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Vocera SpectraLink XML Adapter Configuration Guide

Version 2.2.0

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Understanding a Vocera SpectraLink XML Adapter Configuration

Configure a Vocera SpectraLink XML Adapter to enable communication with Vocera Platform.

Adapters send information to and receive information from 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.

The Vocera SpectraLink XML Adapter configuration enables the Vocera Platform to request SpectraLink device information (including line appearances and events), and to send alerts and notification messages to SpectraLink endpoints.

Viewing the Vocera SpectraLink XML Adapter Requirements

The minimum requirements for a Vocera SpectraLink XML Adapter installation are described here.

System

This Vocera SpectraLink XML Adapter depends on the Vocera Platform 6.1.0 and greater.

This adapter is supported on Engage Platform version 5.5.x or greater.

Lines and Devices

One device is required per line that is registered with Vocera Platform. Vocera will send messages to one device using a unique line. Multiple devices cannot receive messages from the same line.

Rule Configuration

Any rule configured for the Vocera SpectraLink XML Adapter must be configured with an execute priority of **Critical**. If a rule is configured with an execute priority of Normal, the alert will only be sent when the phone is in an idle state.

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 CALLED_PARTIES Dataset the parties that received a phone call.
- The CALLS Dataset phone calls EXTENSION has monitored.

- The DEVICES Dataset details of every device registered with EXTENSION. Each device EXTENSION can send a message to must be listed.
- The LINES Dataset telephone line reported by a device when it is registered is stored herein.
- The PRESENCE_UPDATE Dataset a record created to update a users presence.
- The REGISTRATION_HISTORY Dataset a history of the all the registrations for a user.
- The USERS Dataset eXTENSION users

CALLED_PARTIES 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 phone number that a call was placed from or to.
Attribute	caller_id	N/A	False	N/A	False	String	Attribute that stores the caller ID of a person making or receiving a phone call.
Link	call	called_parties	True	False	N/A	Many-to-one	The CALLED_PARTIES Dataset is linked to the CALLS Dataset, and the link order is n:1 (many called_parties associated to one call)

CALLS Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	call_id	N/A	True	N/A	N/A	String	Attribute that stores the ID of a call. Not to be confused with caller ID. This is an internal Call Manager identifier.
Attribute	established	N/A	False	N/A	True	Date/Time	Attribute that stores time when the call was established.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	number	N/A	False	N/A	True	String	Attribute that stores the phone number that a call was placed from or to.
Attribute	status	N/A	False	N/A	True	String	Attribute that stores the status of the call. One of INITIATING, CONNECTING, RINGING, ANSWERED, COMPLETED, or FAILED.
Attribute	caller_id	N/A	False	N/A	False	String	Attribute that stores the caller ID of a person making or receiving a phone call.
Attribute	duration	N/A	False	N/A	False	Integer	Attribute that stores the length of a call.
Link	called_parties call		False	True	N/A	One-to-many	The CALLS Dataset is linked to the CALLED_PARTIES Dataset, and the link order is 1:n (one call associated to many called_parties)

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.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	status	N/A	False	N/A	True	String	Attribute that stores interfaces will keep track of the status of each device. This is current status of the device. For example, registered or unregistered.
Attribute	vendor	N/A	False	N/A	True	String	Attribute that stores the vendor of the device. For example, Cisco or Apple.
Attribute	ip_address	N/A	False	N/A	False	String	Attribute that stores in some cases EXTENSION needs to keep track of the current ip_address of a device, such a Cisco phone. The ip address is stored here.
Attribute	priority	N/A	False	N/A	False	String	Attribute that stores the priority level of the most recent message sent to a device will be retained in order to be used as filter to prevent less important messages from being sent to a user currently handling a critical issue.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	token	N/A	False	N/A	False	String	Attribute that stores some devices, such as smartphones, require a special identifier in order to receive a message. The token is used to store that special identifier.
Link	history	device	False	False	N/A	One-to-many	The DEVICES Dataset is linked to the REGISTRATION_HIST Dataset, and the link order is 1:n (one device associated to many registration_histories)
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)
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)

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 an actual telephone or directory number
Link	device_history	line	False	False	N/A	One-to-many	The LINES Dataset is linked to the REGISTRATION_HIST Dataset, and the link order is 1:n (one line associated to many registration_histories)
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)

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.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
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)

REGISTRATION_HISTORY Dataset

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Attribute	device_status	N/A	False	N/A	False	String	Attribute that stores the current registration status of the device.
Attribute	ip_address	N/A	False	N/A	False	String	Attribute that stores the device's current IP address.
Attribute	token	N/A	False	N/A	False	String	Attribute that stores some devices, such as smartphones, require a special identifier in order to receive a message. The token is used to store that special identifier.
Link	device	history	False	False	N/A	Many-to-one	The REGISTRATION_HIST Dataset is linked to the DEVICES Dataset, and the link order is n:1 (many registration_histories associated to one device)

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

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 identifying name used when a person wishes to login to EXTENSION
Attribute	presence_show	N/A	False	N/A	False	String	Attribute that stores the current presence state.
Attribute	presence_status	N/A	False	N/A	False	String	Attribute that stores the current presence message to display.

Element	Name	Reverse Name	Key	Reverse Key	Required	Type	Description
Link	device_history	usr	False	False	N/A	One-to-many	The USERS Dataset is linked to the REGISTRATION_HIST Dataset, and the link order is 1:n (one user associated to many registration_histories)
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	presence_upda	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 SpectraLink XML Adapter

These settings enable direct communication between the Vocera SpectraLink XML 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 35 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 38 and Editing an Adapter on page 37 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.

Configuration Field	Description
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.
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. Complete the **Common Settings** configuration fields as described in the table.

Common Settings Configuration Field	Description
Admin User Name	Insert the Administrator's User Name that is applicable to all SpectraLink devices into this field.
Admin Password	Insert the Administrator's Password that is used in conjunction with the **Admin UserName**. The password field displays asterisks, and not the user's entry.
Associate Users	Select the Associate Users checkbox if you are using the SpectraLink User Profile feature. If you are managing user to phone number associations in Vocera Platform, do not select this option.

Common Settings Configuration Field	Description
Default User	Select a user name in the Default User drop down list to assign that user to be the default for the Vocera SpectraLink XML Adapter. The user names displayed in the list are non-system users who are Active and are not authenticated by LDAP. ⚠️ **Warning:** A default user MUST be set. If a default user is not defined, the user is forced to re-authenticate after every session timeout. This may cause a user to miss notifications.
Heartbeat Interval	Enter a time, in seconds, in this field. The Vocera SpectraLink XML Adapter will use this value to determine if a device's heartbeat has been missed.
Maximun Concurrent Messages	Enter the maximum number of messages that will be sent concurrently to phones.

6. Complete the **PTT Settings** configuration fields to configure the Push-To-Talk functionality.

PTT Settings

Enable Push-to-Talk: ☑

PTT Workflow Page: [▼]

PTT Settings	Description
Enable Push-To-Talk	Select the **Enable Push-to-Talk** checkbox to enable this feature on devices that support this functionality. Selecting this option displays the PTT workflow page selection field.
PTT Workflow Page	Select a workflow from the drop down list. The selected workflow page will allow a user to utilize the Push-To-Talk functionality from that workflow page.

7. Complete the **Phone Application Settings** configuration fields as described in the table.

The settings described in this section provide the Vocera Platform with the explicit information required to communicate with the customer's devices, such as setting a default workflow page for the home screen or an outside application for a user profile. Enter these values exactly as provided.

Select **Enable Main Home URL** to use a Vocera Platform workflow page as the default home screen on all devices. Otherwise, select **Enable Application URL** to utilize a URL other than a Vocera Platform workflow page. The configuration for these choices is described in the following table.

Phone Application Settings

Enable Main Home URL: ☐

Enable Application URL: ☑

Application Number: [1   ▼]

Application Name: [   ]
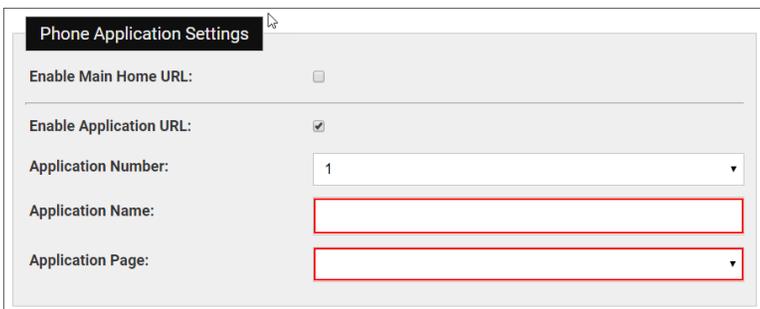
Application Page: [▼]

Phone Application Settings	Description
Enable Main Home URL	Select **Enable Main Home URL** if a Vocera Platform workflow page will be the default home screen on all devices. Selecting this checkbox displays an additional configuration field; Main Home Page.
Main Home Page	Select the workflow to be used as the default home screen from the drop down menu in **Main Home Page**.
Enable Application URL	Select **Enable Application URL** if the facility is using a URL other than an Vocera Platform workflow page for the default home page. Selecting this checkbox displays additional configuration fields.
Application Number	Assign an **Application Number** to the URL. You may assign a number between 1-6 from the dropdown menu. This will allow you to change Applications at a later date easily.
Application Name	Enter the name of the Application in this field.
Application Page	Select the workflow page that will be used as the URL for the Application page.

8. Select one of the available options to exit the adapter configuration page. See Saving an Adapter on page 39 for details.

Downloading Adapter Settings for Use on Devices

Export the Vocera SpectraLink XML Adapter settings to a configuration file that can be loaded into a SpectraLink XML device.

Instead of loading this file to devices individually, place the configuration file on the TFTP server and include it in the main configuration file for all phones. This enables devices to load the settings without manually configuring each device.

For assistance in managing the TFTP server, please see the SpectraLink 84-Series Administration Guide.

Select the **Download Config File** button in the Phone Application Settings section of the adapter's user interface.
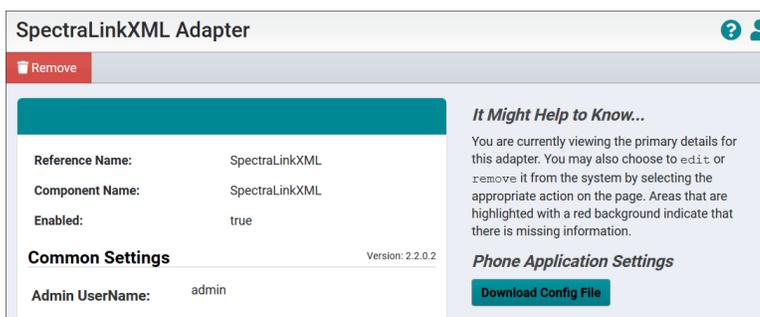
If the adapter is not active on the Vocera Platform, an error displays. Click Edit and then select the Enabled checkbox to make the adapter active.

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.

Phone Application Settings

Download Config File

Failed to download SpectraLink configuration file, the adapter was not active.

Understanding the Vocera SpectraLink XML Adapter Rules

A Vocera SpectraLink XML Adapter dataset rule can be configured on the Vocera Platform to manage message delivery to devices.

See the Vocera Platform Dataset Guide for information about working with rules. See Configuring a Vocera SpectraLink XML Adapter on page 13 for information about the adapter settings.

In the Adapter Settings, configure the Rule Settings fields to manage message delivery.

Setting	Description
Phone	Enter the phone number for the device. **This is a required field**.
Execute Priority	Select the execution priority for this rule. **This is a required field.** **Critical**: The message will execute immediately, regardless of the state of the device. **High**: The message will execute immediately but can be preceded by a higher priority message, Critical for example. **Important**: The message will execute immediately but can be preceded by a higher priority message, Critical or High for example. **Normal**: The message will execute when the device is idle or only after the device returns to the idle state.
Priority Level	Select the priority level that will be stored in the priority attribute for this message. **This is a required field.**

Setting	Description
WorkFlow Page	Select the workflow page that should be presented when the message is triggered. **This is a required field**.
Parameters	Supply a list of parameters that will be passed along with the executed URL. Each parameter pair must appear on its own line.
Audible Alert	Check this box if an audible alert is to be played when the message is delivered.
Alert Sound	Select the ring tone that is to be played when the message is delivered. **This is a required field if the Audible Alert box is selected.**

Working with the SpectraLink Web Configuration Utility

Use the vendor's Web Configuration Utility to perform configurations required for a SpectraLink device to work with the Vocera Platform.

Device configurations are performed in the SpectraLink Web Configuration Utility via a web browser.

Note that some screens in the utility may display the name Polycom, in addition to SpectraLink, as Polycom is the previous name for SpectraLink.

Accessing the SpectraLink Web Configuration Utility

Navigate to the device's Internet Protocol (IP) address in a web browser, in order to work with the SpectraLink Web Configuration Utility.

First locate the device's IP address, then access the SpectraLink Web Configuration Utility. See Exiting the Web Utility on page 21 for instruction on closing the utility.

1. On the SpectraLink phone, navigate the following path to locate the IP address of the device:
   Settings > **Status** >**Platform** >**Phone** >**IP**.
   The IP address of the device is displayed.
2. Enter the device's IP address in a web browser to display the SpectraLink Web Configuration Utility.

   a. Enter the `User Name`. This must match the **Admin UserName** entered in the adapter's Common Settings configuration. See Configuring a Vocera SpectraLink XML Adapter on page 13.
   b. Enter the `Password`. This must match the **Admin Password** entered in the adapter's Common Settings configuration. See Configuring a Vocera SpectraLink XML Adapter on page 13.
3. Select **Submit** to log into the SpectraLink Web Configuration Utility.
   The Utility dashboard displays.
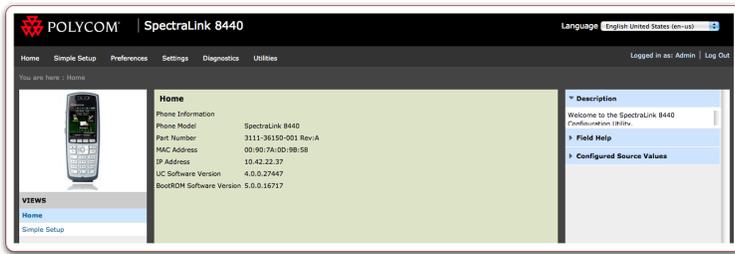
Exiting the Web Utility

After configuring the required sections of the SpectraLink Web Configuration Utility, you can save, cancel, or reset the selections, or view the modifications made.

1. Select one of the following options from the bottom of the screen in the Web Configuration Utility.

- Select **Save** to save the changes.
- Select **Cancel** to abandon your changes.
- Select **Reset to Default** to restore the default field values.
- Select **View Modifications** to view a list of the changes.

Configuring the Required Settings

Access the Applications section of the SpectraLink Web Configuration Utility to configure URLs, Telephony Event Notification, Phone State Polling, and Push settings.

Access the SpectraLink Web Configuration Utility to configure the following four sections in the Applications page:
- Configure URLs
- Telephony Event Notification
- Phone State Polling
- Push

1. Select **Settings** >**Applications**.
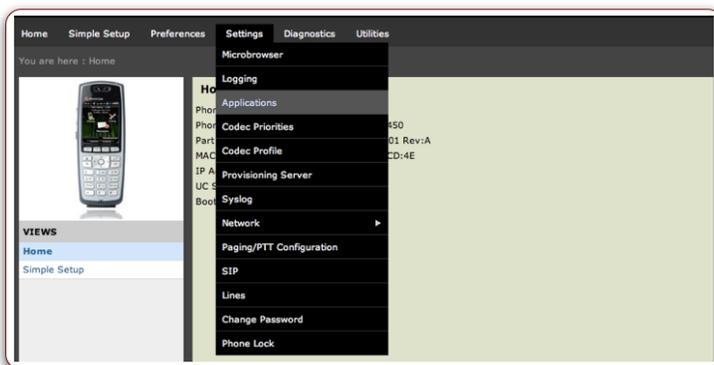
Configure URLs

Two methods describe how to configure the appliance URL when Vocera is the only application on the device, or when multiple applications are on the device.

Adding an Appliance's URL to the **Configure URLs** section allows the phone to browse to the Appliance's default workflow page.

Multiple URLs can be set in the Configure URLs section, and if more than one is set, a list displaying the Application Name will appear when a user selects **Applications** from a SpectraLink phone.

The Vocera Appliance's IP address along with the ending "/ei/w" should be added to the list of Application URLs to launch the default workflow page. Additionally, display a different "home page" workflow on a SpectraLink device by adding the workflow page name to the end of the Application URL; for example, "IPAddress/ei/w/Messages".

The configuration file XML strings associated with these settings are as follows when Vocera is one of multipiple applications on a device:

XML String	Description
Application URL	apps.1.url
Application Name	apps.1.label

1. Perform the URL configuration in the Applications window if Vocera and another application are being used on a SpectraLink device.
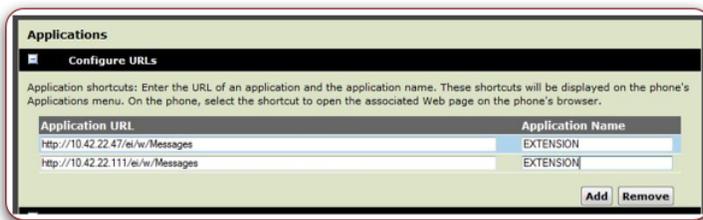
2. Select the **Add** button to add a new Application URL and Application Name.
3. Place the cursor in a line item and select the **Remove** button to delete an entry.

URL Configuration when Vocera is the Only Application

If Vocera is the only application on a SpectraLink device, the URL is configured differently.

Perform the following URL configuration if only Vocera is being used on a SpectraLink device.

The configuration file XML string associated with this setting is as follows:

XML String	Description
Main Browser Home	mb.main.home

1. Launch the SpectraLink Web Configuration Utility.
2. Select **Settings** >**Microbrowser**.

The Microbrowser page displays.

3. In the **Main Browser Home** field, enter the Appliance's URL to allow the device to browse to the Appliance's default workflow page, or to a different "home page" workflow.

4. When you have finished entering the URL in this field, click the **Save** button.

Telephony Event Notification

Vocera SpectraLink XML Adapter relies on telephony event notification for device management and call monitoring.

Multiple URLs can be set in this Telephony Event Notification section, and if more than one is set, the phone sends events to multiple applications.

The Vocera Appliance's IP address along with the ending `/osgi/SpectraLinkXML` should be added to the list of Application URLs, and the following events should be selected:

- Line Registration
- User Login and Logout
- Call State Change

The configuration file XML strings associated with these settings are as follows:

XML String	Description
Configured Telephony Notification URL	apps.telNotification.URL
Line Registration	apps.telNotification.lineRegistrationEvent
User Login and Logout	apps.telNotification.userLogInOutEvent
Call State Chang	apps.telNotification.callStateChangeEven

1. Edit the Telephony Event window as needed.

2. Select the **Add** button to add a new Configured Telephony Notification URL.
3. Place the cursor in a line item and select the **Remove** button to delete an entry.
4. Check the **Line Registration**, **User Login and Logout**, and **Call State Change** boxes.

Phone State Polling

Vocera SpectraLink XML Adapter relies on Phone State Polling for device management.

The configuration file XML strings associated with these settings are as follows:

XML String	Description
Response Mode (radio button)	apps.statePolling.responseMode
Poll URL (field)	apps.statePolling.URL
User Name	apps.statePolling.username
Password	apps.statePolling.password

1. Complete the following information in the Phone State Polling window. Only one URL can be set in this section.

2. Select the **Response Mode** radio button for Poll URL or Requester.

   The Requester selection is recommended as it is faster, reduces traffic, and scales to multiple application servers.

3. Enter the Vocera Appliance's `IP address` along with the ending `/osgi/SpectraLinkXML` in the Poll URL field.

4. Enter the `User Name`. This must match the **Admin UserName** entered in the adapter's Common Settings configuration. See Configuring a Vocera SpectraLink XML Adapter on page 13.

5. Enter the `Password`. This must match the **Admin Password** entered in the adapter's Common Settings configuration. See Configuring a Vocera SpectraLink XML Adapter on page 13.
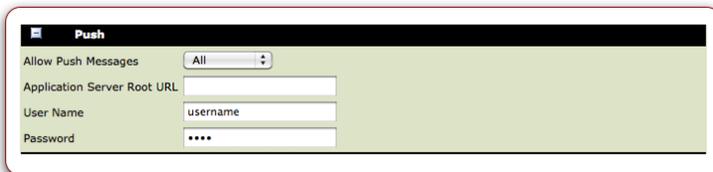
Push

Push settings must be configured in order for a SpectraLink device to receive messages from Vocera.

The configuration file XML strings associated with these settings are as follows:

XML String	Description
Allow Push messages	apps.push.messageType
User Name	apps.push.username
Password	apps.push.password

1. Complete the following information in the Push window.

2. Set Allow Push Messages to **All**.

3. Enter the `User Name`. This must match the **Admin UserName** entered in the adapter's Common Settings configuration. See Configuring a Vocera SpectraLink XML Adapter on page 13.

4. Enter the `Password`. This must match the **Admin Password** entered in the adapter's Common Settings configuration. See Configuring a Vocera SpectraLink XML Adapter on page 13.

Line Settings

In order for a SpectraLink device to register with Vocera Platform, the device must be registered to a Session Initiation Protocol (SIP) server.

Register the SpectraLink device to a SIP server in the **Simple Setup** section of the Web Configuration Utility, found in the main menu bar.

Note: The same Line Settings can be accessed by selecting Settings from the main menu bar and clicking on **Lines** or **SIP** in the drop-down menu. However, only the first line of each SpectraLink device will be registered with the Vocera Platform.

Note: SIP server settings vary widely, based upon the individual configurations. Therefore, Vocera Platform cannot provide exact values for SIP server settings or determine all information settings that might be required. Values shown in this document are for demonstration purposes only. Contact your IT professional or a SpectraLink representative for more information on SIP server settings.

Note: The number that should receive messages must be configured for Line 1 in order for that phone to receive messages.

1. Select **Simple Setup** in the SpectraLink Web Configuration Utility menu bar.
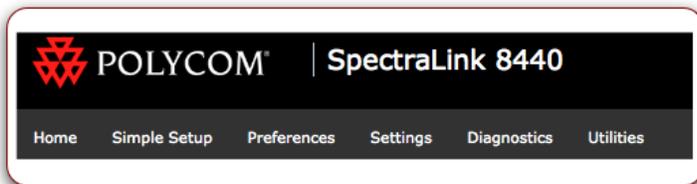
The Simple Setup page displays.
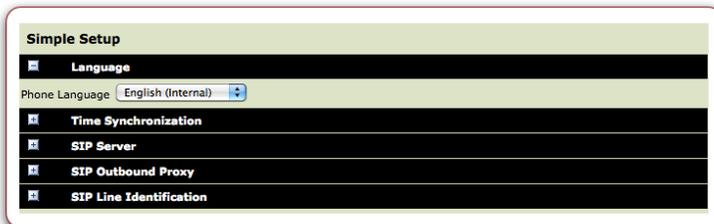
2. Expand the SIP Server section of the screen. There are two fields, Address and Port, that must be configured.


SIP Server Configuration Field	Description
Address	Enter the IP address of the SIP server with which the phone is registered.
Port	Enter the port that the phone uses to access the SIP server for phone registration.

The configuration file XML strings associated with these settings are as follows:

XML String	Description
Address	voIpProt.server.1.address
Port	voIpProt.server.1.port

3. Expand the SIP Line Identification section. There are five fields that must be configured.
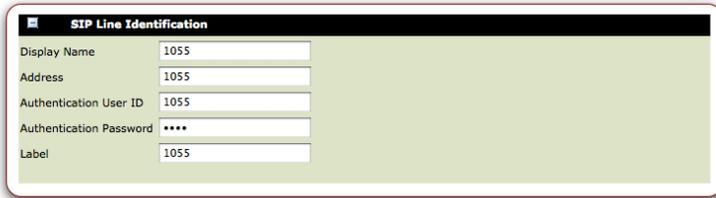
SIP Line Setting	Description
Display Name	Enter the name or number that will be used as the phone's caller ID. This information appears at the top of the phone screen display.
Address	Enter the line number for the phone. This number **must** match the line number that is registered with the SIP server.
Authentication User ID	Enter the user name used to authenticate this line registration with the SIP Server. Depending upon the SIP Server configuration utilized, this field may not be required.
Authentication Password	Enter the password used to authenticate this line registration with the SIP Server. Depending upon the SIP Server configuration utilized, this field may not be required.
Label	Enter the text that will display next to the associated line key. If a label is not defined, the label will be derived from the user part of the address. This field is optional

The configuration file XML strings associated with these settings are as follows:

XML String	Description
Display Name	reg.1.displayName
Address	reg.1.address
Authentication User ID	reg.1.auth.userId
Authentication Password	reg.1.auth.password
Label	reg.1.label

Timeout Settings

Timeout Settings will result in the phone going offline after a specific period of time, whether or not activity from that phone is detected.

SpectraLink devices are automatically configured with Timeout Settings. In order to improve the Vocera workflow experience on the SpectraLink devices, the **Main Browser Page Timeout** value must be changed from the default setting of 40 seconds.

Note: If the Timeout Setting is not changed from 40 seconds, activity being conducted on the phone, such as the composing of a text message, could be lost when the 40 second threshold is reached. It is strongly recommended that the Timeout Setting be changed to zero, which eliminates the timeout interval.

The configuration file XML string associated with this setting is as follows:

XML String	Description
Main Browser Page Timeout	mb.main.idleTimeout

1. Access the Timeout Setting by selecting **Settings** >**Microbrowser**. The Microbrowser page displays.
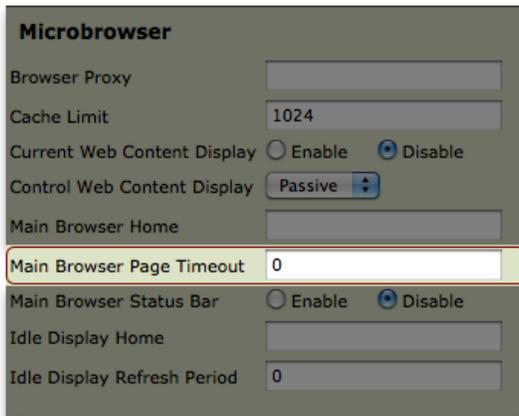
2. Change the **Main Browser Page Timeout** value. The default value, in seconds, is 40. It is recommended that the value be changed to 0.

Expires

Configure the Expires setting in the SpectraLink Web Configuration Utility to match the Heartbeat Interval setting in the Vocera SpectraLink XML Adapter.
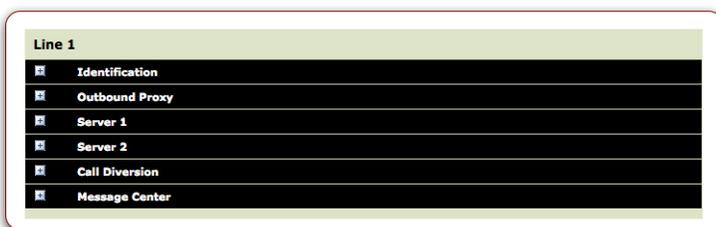
Important: These two values must match.

The configuration file XML string associated with this setting is as follows:

XML String	Description
Expires	reg.1.server.1.expires

1. To access the Expires setting, access the SpectraLink Web Configuration Utility and from the main menu bar, select **Settings** >**Lines**.
   The Line 1 page displays.

2. Expand the Server 1 section of the screen and locate the **Expires** field.

WORKING WITH THE SPECTRALINK WEB CONFIGURATION UTILITY

3. Change the value in the **Expires** field to match the value entered for the **Heartbeat Interval** in the Vocera SpectraLink XML Adapter. See Configuring a Vocera SpectraLink XML Adapter on page 13 for information about the Heartbeat Interval setting.

Configuring Multiple Devices with the SpectraLink Web Configuration Utility

The Export and Import features in the SpectraLink Web Configuration Utility can be utilized to expedite the process if multiple devices are being configured.

SpectraLink device configuration for use with the Vocera Platform is accomplished by accessing each individual device's IP address and adjusting the settings in that specific device's SpectraLink Web Configuration Utility.

Alternately, you may bypass using the SpectraLink Web Configuration Utility by directly editing the associated XML configuration files on your provisioning server. See Manually Editing the SpectraLink Configuration Files on page 30.

1. Navigate to the SpectraLink Web Configuration Utility of the device you have configured and will use as a template for all other devices.

   The device that will be used as a template for all other devices must already be configured as described in this document. If the template device is not configured, follow the steps in this document to configure the device before utilizing the Export feature.

2. Log into the SpectraLink Web Configuration Utility. See Accessing the SpectraLink Web Configuration Utility on page 20.

3. Select **Utilities** >**Import and Export Configuration**.

The Import and Export Configuration page displays.

VOCERA SPECTRALINK XML ADAPTER CONFIGURATION GUIDE
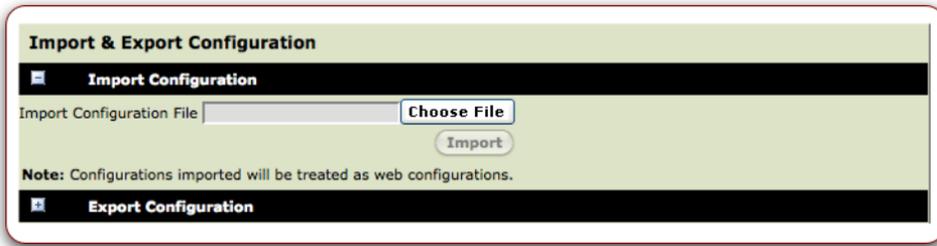
4. To Export a configuration:

a. Expand the **Export** section of the page.

b. Select the **Export Configuration File** drop-down menu to view all export file choices. Select the export option that is appropriate for your needs. For this example, **All Configuration** is selected.
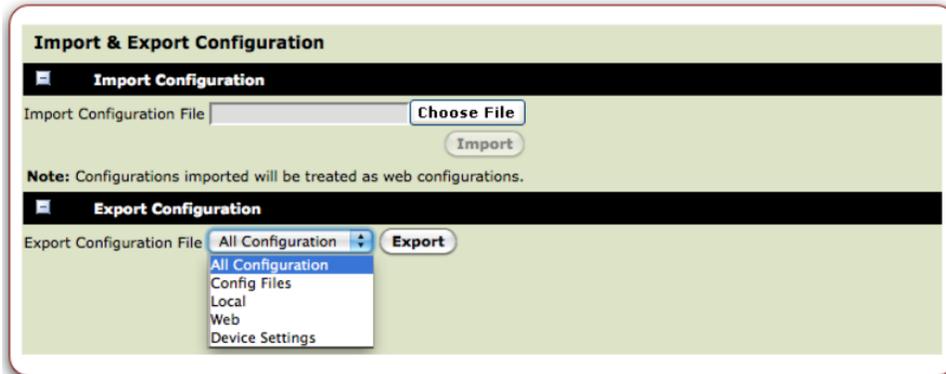
c. Select the **Export** button, located next to the **Export Configuration File** drop-down menu. A dialog box displays.
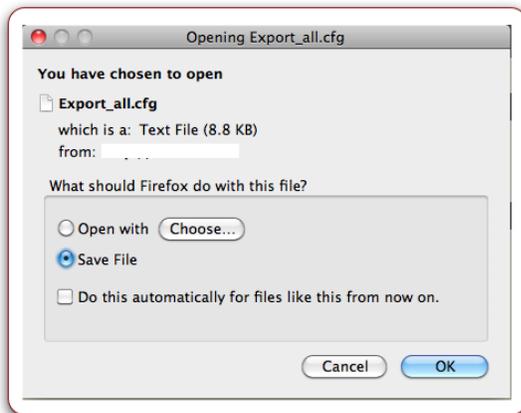

d. Select the location on your local computer to which you want to save the configuration file, and then select the **OK** button. The file is now saved to your local computer.

e. Logout of the SpectraLink Web Configuration Utility from which you just saved the configuration file.

f. Enter the IP address in your web browser of the SpectraLink device to which you want to apply the saved configuration file.

The SpectraLink Web Configuration Utility for that device displays.

5. To Import a configuration:

a. In the Import Configuration page, select the **Choose File** button located at the end of the Import Configuration File field.

b. Navigate to the location of the XML configuration file that you previously saved to your local computer and select the file. The configuration file path is displayed in the Import Configuration File field.
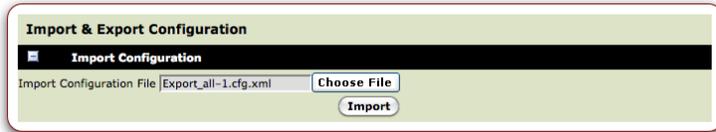

c. Select the **Import** button located below the Choose File button. A confirmation message displays.
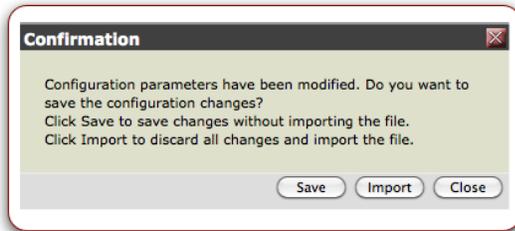
d. Select an operation.
   - Select the **Save** button to save your changes without importing the configuration file.
   - Select the **Import** button to import the configuration file and apply the device configuration.
   - Select the **Close** button to close the confirmation message.

   In this example, the Import button is selected and a message displays that confirms the configuration file was successfully imported.
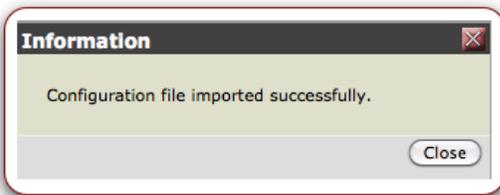
e. Click the **Close** button on the success message. The device configuration file has been successfully imported and applied to this SpectraLink device.

f. Repeat this process to apply the configuration to additional SpectraLink devices.

Manually Editing the SpectraLink Configuration Files

Edit the XML configuration files directly, instead of using the SpectraLink Web Configuration Utility.

You may bypass using the SpectraLink Web Configuration Utility and directly edit the associated XML configuration files on your provisioning server.

Throughout the SpectraLink Web Configuration Utility documentation, the XML strings that must be added or edited for the device to function with Vocera have been provided. Locate the appropriate configuration files on your provisioning server and add or edit the corresponding XML strings. A complete list of XML strings is provided here.

Open the 8400-global.cfg, sip-basic.cfg, or MAC file. This file will vary, depending upon your configuration.

Using the XML strings provided in this document, make the necessary changes to the configuration file(s).

Save the files after you have finished making changes, and then upload the edited files to your provisioning server.

Files to Edit

For ease in editing these files, a list of the XML strings that must be modified are listed below. These are the same XML strings that are detailed at other points in this document. This list is provided for ease of use.

- apps.1.url
- apps.1.label
- mb.main.home
- apps.telNotification.URL
- apps.telNotification.lineRegistrationEvent
- apps.telNotification.incomingEvent
- apps.telNotification.outgoingEvent
- apps.telNotification.userLogInOutEvent
- apps.telNotification.callStateChangeEvent
- apps.statePolling.responseMode
- apps.statePolling.URL
- apps.statePolling.username
- apps.statePolling.password
- apps.push.messageType
- apps.push.username
- apps.push.password
- voIpProt.server.1.address
- voIpProt.server.1.port
- reg.1.displayName
- reg.1.address
- reg.1.auth.userId
- reg.1.auth.password
- reg.1.label
- mb.main.idleTimeout
- reg.1.server.1.expires

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.
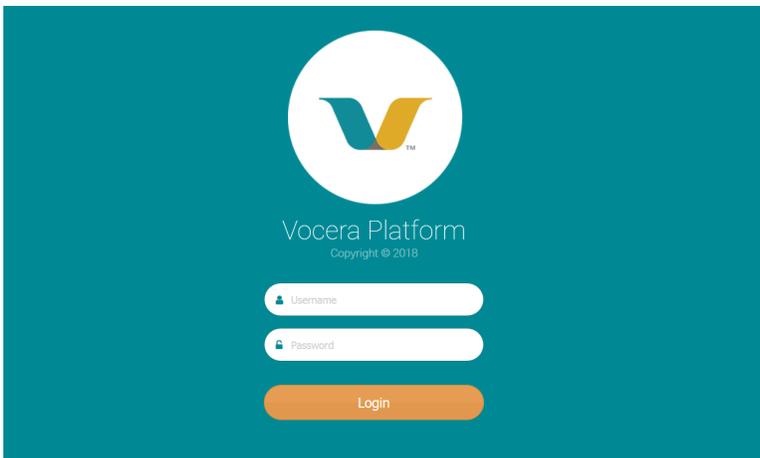
2. Select **Settings > Adapters** in the navigation menu.
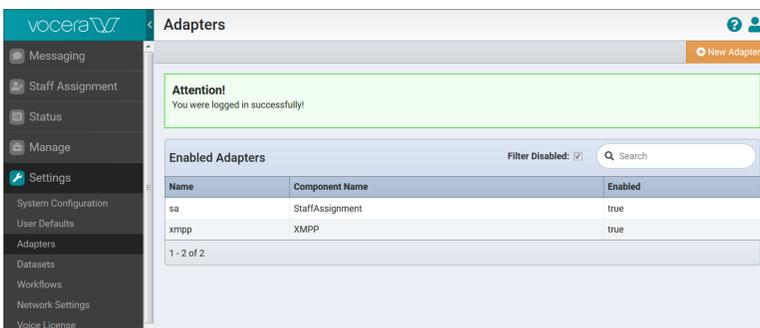

   The **Adapters** page displays.

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.
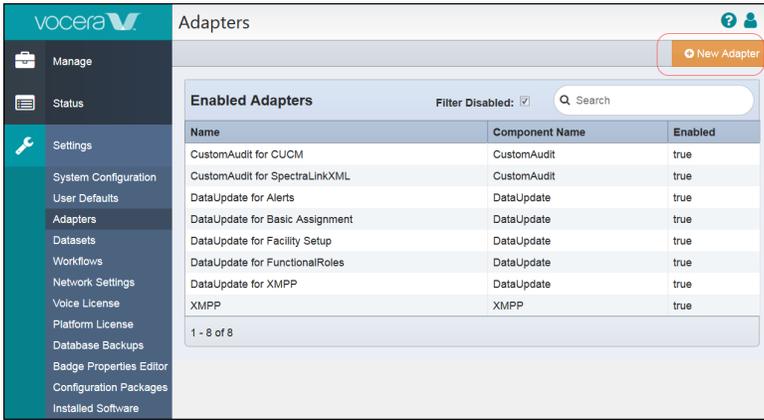
4. Uncheck the **Filter Disabled** box to display all the adapters that have been installed, including those that are not currently enabled. The column title now displays **All Adapters**.

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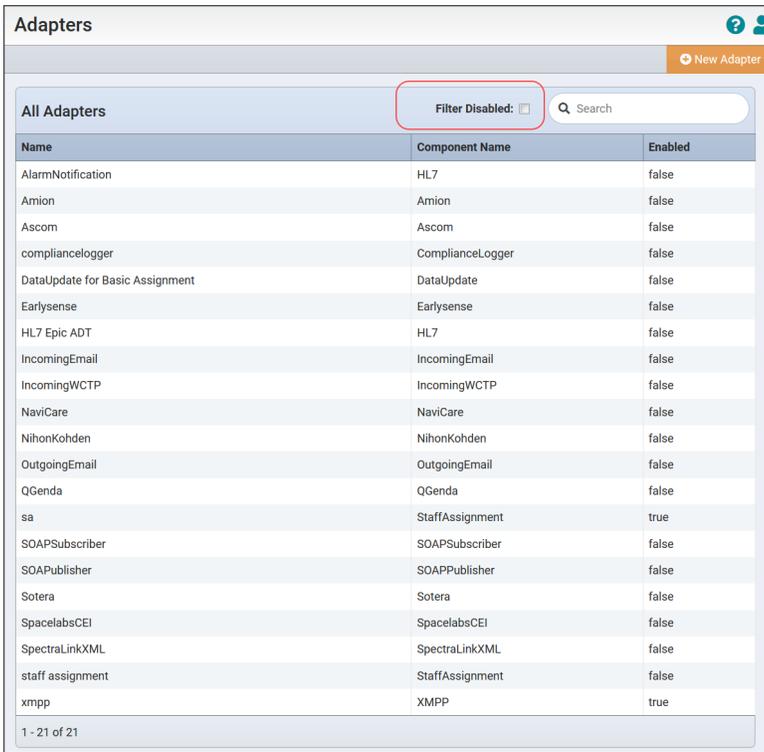
5. Enter a term in the **Search** field to locate a needed adapter on the system.

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.
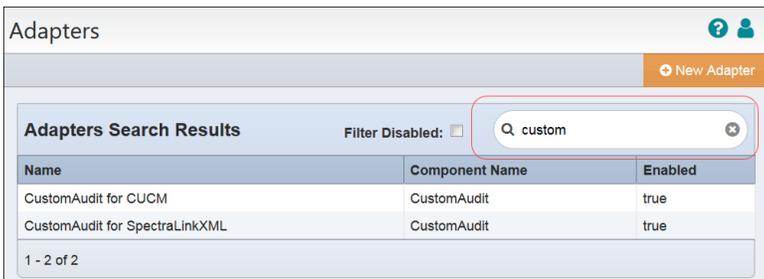
Editing an Adapter

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 35 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 39 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 35 for instructions.

2. Select **New Adapter** in the Action menu on the Adapters page.
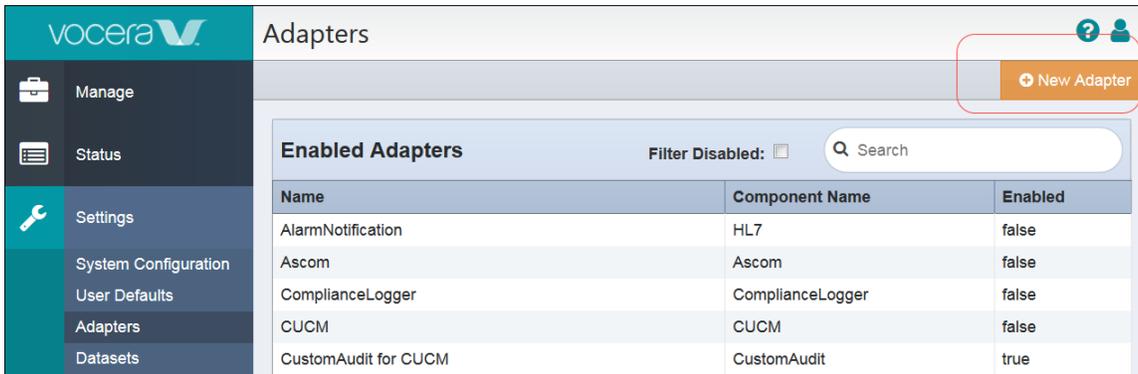
   The **Create a New Adapter** dialog displays.

3. Complete the configuration fields.
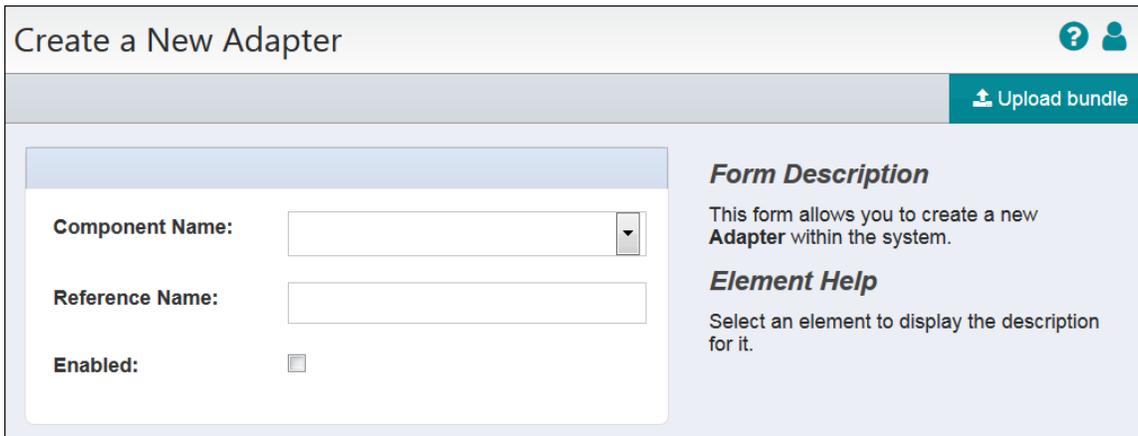
Name	Description
Component Name *	Select the Component Name field dropdown arrow to display a list of the systems and devices that Vocera currently supports. Select the name of the adapter to create.
Reference Name	Enter a short descriptive name in the Reference Name field to uniquely identify an adapter 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.
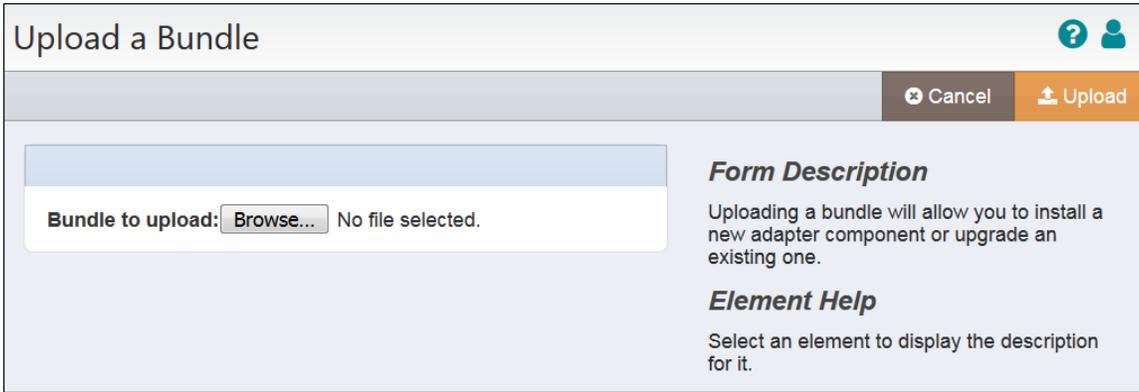
6. Select one of the Action options to exit from the Upload a Bundle dialog.
    • **Upload**: Upload the selected bundle to the appliance.
    • **Cancel**: Close the Upload a Bundle dialog without making a change to the system.

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:
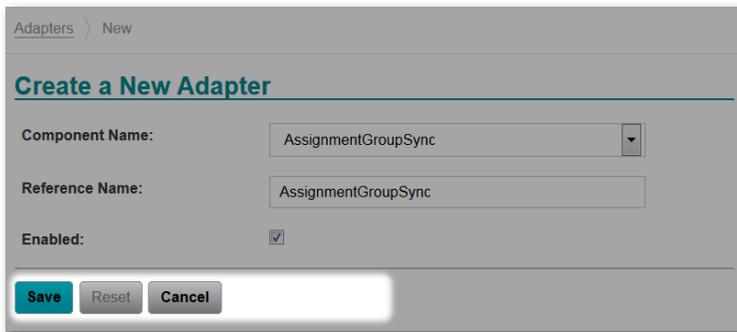
Option	Description
Save	Select Save to store the adapter configuration in the system, when the fields are set to desired specifications.
Cancel	Select Cancel to close the configuration window without saving your changes to the system.
Reset	Select Reset to clear all fields without closing the window, 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 35 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 39 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 35 for instructions.

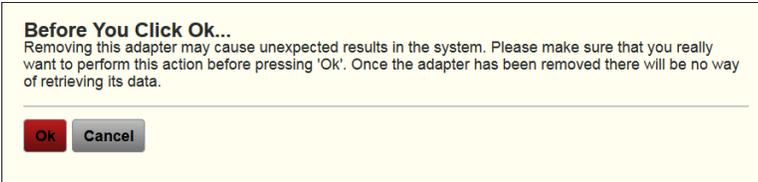2. Select **Remove** in the Actions menu to permanently delete the adapter.

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.