users" is set in the device workflow to enable CUCM to manage user-to-device mappings for Cisco devices, do not list CUCM in the Managed Device Vendors field below. The following table describes the conditions under which Hill-Rom should manage device mapping.</p>
Devices	Enter the device types specified by the facility. If no devices are specified, this adapter will not manage device assignments.

Use this table as a guide to determine device assignment management:

Adapter Name	Vendor	Managed by Hill-Rom?
Ascom	Ascom	Yes, unless user-to-device mapping is permanently made through the device workflow
CUCM	Cisco	Yes, unless Cisco Extension Mobility is used, or user-to-device mapping is permanently made through the device workflow
Smartphone	Apple, Android	No. Smartphone always manages the device mapping

Adapter Name	Vendor	Managed by Hill-Rom?
SpectraLink XML	SpectraLinkXML	Yes, unless SpectraLink User Profiles are used, or user-to-device mapping is permanently made through the device workflow
Outgoing WCTP	WCTP	No. Outgoing WCTP always manages the device mapping
XMPP	XMPP	No. XMPP always manages the device mapping

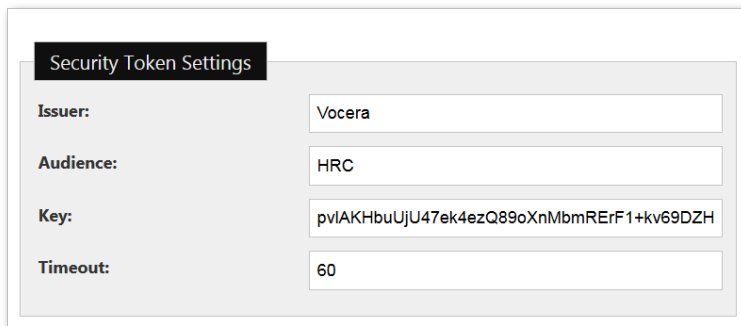
6. Complete the **Subscriber Settings** configuration fields as described in the table.

The Hill-Rom Clinical Staff Assignment API exposes clinical staff data from a publishing system to one or more subscribing systems, such as Vocera Platform. The following configuration is required for Vocera Platform to subscribe to the clinical data published by Hill-Rom.

The Subscriber Settings are part of the address that will be used by the Hill-Rom service to make calls back to the Vocera Platform appliance. Once the new adapter is saved, and has started running on the appliance, the full URL can be seen on the adapter's Details screen.

Subscriber Settings Configuration Field	Description
Protocol Scheme	Select the protocol scheme from the dropdown list that the Clinical Staff Assignment service should use when invoking publisher operations. Current dropdown options include HTTP and HTTPS.
Hostname	Enter the hostname or IP address that the Clinical Staff Assignment service should use when invoking publisher operations. If this field is empty, the FQDN of the appliance is used by default.
Port	Enter the port that the Clinical Staff Assignment service should use when invoking publisher operations. If left blank, the default for the selected Protocol Scheme is used: 80 for HTTP, and 443 for HTTPS. The entered value must be a number between 1 and 65535.
Subscriber Timeout	Enter the number of minutes the adapter waits for an update. After this timeout threshold is passed, the adapter assumes that the subscription is no longer active and restarts it.

7. Complete the **Security Token Settings** configuration fields as described in the table.



Security Token Settings

Issuer: Vocera

Audience: HRC

Key: pviAKHbuUjU47ek4ezQ89oXnMbmRErF1+kv69DZH

Timeout: 60

The Clinical Staff Assignment services are secured using a two-part mechanism where the publishing system licenses the subscribing systems with a shared secret; an HMAC-256 bit symmetric key is generated. An administrator of the Hill-Rom Clinical Staff Assignment service should provide the values to configure the Security Token fields.

Security Token Settings Configuration Field	Description
Issuer	Enter a string that identifies this adapter configuration when making a request to the Clinical Staff Assignment service.
Audience	Enter a string that identifies the Clinical Staff Assignment service when receiving updates from the Clinical Staff Assignment service.
Key	Enter the key used to encode a security token that authenticates messages exchanged with the Clinical Staff Assignment service.
Timeout	Enter the length of time (in the range of 1-3600 seconds) that the security token is valid.

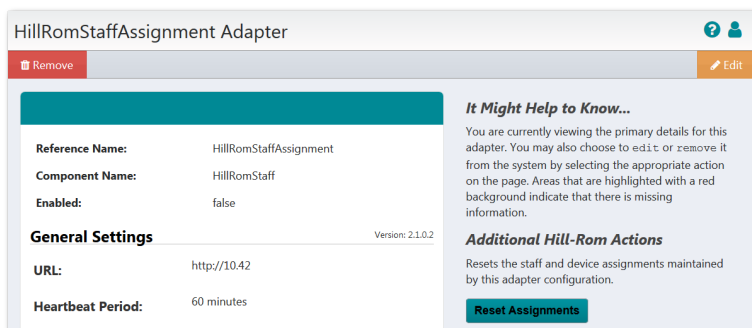
- Select one of the available options to exit the adapter configuration page. See [Saving an Adapter](#) on page 31 for details.

Resetting Staff Assignments

Synchronize the staff assignments in a Vocera Platform database with the Hill-Rom staff assignment service.

Navigate to the Vocera Hillrom Subscriber Adapter in the Vocera Platform Web Console.

Select **Reset Assignments** in Additional Hill-Rom Actions to clear the cached data, then unsubscribe and resubscribe to the Hill-Rom web service. This allows the staff assignments in the Vocera Platform Hill-Rom database to be re-synchronized with the Hill-Rom staff assignment service.



HillRomStaffAssignment Adapter

[Remove](#) [Edit](#)

Reference Name: HillRomStaffAssignment

Component Name: HillRomStaff

Enabled: false

General Settings Version: 2.1.0.2

URL: http://10.42

Heartbeat Period: 60 minutes

It Might Help to Know...

You are currently viewing the primary details for this adapter. You may also choose to edit or remove it from the system by selecting the appropriate action on the page. Areas that are highlighted with a red background indicate that there is missing information.

Additional Hill-Rom Actions

Resets the staff and device assignments maintained by this adapter configuration.

[Reset Assignments](#)

Understanding the Vocera Hillrom Subscriber 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
(1/2): Quartz/group_gz | 3.6 kB 00:00:00
(2/2): Quartz/primary_db | 483 B 00:00:00
| 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                               Size
Version                               Repository                         Size
=====
Installing:
extension-navicare-interface          x86_64                             59 k
1.3.3-0                               Quartz
```

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!

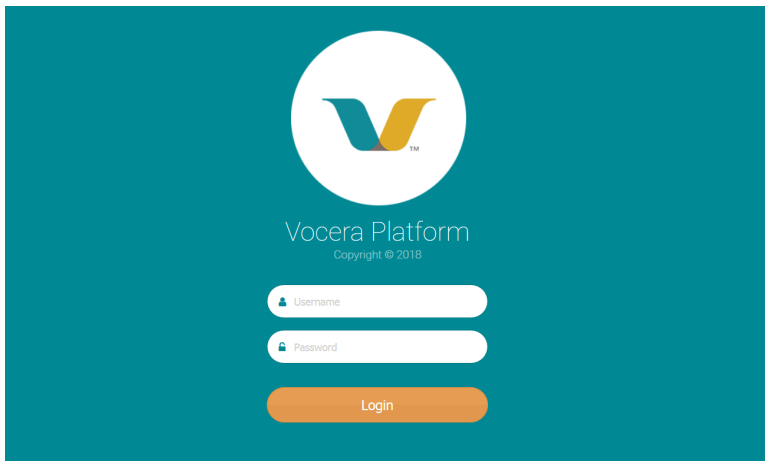
5. This completes the steps to install an adapter.

Navigating the Vocera Platform Adapters

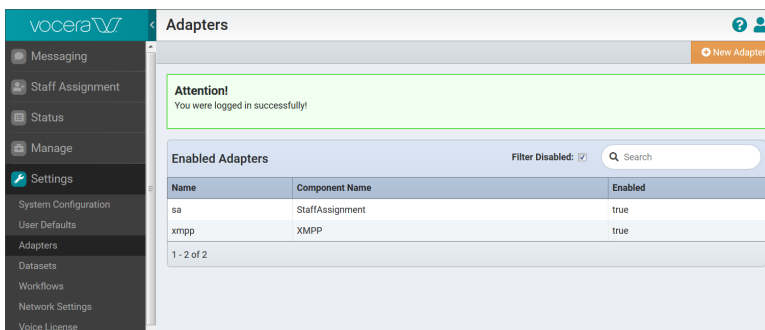
Access the Adapters tab and use the filter or search tools to display a specific adapter.

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.



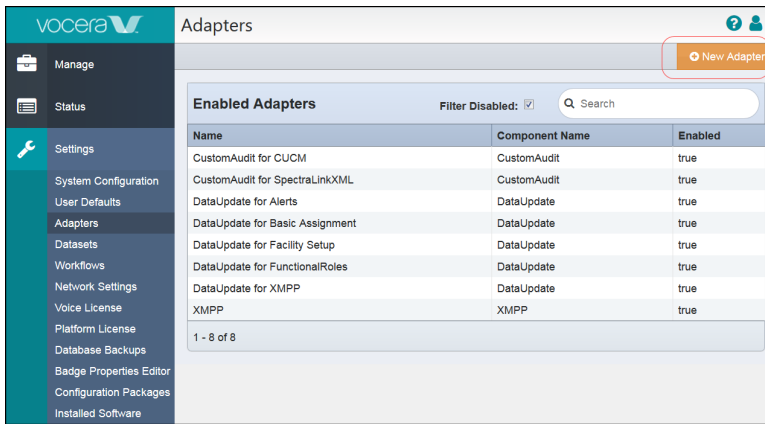
The **Adapters** page displays.

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.

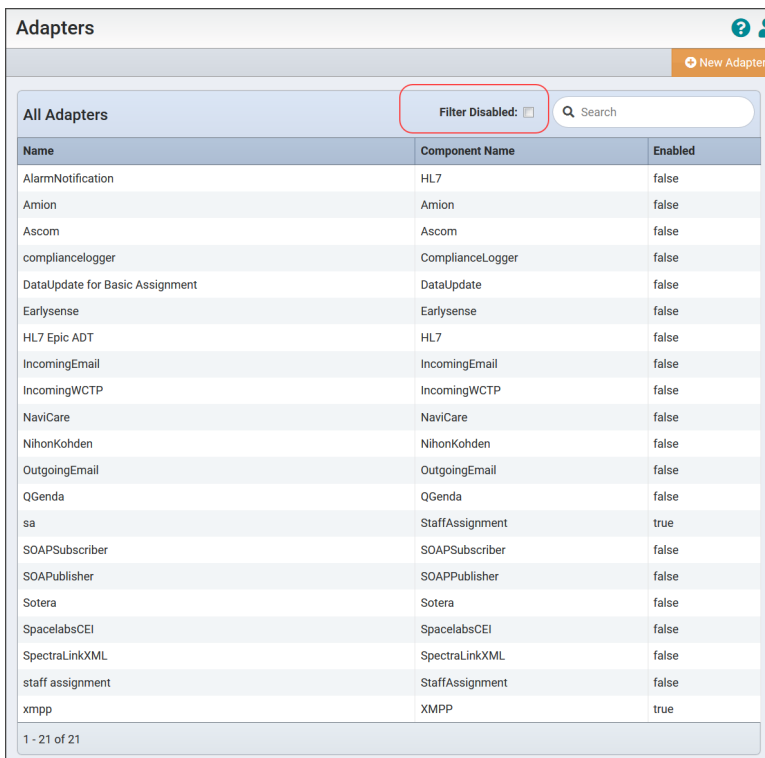
On the **Adapters** page you can identify adapters by their name or component name. The Enabled column (displaying a true or false status) indicates whether the adapter is active on the system, or disabled.

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

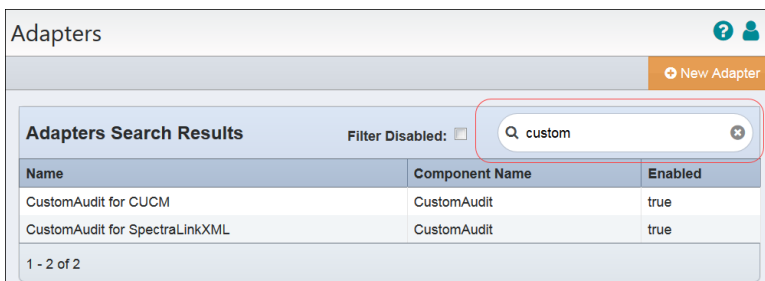
The Filter Disabled box is checked by default, and displays only the enabled adapters that are configured on the Vocera Platform.



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.

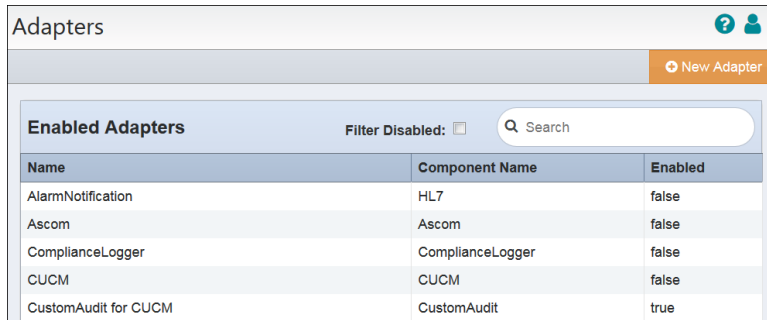


Editing an Adapter

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

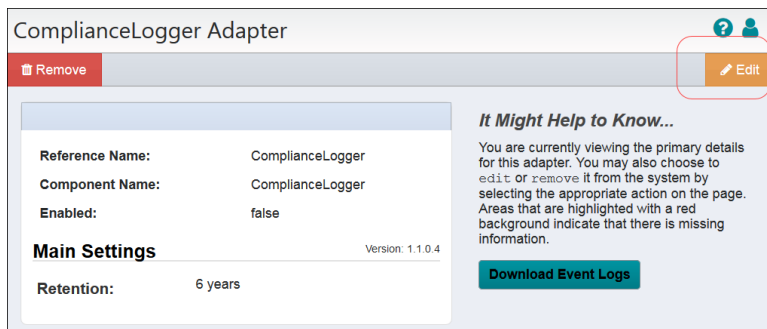
This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

1. Access the Vocera Platform Web Console and navigate to the adapters.
See [Navigating the Vocera Platform Adapters](#) on page 27 for instructions.
2. Select the adapter to edit in the **Adapters** list.



Name	Component Name	Enabled
AlarmNotification	HL7	false
Ascom	Ascom	false
ComplianceLogger	ComplianceLogger	false
CUCM	CUCM	false
CustomAudit for CUCM	CustomAudit	true

3. Select **Edit** in the adapter's menu.



ComplianceLogger Adapter

[Remove](#) [Edit](#)

Reference Name: ComplianceLogger
Component Name: ComplianceLogger
Enabled: false

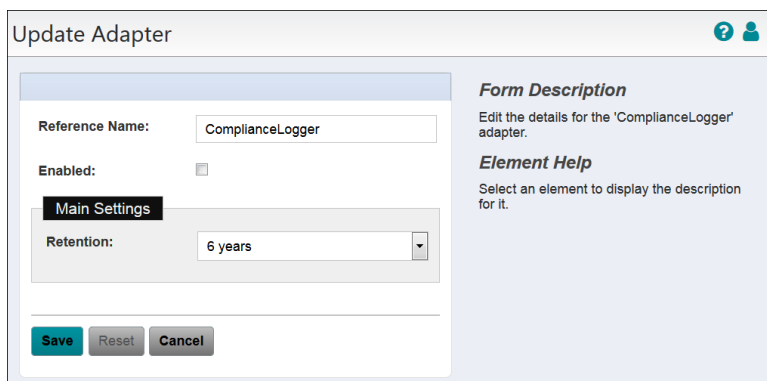
Main Settings Version: 1.1.0.4
Retention: 6 years

It Might Help to Know...
 You are currently viewing the primary details for this adapter. You may also choose to edit or remove it from the system by selecting the appropriate action on the page. Areas that are highlighted with a red background indicate that there is missing information.

[Download Event Logs](#)

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.



Update Adapter

Reference Name: ComplianceLogger
Enabled: ☐

Main Settings
Retention: 6 years

Form Description
 Edit the details for the 'ComplianceLogger' adapter.

Element Help
 Select an element to display the description for it.

[Save](#) [Reset](#) [Cancel](#)

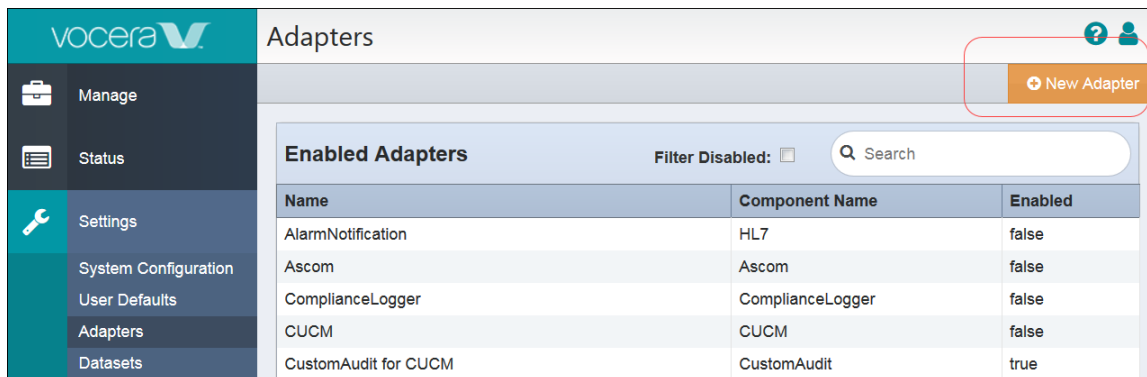
5. Select one of the options to exit the **Update Adapter** page. See [Saving an Adapter](#) on page 31 for details.

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 27 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 27 for instructions.
2. Select **Edit** in the Actions menu to access the Update page for the adapter.

XMPP Adapter

[Remove](#) [Edit](#)

Reference Name:	XMPP
Component Name:	XMPP
Enabled:	true

Main Adapter Settings Version: 4.0.0.175

It Might Help to Know...
You are currently viewing the primary details for this adapter. You may also choose to edit or remove it from the system by selecting the appropriate action on the page. Areas that are highlighted with a red background indicate that there is missing information.

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.

Update Adapter

[?](#) [User](#)

Form Description
Edit the details for the 'XMPP' adapter.

Element Help
Select an element to display the description for it.

Reference Name:

Enabled: ☐

Required Datasets

Actors:

Assignments:

4. Select one of the options to exit the **Update Adapter** page. See [Saving an Adapter](#) on page 31 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 27 for instructions.
2. Select **Remove** in the Actions menu to permanently delete the adapter.

XMPP Adapter

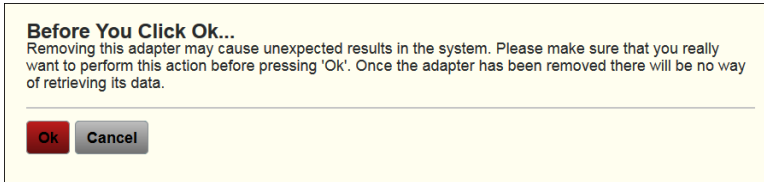
[Remove](#) [Edit](#)

Reference Name:	XMPP
Component Name:	XMPP
Enabled:	true

Main Adapter Settings Version: 4.0.0.175

It Might Help to Know...
You are currently viewing the primary details for this adapter. You may also choose to edit or remove it from the system by selecting the appropriate action on the page. Areas that are highlighted with a red background indicate that there is missing information.

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



- **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.

