

## Vocera Assignment Group Sync Adapter Configuration Guide

Version 2.2.0

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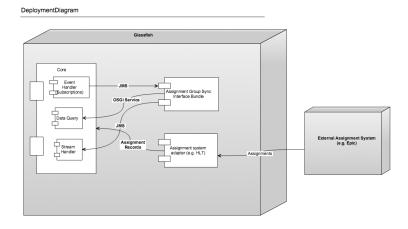
## Understanding a Vocera Assignment Group Sync Adapter Configuration

Configure a Vocera Assignment Group Sync Adapter in the Vocera Platform Web Console to allow communication between the external Assignment Group Sync system and the 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 Assignment Group Sync Adapter is used to map assignments to groups (and groups to assignments) in the Vocera Platform.

The Vocera Assignment Group Sync Adapter transforms assignments received from an external assignment system to Vocera Platform groups which can be utilized by the Vocera Voice Server. In the absence of an external assignment system, the transformation from groups received from the Vocera Voice Server to assignments on the Vocera Platform allows for proper routing of alerts and messages to the appropriate caregivers.

See <u>Understanding Vocera Care Team Sync Integration</u> on page 12 for additional system integration information.



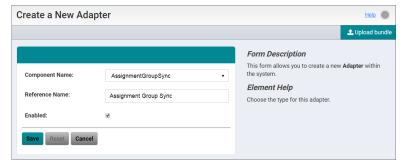
## Configuring a Vocera Assignment Group Sync Adapter

These settings allow you to configure the adapter to transform assignments received from an external assignment system to Vocera Platform groups which can be utilized by the Vocera Voice Server solution.

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. See <u>Using the Adapter Specific Actions Functionality</u> on page 6 to synchronize groups and assignments or to link groups and roles.

- 1. Access the Vocera Platform Web Console and navigate to the adapters. See Navigating the Vocera Platform Adapters on page 18 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 21 and Editing an Adapter on page 20 for instruction as needed.

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



4. Complete the general adapter configuration fields as described in the table. These fields are used by most adapters in the Vocera Platform.

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.

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.

5. Select one of the available options to exit the adapter configuration page. See Saving an Adapter on page 22 for details.

#### **Using the Adapter Specific Actions Functionality**

Synchronize groups and assignments, and link groups and required roles, in the Specific Actions section of the Vocera Assignment Group Sync Adapter configuration options.

The Vocera Assignment Group Sync Adapter allows on-demand synchronization, and the ability to link groups and required roles.

This adapter does not set a level for an assignment; the clinical path must be set as role-based, rather than level-based, if this adapter is used to create assignments based on groups.

Navigate to the Vocera Assignment Group Sync Adapter in the Vocera Platform Web Console to locate the **Assignment Group Sync Specific Actions** options in the side bar. The Vocera Assignment Group Sync Adapter does not interface with any external system, so there is no additional configuration provided other than component name, reference name, enabled, and this synchronization functionality.

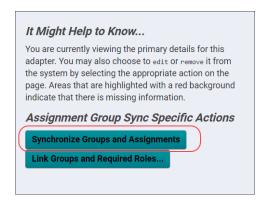
#### **Synchronizing Groups and Assignments**

Group and assignment synchronization occurs immediately when this button is selected.

Synchronization occurs automatically at startup; this manual option should only be necessary when there is reason to believe that there is a significant discrepancy between the assignments and groups.

Navigate to the Specific Actions section in the adapter's side bar to locate the **Synchronize Groups and Assignments** option.

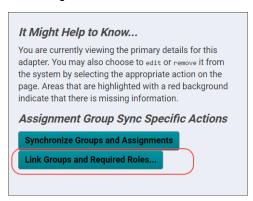
Click the **Synchronize Groups and Assignments** button to ensure the groups and assignments are mirrors of each other in the Vocera Platform.



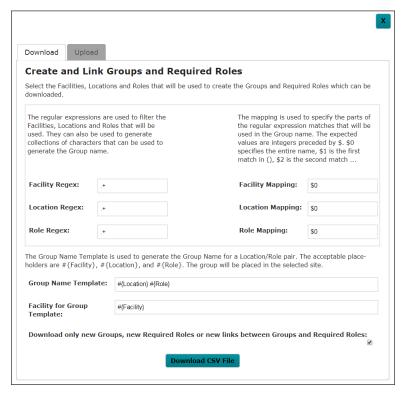
#### **Linking Groups and Required Roles**

The Vocera Assignment Group Sync Adapter can create required functional roles that link to groups. In the process, it will create any groups that are missing, but it will not create locations or functional roles.

Navigate to the Specific Actions section in the adapter's side bar to locate the **Link Groups and Required Roles** option.



The **Link Groups and Required Roles** button presents a dialog that allows you to specify how the groups are linked to required functional roles.

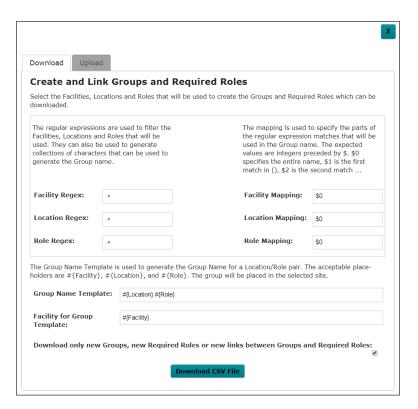


The linking occurs in two parts. Use the tabs in the **Create and Link Groups and Required Roles** dialog to:

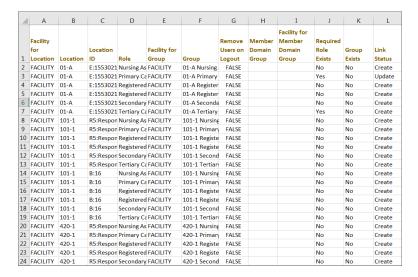
- First, download a CSV file from Vocera Platform that contains the fields that correspond to those in the dataset.
- Second, upload a CSV file that will be used to make the actual changes.

#### **Downloading Groups and Roles**

In the first part of the operation, click the **Download CSV File** button in the **Create and Link Groups** and **Required Roles** dialog.



The downloaded CSV file contains the Facility for Location Name, Location Name, Location ID, Role Name, Facility for Group Name, Group Name that corresponds to those, as well as the Remove Users on Logout, Member Domain Group, Facility for Member Domain Group, Required Role Exists, Group Exists, and Link Status.



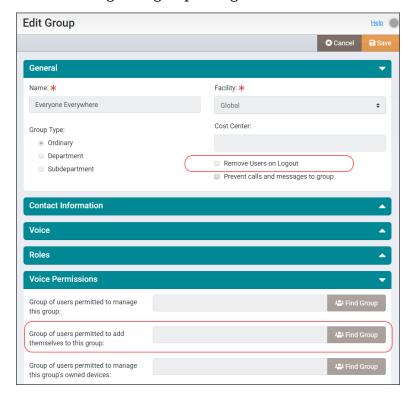
The file's column headers specify the Facility For Location, Location Name, Location ID, Functional Role regular expressions that will be used to identify the Locations and Functional Roles. The Locations and Functional Roles will comprise the set of Required Roles, Facility For Group, Required Role Exists, Group Status, and Link Status.

The mappings from the specified regular expressions are used to create the Group Name for a group that is part of a selected Facility For Group. The Remove Users on Logout property may be configured for Groups that are created, as well as a link to a Member Domain Group (which allows for users in the linked group to add or remove themselves from this group).

In the event that a given Location or Functional Role does not exist, it will not be created, nor will the Group or Required Functional Role be created.

The downloaded CSV file indicates if the Group already exists, if the Required Role already exists, and if the Group is already linked to the Required Role. You can filter out the rows where the Groups and Required Role already exist and are linked, in order to identify the groups and roles that you wish to work with.

The Member Domain Group and Facility for Member Domain Group columns correspond to the group and its facility, which can be configured when editing any group in the Vocera Platform Web Console. The columns "Member Domain Group" and "Facility for Member Domain Group" are used to set the "Groups of users permitted to add themselves to this group" setting for Groups. The Group setting "Remove Users on Logout" corresponds to the column of the same name, and indicates whether or not users will be removed from the group when they logout of their device. See the Vocera Platform Administration Guide for details about working with group configurations.



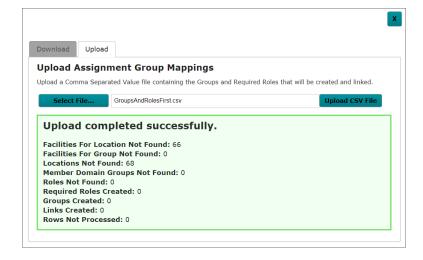
#### **Uploading Assignment Group Mappings**

In the second part of the operation, upload the CSV file that will make the actual changes in the system. The CSV file to upload will contain the Facility For Location Name, Location ID, Functional Role Name, Facility For Group Name, and Group Name. Any additional columns will be ignored. Any missing group or required functional role will be created and linked if necessary.

In the Upload tab, navigate to the file you wish to upload, then click **Upload CSV File**.



A report displays which indicates the number of Groups created, the number of Required Functional Roles created, and the number of Groups that were linked to a Required Functional Role.



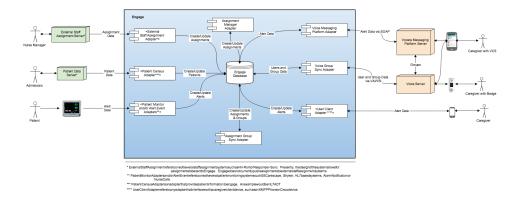
# Understanding the Vocera Assignment Group Sync Adapter Rules

This adapter does not require dataset rule configuration.

### **Understanding Vocera Care Team Sync Integration**

Vocera Care Team Sync (CTS) integration allows for routing of alerts and messages to the caregivers currently assigned to rooms and patients.

As the assignments and personnel change over time, the system adjusts the care team to ensure proper routing of alerts and messages. A number of systems and adapters are utilized to dynamically route alerts and messages based upon assignments. Assignments can be created either from an external assignment system, or based upon Vocera Voice Server groups.



#### **Assignments from an External Assignment System**

When the assignment comes from an external system, the external assignment adapter will normalize the information into an Assignment linked to a Location, and Role which has an association to a Patient and Group. The association to a group is maintained by the Vocera Assignment Group Sync Adapter. This group is synchronized with the Vocera Voice Server via the Vocera Voice Group Sync Adapter.

Alerts can be generated from Patient Monitoring systems or via workflows. When an alert occurs, the group or user associated with the assignment is notified via the Vocera VMP Adapter (for the Vocera Client), or the Vocera XMPP Adapter (for the Engage Client).

#### **Self Assignment via the Voice Server**

Caregivers can put themselves into groups and thus be linked to assignments. When they are included in a Vocera Voice Server group, that group is synchronized with a group on Vocera Platform via the Vocera Voice Group Sync Adapter and linked to an assignment via the Vocera Assignment Group Sync Adapter.

Alerts can be generated from Patient Monitoring systems or via workflows. When an alert occurs, the group or user associated with the assignment is notified via the Vocera VMP Adapter (for the Vocera Client), or a client device adapter, such as the Vocera XMPP Adapter (for the Vocera Vina Client) or the Vocera CUCM Adapter.

#### **Vocera Messaging Platform (VMP) Adapter**

The Vocera VMP Adapter allows for communication between the Vocera Platform and the VMP Server, allowing for alerts to be generated and cancelled, as well as synchronizing Vocera Platform devices with VMP users, and storing the alert responses received from the VMP Server for metric generation. The Vocera VMP Adapter is only required if the Vocera Collaboration Suite (VCS) application or the Vocera Voice Server is used in the final solution.

#### **Assignment Group Sync Adapter**

The Vocera Assignment Group Sync Adapter is used to map assignments to groups, and vice-versa. This provides the pivotal transformation from assignments received from an external assignment system, to groups which can be utilized by the Vocera Voice Server. In the absence of an external assignment system, the transformation from groups received from the Vocera Voice Server to assignments allows for proper routing of alerts and messages to the appropriate caregivers.

#### **Assignment Manager Adapter**

The Vocera Assignment Manager Adapter links assignments to location/bed when an external assignment system provides assignments by patient, and activates and ends assignments based upon dataset conditions. Activating assignments can be useful with systems with Epic, which can send assignments with start and end dates in the future. See the **Understanding Epic Treatment Team Configuration** documentation for additional details.

#### **Voice Group Sync Adapter**

The Vocera Voice Group Sync Adapter is used to synchronize the groups between Vocera Platform and the Vocera Voice Server. This synchronization is bi-directional, depending upon the configuration. The Vocera Voice Group Sync Adapter is only required if the Vocera Voice Server will be used in the final solution.

The Vocera Voice Group Sync Adapter requires a VAI Library in order to communicate with the Vocera Voice Server. The VAI Library is provided by the Vocera Adapter. Therefore, the Vocera Adapter must be installed, however, it is not necessary to have a configuration for the Vocera Adapter on the system.

#### **External Staff Assignment System Adapters**

The Vocera Care Team Sync integration allows for external staff assignment systems to provide the assignments for caregivers.

Examples of assignments systems that can be utilized are listed below. Access these adapter guides in the Vocera Documentation Portal for additional details.

- Hill-Rom Staff Assignment adapter
- Rauland ResponderSync Assignment adapter
- HL7 adapter
- Amion adapter
- QGenda adapter

#### **Patient Monitoring System Adapters**

The Patient Monitoring System adapters allow external patient monitors to provide data and alerts to Vocera Platform which can be distributed to caregivers as necessary. There are a variety of Patient Monitoring Systems that can be utilized with the Vocera Platform. Access these adapter guides in the Vocera Documentation Portal for additional details.

- GE Carescape adapter: generates alarms from GE Carescape patient monitors
- Stryker adapter: generates alarms from Stryker smart beds
- HL7 adapter for ADT: generates alarms from HL7 compatible system

• EarlySense adapter: generates alarms from EarlySense bed pads

## **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.

#### **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.

2. Execute the following commands:

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

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:
                                                 x86 64
 extension-navicare-interface
 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.

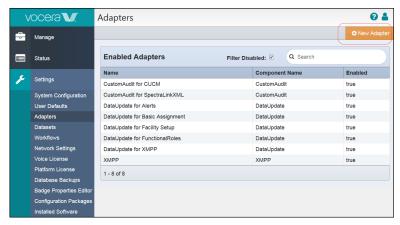


The **Adapters** page displays.

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  $\mathbf{x}$  icon allows you to clear the search field.



#### **Editing an Adapter**

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

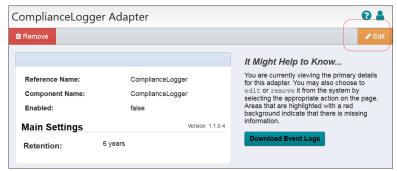
This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

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

  See Navigating the Vocera Platform Adapters on page 18 for instructions.
- 2. Select the adapter to edit in the **Adapters** list.



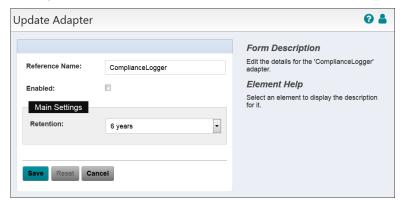
3. Select **Edit** in the adapter's menu.



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.



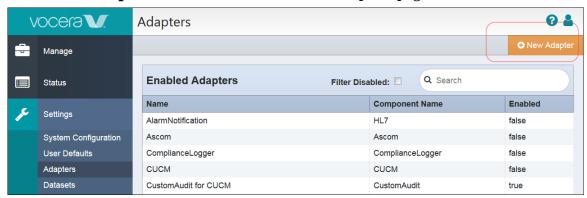
5. Select one of the options to exit the **Update Adapter** page. See Saving an Adapter on page 22 for details.

#### **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.

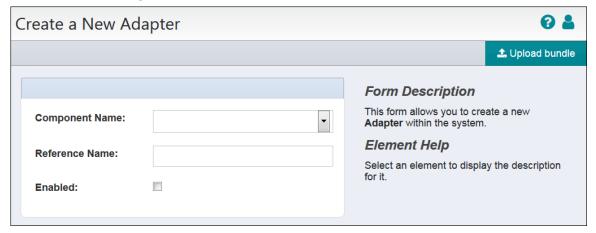
This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

- 1. Access the Vocera Platform Web Console and navigate to the adapters. See Navigating the Vocera Platform Adapters on page 18 for instructions.
- 2. Select **New Adapter** in the Action menu on the Adapters page.



The **Create a New Adapter** dialog displays.

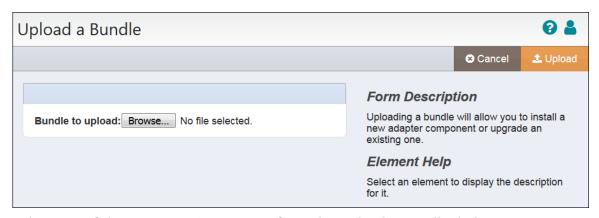
3. Complete the configuration fields.



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

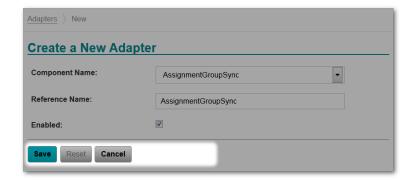
Close an adapter configuration dialog using the Save, Reset, or Cancel options.

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.

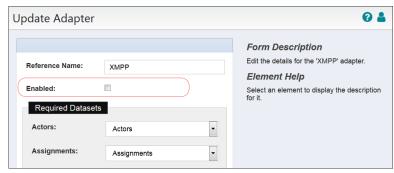
This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

- 1. Access the Vocera Platform Web Console and navigate to the adapter to deactivate. See Navigating the Vocera Platform Adapters on page 18 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 22 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.

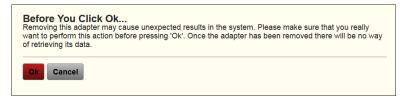


**Warning:** Remove cannot be undone. If any system features use this adapter, removing the adapter prevents the features from functioning.

- 1. Access the Vocera Platform Web Console and navigate to the adapter to remove. See Navigating the Vocera Platform Adapters on page 18 for instructions.
- 2. Select **Remove** in the Actions menu to permanently delete the adapter.



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.

