

# **Vocera Outgoing WCTP Adapter Configuration Guide**

Version 2.1.0

# Notice

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# Understanding a Vocera Outgoing WCTP Adapter Configuration

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The Vocera Outgoing WCTP Adapter is designed to interact with a WCTP Carrier Gateway.

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 Outgoing WCTP Adapter configuration defines the URL of the WCTP Carrier Gateway, and the host name and port to be used by the WCTP Carrier Gateway to connect back to the enterprise host. Multiple adapter instances may be configured; each instance requires a unique Carrier Gateway URL.

The adapter supports WCTP messaging and alerting, and sending messages with additional IHE extensions. When working with alerts that come from a source which uses IHE formatted data (HL7), the data can be stored on additional attributes on the dataset and be passed directly through the rule using templated input.

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## Viewing the Vocera Outgoing WCTP Adapter Requirements

The minimum Vocera Outgoing WCTP Adapter requirements for a Vocera Platform installation are described here.

### 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 **DEVICES Dataset** stores all details of every device registered with Engage. Each device to which Engage can send a message must be listed in this dataset.
- The **LINES Dataset** stores each telephone line reported by a device when it is registered.
- The **PRESENCE\_UPDATE Dataset** stores records created to update a users presence.
- The **USERS Dataset** stores all Engage users.

### 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)

### **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	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)

**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	presence_show	N/A	False	N/A	False	String	Attribute that stores the current presence show value for the user.
Attribute	presence_status	N/A	False	N/A	False	String	Attribute that stores the current presence status message for the user.
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_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 Outgoing WCTP Adapter

Description of the settings that enable direct communication between the Vocera Outgoing WCTP 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 25 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 28 and [Editing an Adapter](#) on page 27 for instruction as needed.

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

**Create a New Adapter**

Component Name:

Reference Name:

Enabled:

**Required Datasets**

Devices:

Lines:

Presence update:

Users:

**Connection Settings**

Sender ID:

Carrier Gateway URL:

Security Code:

Enable IHE PCD Extensions:

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

Configuration Field	Description
Component Name	Click the Component Name field to display a list of the systems and devices that the Vocera Platform currently supports. Select the name of the adapter to create.
Reference Name	Enter a short descriptive name in the Reference Name field to uniquely identify an adapter instance. It may demonstrate the adapter function or other information; for example, Production adapter may differentiate a live adapter from a development or "sandbox" adapter.
Enabled	Select the Enabled checkbox to allow the Vocera Platform to use the new adapter. The Vocera Platform ignores the adapter if this option is disabled.
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> <p>Refer to <a href="#">Viewing the Vocera Outgoing WCTP Adapter Requirements</a> on page 4 for dataset information.</p>

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

Connection Settings	Description
Sender ID	<p>Enter the WCTP sender ID which is sent in all outbound messages. This address is used for responses and delivery notifications.</p> <p>If not specified, the appropriate servlet path will be used to deliver responses.</p> <p>Configure a different address or port to override the Sender ID in this field.</p>
Carrier Gateway URL	Enter the URL to use to connect to the carrier gateway. <b>This is a required field.</b>
Security Code	Enter the security code to be used when sending messages and authenticating responses or status updates.
Enable IHE PCD Extensions	<p>Check the <b>Enable IHE PCD Extensions</b> box to modify the WCTP version sent to be the version specified in the IHE Technical Framework, and also enable an extra rule action in the "Multiple Choice Response with IHE PCD Extensions" rule configuration.</p> <p>See <a href="#">Understanding the Vocera Outgoing WCTP Adapter Rules</a> on page 13 documentation to see the "Multiple Choice Response with IHE PCD Extensions" rule.</p>

6. Select one of the available options to exit the adapter configuration page. See [Saving an Adapter](#) on page 29 for details.

## Uploading a User Phonebook for Vocera Outgoing WCTP Adapter

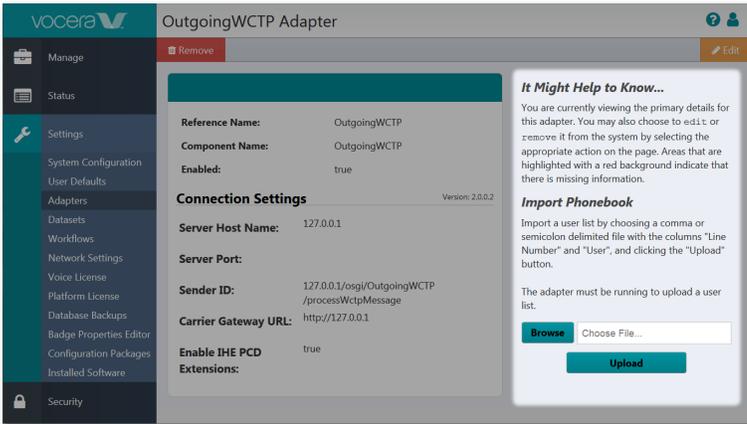
The Vocera Outgoing WCTP Adapter allows you to import a phonebook or user list. The adapter uses the phonebook to map users and phone lines.

The phonebook must be a comma or semicolon delimited file containing two columns; Line Number and User. The adapter must be running to upload the phonebook.

Once uploaded to the Vocera Platform, the line numbers are assigned to users via the associations specified in the phonebook. In order to make changes to the phonebook, simply upload a new version to overwrite the previous file.

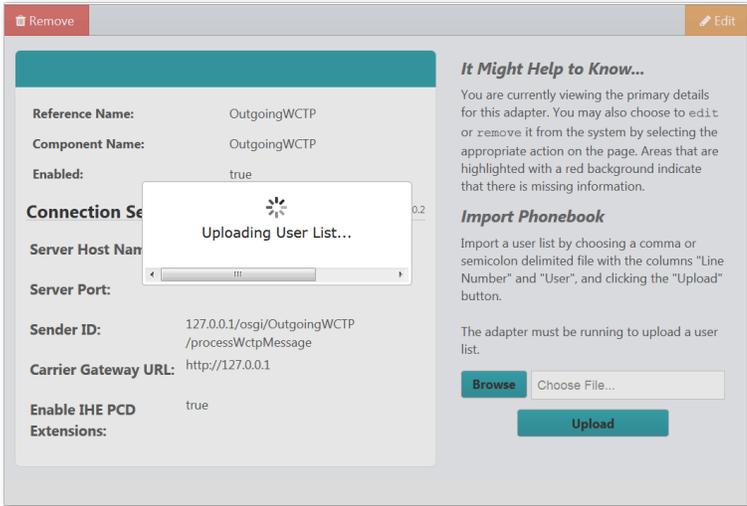
Use the Manage Devices workflow to see the line numbers that were assigned to users via the OutgoingWCTP phonebook. See the [Vocera Platform Workflow Guide](#) for information about accessing the Manage Devices workflow.

Click **Browse** in the adapter's sidebar configuration under **Import Phonebook**, and navigate to select the phonebook file to upload.



Click **Upload** to add the file to the system when the file name of the phonebook you want to upload displays in the **Choose File** field.

A spinning wheel displays and a message indicates that the phonebook (user list) is uploading.



A confirmation message displays reporting the successful upload of the phonebook file to the system, as shown below.

***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.

***Import Phonebook***

Import a user list by choosing a comma or semicolon delimited file with the columns "Line Number" and "User", and clicking the "Upload" button.

The adapter must be running to upload a user list.

**Browse**

**Upload**

User list upload succeeded.

## Understanding the Vocera Outgoing WCTP Adapter Rules

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The Vocera Outgoing WCTP Adapter rules can trigger the adapter to send messages to a WCTP Carrier Gateway.

A Vocera Outgoing WCTP Adapter rule for triggering a message to be sent may be defined against a dataset view. The rule defines the parameters used in formulating the message, to whom it should be sent, and what to do with the response.

See the [Vocera Platform Administration Guide](#) for information about working with rules. See [Configuring a Vocera Outgoing WCTP Adapter](#) on page 9 for information about adapter settings.

In the Adapter Settings, configure the Rule Settings fields on a Vocera dataset to manage message delivery.

Datasets > Clinicals > Rules >  
 SEND PRIMARY | APNEA, ASYSTOLE | FIRST GROUP | WCTP | GROUP | ALL UNIT... > Edit

### Edit SEND PRIMARY | APNEA, ASYSTOLE | FIRST GROUP | WCTP | GROUP | ALL...

**Purpose:** SEND PRIMARY | APNEA, ASYSTOLE | FIRST GROUP | WCTP | GROUP | ALL UNITS | IHE

**Adapter:** outgoingwctp

**Defer Delivery By:** 0

**Don't send back to originating adapter:**

**Active?:**

**Trigger Events**

**Create Event:**

**Update Event:**

**Trigger Conditions** Add Condition

Remove

**Adapter Settings**

**Rule Settings**

**Recipients:** #{bed.room.unit.first.users.devices.lines.number}

**Delivery Priority:** NORMAL

**Message:** #alert\_summary  
 Clinical Alert  
 #bed.room.facility.configuration.assignment\_level\_primary.description  
 Room: #{bed.room.room\_number} - #{bed.bed\_number}

**Message Type:** Alphanumeric

**Response Allowed:**

**Line Attribute Path:** responses.line.number

**User Attribute Path:** responses.usr.login

**Value Attribute Path:** responses.action

**Save** **Reset** **Cancel**

The Message Type selection controls which fields display for configuration. In the image above, the Message Type field selection is Alphanumeric, which displays the Response Allowed checkbox.

In the image below, one of the two Multiple Choice Response options is selected, which display the attribute path configuration fields for line, user, and value. See the tables below to understand all of the configuration field descriptions.

**Adapter Settings**

**Rule Settings**

Recipients:

Delivery Priority:

Message:

Message Type:

Line Attribute Path:

User Attribute Path:

Value Attribute Path:

Rule Settings	Description
Recipients	Enter the lines to which the message should be delivered. This field is required.
Delivery Priority	Select the delivery priority value to assign to the message; options in the dropdown are: <ul style="list-style-type: none"> <li>High</li> <li>Normal</li> <li>Low</li> </ul>
Message	Enter the message that should be delivered. This field is required.
Message Type	Select the Message Type for the rule; dropdown options are: <ul style="list-style-type: none"> <li><b>Alphanumeric</b>: the Response Allowed checkbox displays for configuration</li> <li><b>Multiple Choice Response</b>: the Response Choices fields display for configuration</li> <li><b>Multiple Choice Response with IHEPCD Extensions</b>: in addition to the Response Choices options, the IHE PCD Extensions fields display for configuration</li> </ul>
Response Allowed	Select this checkbox to indicate whether or not responses to a message are allowed. <p>This checkbox only displays when the <b>Alphanumeric</b> option is selected in the Message Type dropdown shown above. If the Response Allowed box is not checked, the Line, User, and Value Attribute Path fields described next are not available.</p>
Line Attribute Path	Enter an attribute path relative to the triggering dataset in which to store a responding line. <p>Required if Alphanumeric and Response Allowed are selected, or if either Multiple Choice Response or Multiple Choice Response with IHEPCD Extensions is selected.</p>
User Attribute Path	Enter an attribute path relative to the triggering dataset in which to store a responding user. <p>Required if Alphanumeric and Response Allowed are selected, or if either Multiple Choice Response or Multiple Choice Response with IHEPCD Extensions is selected.</p>

Rule Settings	Description
Value Attribute Path	Enter an attribute path relative to the triggering dataset in which to store a responding value. Required if Alphanumeric and Response Allowed are selected, or if either Multiple Choice Response or Multiple Choice Response with IHEPCD Extensions is selected.

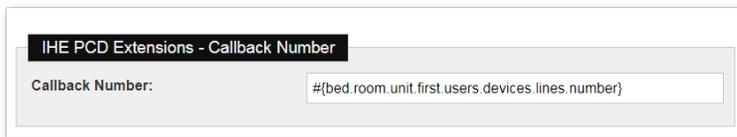
The **Response Choices** configuration fields display when the Message Type field is set to either Multiple Choice Response, or Multiple Choice Response with IHEPCD Extensions.

Response Choices Configuration Field	Description
Send Choice	Enter the string to display to a user for this choice. Send Choice is the prompt component of an MCR request. This is the value used by the ACM Alert Communicator to populate buttons, softkeys, or menu choices on the endpoint communication device for selection by the device operator. There can be multiple.
Reply Choice	Enter the string to return to the enterprise host for this choice. Reply Choice is the response value component of an MCR request. This value is correlated with its same ordinal occurrence Send Choice value.
Add Response Choice	Click to add a response choice to the configuration.
Remove Response Choice	Click to remove the selected response choice from the configuration.

The optional IHE PCD Extensions configuration fields display when the Message Type field is set to Multiple Choice Response with IHEPCD Extensions.

IHE PCD Extensions Configuration Field	Description
Alarm Priority	<p>Enter the IHE value to be sent for the alarm priority. For example:</p> <ul style="list-style-type: none"> <li>• No Alarm: PN</li> <li>• Low Priority: PL</li> <li>• Medium Priority: PM</li> <li>• High Priority: PH</li> </ul> <p>HL7 values to automatically populate the alarm priority:</p> <ul style="list-style-type: none"> <li>• OBX-5 of OBX segment with Alarm Priority facet</li> <li>• Component of OBX-8 Abnormal Flags field of OBX segment with Event Identification facet</li> </ul> <p>This corresponds to an observation in a PCD-04 Report Alert transaction. For more information, see Table B.8.5-1 in the IHE PCD TF Volume 2.</p>
Alert Type	<p>Enter the IHE value to be sent for the alert type. For example:</p> <ul style="list-style-type: none"> <li>• Physiological: SP</li> <li>• Technical: ST</li> <li>• Advisory: SA</li> </ul> <p>HL7 values to automatically populate the alert type:</p> <ul style="list-style-type: none"> <li>• OBX-5 of OBX segment with Alert Type facet</li> <li>• Component of OBX-8 Abnormal Flags field of OBX segment with Event Identification facet</li> </ul> <p>This corresponds to an observation in a PCD-04 Report Alert transaction. For more information, see Table B.8.5-1 in the IHE PCD TF Volume 2.</p>
Event Identification	<p>Enter the IHE value to be sent for the MDC formatted event identification.</p> <p>The MDC event code should be taken from the IEEE 11073-10101 nomenclature for event codes. The event code is the specific identification of the alert.</p> <p>HL7 values to automatically populate the event identification:</p> <ul style="list-style-type: none"> <li>• OBX-3 of OBX segment with Source Identification facet for alerts with a type of Physiological</li> <li>• OBX-5 of OBX segment with Source Identification facet for other alert types</li> </ul> <p>The event identification is the MDC event code for the alert. This corresponds to an observation in a PCD-04 Report Alert transaction. For more information, see Table B.8.5-1 in the IHE PCD 4670 TF Volume 2.</p>
Source Identification	<p>Enter the IHE value to be sent for the source system identification.</p> <p>In the case of physiologic alarm type of alerts, this is the associated MDC value for the alert. In the case of technical alarm type alerts and advisory type alerts, this is 196616^MDC_EVT_ALARM^MDC and OBX-5 contains the specific identification of the alert.</p> <p>The source identification is the physiological measurement or technical source responsible for the alert. This corresponds to an observation in a PCD-04 Report Alert transaction. For more information, see Table B.8.5-1 in the IHE PCD TF Volume 2.</p>

IHE PCD Extensions Configuration Field	Description
<p>Event Phase</p>	<p>Enter the IHE value to be sent for the event phase. The event phase describes the stimulus for the message which can be the beginning, end, or some other state, or state transition of the alert. For example:</p> <ul style="list-style-type: none"> <li>• START</li> <li>• END</li> <li>• CANCEL</li> <li>• SUSTAIN</li> </ul> <p>HL7 value to automatically populate the event phase:</p> <ul style="list-style-type: none"> <li>• OBX-5 of OBX segment with Event Phase facet</li> </ul> <p>The event phase corresponds to an observation in a PCD-04 Report Alert transaction. An Alert Manager can use this field to inform an Alert Communicator that a PCD-06 message was sent as a result of an escalation or deescalation. For more information, see Table B.8.5-1 in the IHE PCD TF Volume 2.</p>
<p>Inactivation State</p>	<p>Enter the IHE value to be sent for the inactivation state. The inactivation state reflects the current state of the visual and aural alert indications at the alert source.</p> <p>HL7 value to automatically populate the inactivation state:</p> <ul style="list-style-type: none"> <li>• OBX-5 of OBX segment with Inactivation State facet</li> </ul> <p>This corresponds to an observation in a PCD-04 Report Alert transaction. For more information, see Table B.8.5-1 in the IHE PCD TF Volume 2.</p>
<p>Alert Timestamp</p>	<p>Enter the IHE value to be sent for the alert timestamp. This can be any value stored in the system as Date Time.</p> <p>HL7 values to automatically populate the alert timestamp:</p> <ul style="list-style-type: none"> <li>• OBR-7 segment</li> <li>• OBX-14 segment</li> </ul> <p>The alert timestamp is the timestamp for an alert indication according to the Alert Manager. This corresponds to a value in a PCD-04 Report Alert transaction, but it is in the format of a WCTP conformant timestamp (yyyy-mm-ddThh:mm:ss.tt). For more information, see Section B.8.7 in the IHE PCD TF Volume 2.</p>



Callback Number Configuration Field	Description
<p>Callback Number</p>	<p>Enter the value to be sent for the IHE Callback Phone Number.</p> <p>This field is the telephone number for reporting a status or a result using the standard format with extension and/or beeper number when applicable. This can be used to pass the nurse call system patient station telephony call back information to the caregiver. If the structure of the telephony dial string is not known, then the call back number should be in the Unformatted Telephone number (ST) component of the field.</p>

**IHE PCD Extensions - Observation Metrics**

Value:

Units:

Reference Range:

Abnormality Type:

Observation Metrics Configuration Field	Description
Value	<p>Enter the IHE value (as an attribute) to be sent for the value of a report alert transaction.</p> <p>HL7 value to automatically populate the value:</p> <ul style="list-style-type: none"> <li>OBX-5 of OBX segment with Source Identification facet for alerts with a type of Physiological</li> </ul> <p>This corresponds to an observation in a PCD-04 Report Alert transaction. For more information, see Section B.8.5 in the IHE PCD TF Volume 2</p>
Units	<p>Enter the IHE value to be sent for the measurement type of the value of an alert.</p> <p>If a value is specified, the units should also be specified. IHE requires units to be specified as MDC encoded values. If different units are expected for the same alert, the MDC value can be provided via an attribute transformation on the attribute that the unit is captured on.</p> <p>HL7 value to automatically populate the units:</p> <ul style="list-style-type: none"> <li>OBX-6 of OBX segment with Source Identification facet for alerts with a type of Physiological</li> </ul> <p>This corresponds to an observation in a PCD-04 Report Alert transaction. For more information, see Section B.8.5 in the IHE PCD TF Volume 2.</p>
Reference Range	<p>Enter the IHE value (as an attribute) to be sent for the alert range set in the alarming device.</p> <p>HL7 value to automatically populate the reference range:</p> <ul style="list-style-type: none"> <li>OBX-7 of OBX segment with Source Identification facet for alerts with a type of Physiological</li> </ul> <p>This corresponds to a value in a PCD-04 Report Alert transaction. For more information, see Section B.8.5 in the IHE PCD TF Volume 2.</p>
Abnormality Type	<p>Enter the IHE value to be sent for the abnormality type which indicates the type of abnormality described by this alert. For example:</p> <ul style="list-style-type: none"> <li>Normal: N</li> <li>Below Low Normal: L</li> <li>Below Lower Panic Limits: LL</li> <li>Above High Normal: H</li> <li>Above Higher Panic Limits: HH</li> <li>Abnormal: A</li> </ul> <p>HL7 value to automatically populate the abnormality type:</p> <ul style="list-style-type: none"> <li>OBX-5 of OBX segment with Abnormality Type facet</li> <li>Component of OBX-8 Abnormal Flags field of OBX segment with Event Identification facet</li> </ul> <p>This corresponds to an observation in a PCD-04 Report Alert transaction. For more information, see Section B.8.5 in the IHE PCD TF Volume 2.</p>

**IHE PCD Extensions - Filler Order Number**

Filler Order Number:

Parent Filler Order Number:

Filler Order Number Configuration Field	Description
<p><b>Filler Order Number</b></p>	<p>Enter the IHE value (as an attribute) to be sent for the filler order number, which is the unique identifier for status updates to an alert indication.</p> <p>HL7 values to automatically populate the filler order number:</p> <ul style="list-style-type: none"> <li>• OBR-3 segment</li> </ul> <p>The filler order number is the unique identifier for status updates to an alert indication. This corresponds to a value in a PCD-04 Report Alert transaction. For more information, see Section B.7.1 in the IHE PCD TF Volume 2.</p>
<p><b>Parent Filler Order Number</b></p>	<p>Enter the IHE value (as an attribute) to be sent for the filler order number, which is the unique identifier for the original alert indication.</p> <p>HL7 values to automatically populate the parent filler order number:</p> <ul style="list-style-type: none"> <li>• OBR-29 segment</li> </ul> <p>The parent filler order number is the unique identifier for the original alert indication. This corresponds to a value in a PCD-04 Report Alert transaction. For more information, see Section B.7.1 in the IHE PCD TF Volume 2.</p>

The location of an alert is defined by one or more location elements. These location elements are modeled from the FHIR 8 Location resource. There are attributes for the identifier, description, type, and physical type. Refer to the [FHIR](#) (Health Level Seven International) standard for descriptions and available values of these attributes.

For Bed Location, PV1-3.2 maps to a wctp-IHEPCDACMLocation element with a physical type attribute of "bd" as defined in the FHIR Location Physical Type value set.

For Room Location, PV1-3.2 maps to a wctp-IHEPCDACMLocation element with a physical type attribute of "ro" as defined in the FHIR Location Physical Type value set.

For Unit Location, PV1-3.3 maps to a wctp-IHEPCDACMLocation element with a physical type attribute of "hu" as defined in the FHIR Location Physical Type value set.

**IHE PCD Extensions - Location**

Bed Identifier:

Bed Description:

Bed Type:

Room Identifier:

Room Description:

Room Type:

Unit Identifier:

Unit Description:

Unit Type:

Location Configuration Field	Description
Bed Identifier	Enter the unique code or number identifying the bed as defined by FIHR.
Bed Description	Enter the description of the bed, which helps in finding or referencing the place.
Bed Type	Enter the type of function performed at the bed as defined by FIHR.
Room Identifier	Enter the unique code or number identifying the room as defined by FIHR.
Room Description	Enter the description of the room, which helps in finding or referencing the place.
Room Type	Enter the type of function performed at the room as defined by FIHR.
Unit Identifier	Enter the unique code or number identifying the unit as defined by FIHR.
Unit Description	Enter the description of the unit, which helps in finding or referencing the place.
Unit Type	Enter the type of function performed at the unit as defined by FIHR.

**IHE PCD Extensions - Device**

Device Name:

Device ID:

Device Configuration Field	Description
Device Name	Enter the IHE value to be sent for the name of the participating device.
Device ID	Enter the IHE value to be sent for the ID of the participating device, which is the Equipment Instance Identifier.

**IHE PCD Extensions - Patient**

Patient Name:

Patient ID:

Patient Configuration Field	Description
Patient Name	Enter the IHE value to be sent for the name of the participating patient.
Patient ID	Enter the IHE value to be sent for the ID of the participating patient.

## Understanding Adapter Installation

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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-навicare-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-навicare-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-навicare-interface.x86_64 0:1.3.6-0 will be installed
--> Finished Dependency Resolution
```

Dependencies Resolved

```
=====
Package                               Arch                               Size
Version                               Repository                         Size
=====
Installing:
extension-навicare-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-навicare-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-навicare-interface-1.3.6-0.x86_64          1/1
Verifying  : extension-навicare-interface-1.3.6-0.x86_64          1/1
```

Installed:

```
extension-навicare-interface.x86_64 0:1.3.6-0
```

Complete!

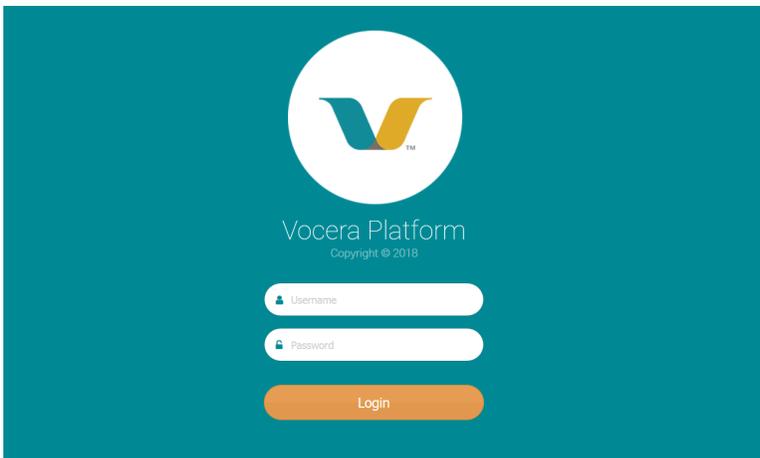
5. This completes the steps to install an adapter.

## Navigating the Vocera Platform Adapters

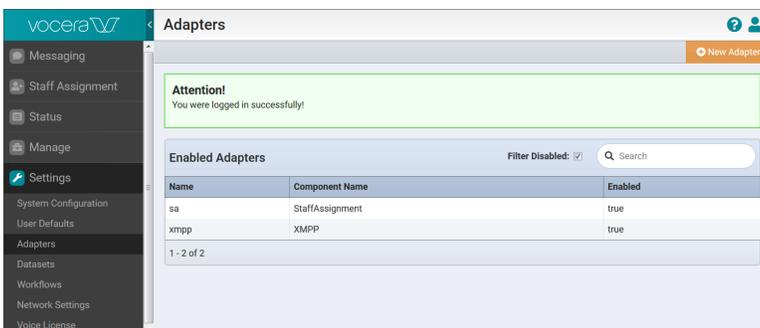
Access the Adapters tab and use the filter or search tools to display a specific adapter.

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.

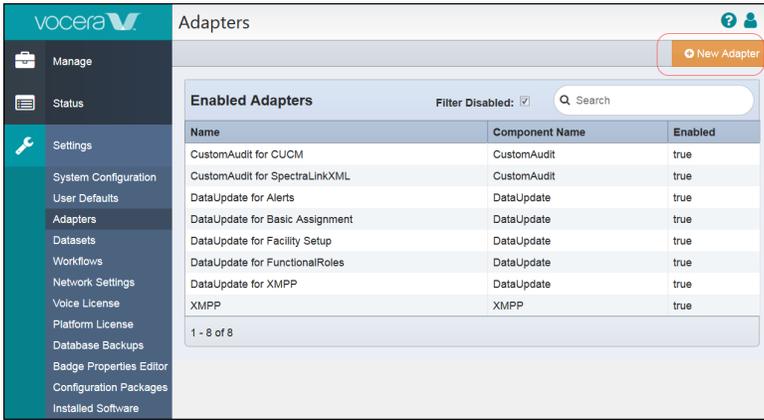


The **Adapters** page displays.

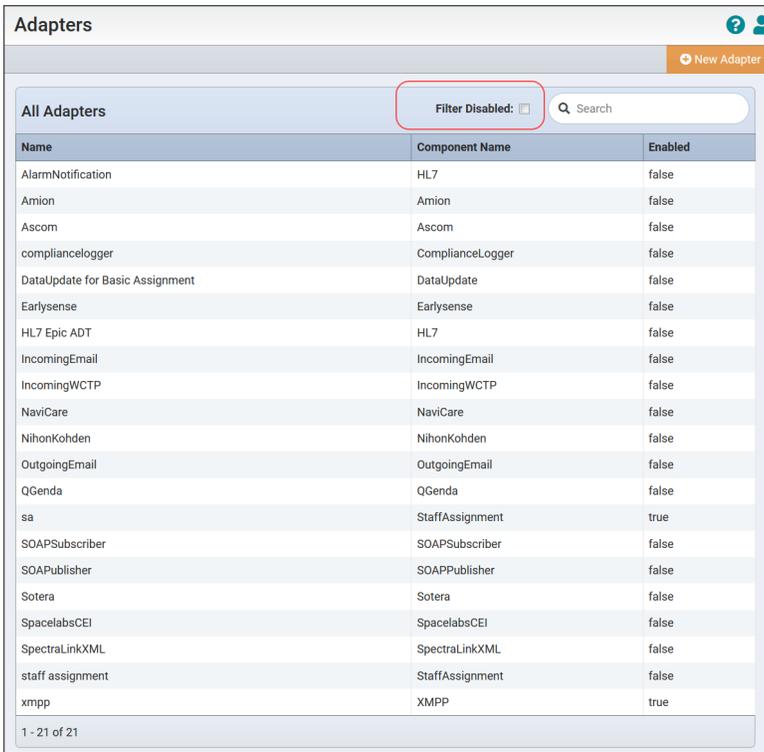
3. Select an adapter to work with from the list displayed in the grid, or select the **New Adapter** Action option to create a new adapter.

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.

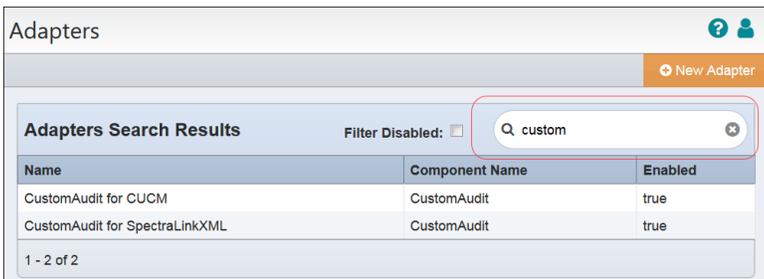
The bottom row of the grid reports the number of adapters displayed, of the available adapters. The Filter Disabled box is checked by default, and displays only the enabled adapters that are configured on the Vocera Platform.



- 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.



- 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 25 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

**Download Event Logs**

*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.

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

**Save** **Reset** **Cancel**

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

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

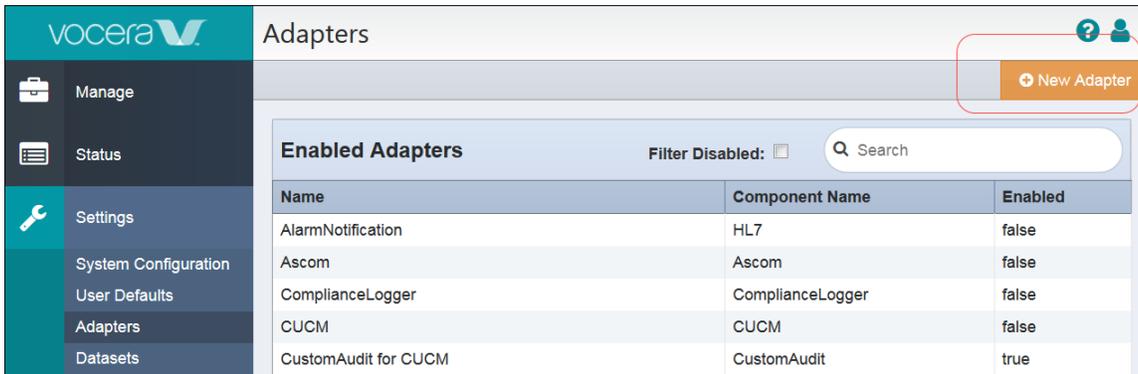
5. Select one of the options to exit the **Update Adapter** page. See [Saving an Adapter](#) on page 29 for details.

## 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.

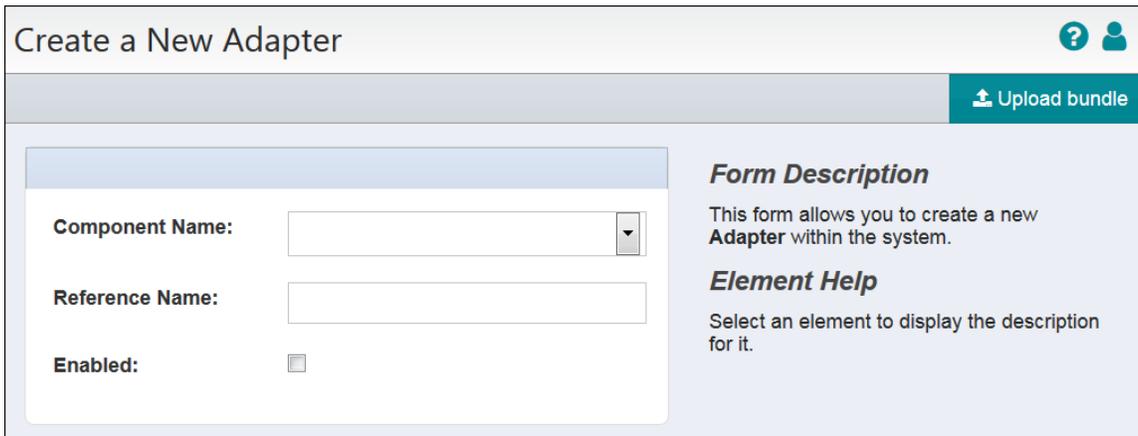
This page is used by all the adapter guides, and therefore, the adapter used as an example here may not be the adapter that you are working with currently.

1. Access the Vocera Platform Web Console and navigate to the adapters.  
See [Navigating the Vocera Platform Adapters](#) on page 25 for instructions.
2. Select **New Adapter** in the Action menu on the Adapters page.



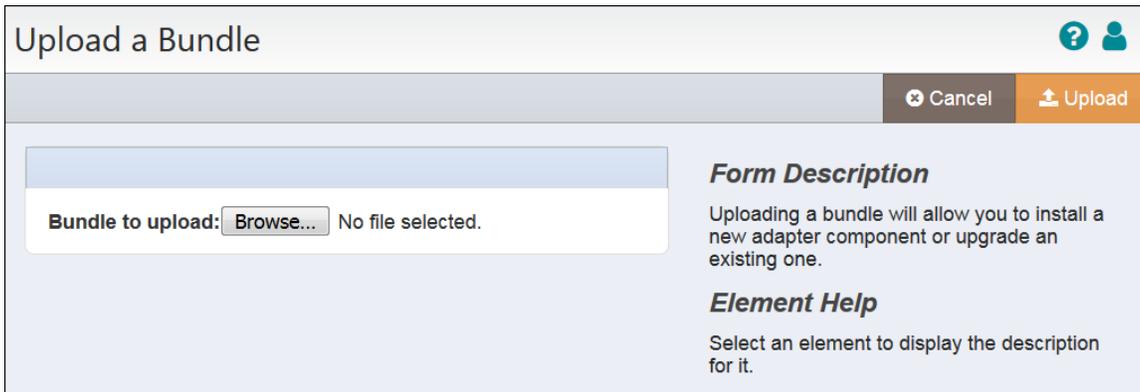
The **Create a New Adapter** dialog displays.

3. Complete the configuration fields.



Name	Description
<b>Component Name *</b>	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.
<b>Reference Name</b>	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.
<b>Enabled</b>	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

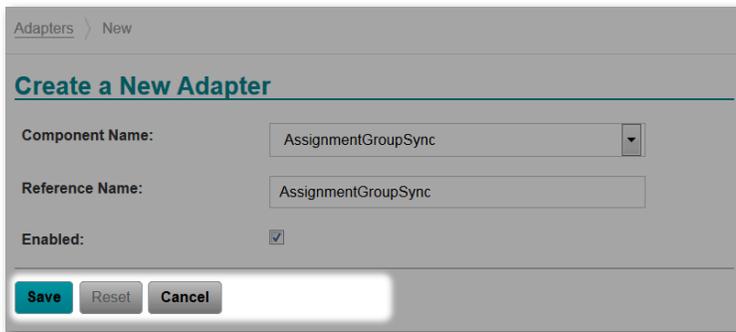
Close an adapter configuration dialog using the Save, Reset, or Cancel options.

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
<b>Save</b>	Select Save to store the adapter configuration in the system, when the fields are set to desired specifications.
<b>Cancel</b>	Select Cancel to close the configuration window without saving your changes to the system.
<b>Reset</b>	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 25 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**

Reference Name: XMPP

Enabled:

**Required Datasets**

Actors: Actors

Assignments: Assignments

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

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

4. Select one of the options to exit the **Update Adapter** page. See [Saving an Adapter](#) on page 29 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 25 for instructions.
2. Select **Remove** in the Actions menu to permanently delete the adapter.

**XMPP Adapter**

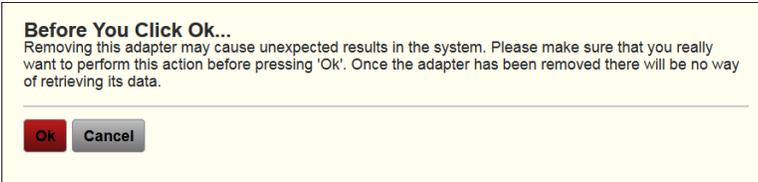
Remove Edit

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.

