

Vocera Alarm Management Console Guide

Version 2.2.5



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Overview

Vocera Alarm Management (VAM) is software for collecting and providing secondary alarm notification from patient monitors to clinicians. It is to be used in all types of monitoring scenarios.

VAM receives alarm notifications from patient monitors or central gateway servers. The received alarms are then processed by the VAM server software, which operates on hospital-owned, pre-deployed servers on the hospital's intranet, and are then delivered to identified handheld devices. VAM software on the handheld devices allows the clinician to respond to an alarm by acknowledging the alarm and by reviewing any current or historical physiological waveforms provided by the patient monitor.

Clinical and administrative staff are provided an administrative console, which is a browser-based service that operates on the VAM server. This console allows assignment of specific beds to identified nurses or handheld devices. It also allows personnel at the nursing station to view the status of handhelds and unanswered alarms. The server can be configured to escalate alarms in predefined time limits when they are not responded to on the handheld. The server can also be configured to escalate alarms if the primary handheld to which an alarm is to be delivered is not available on the network for any reason.

The delivery and acknowledgement on the handheld are separate from and do not affect in any way the underlying alarming functions and processes on the patient monitor or the central station. The central station or the patient monitor will continue to send the alarm until the alarm is silenced on the patient monitor or the central monitor.

The server is a Windows Server based system with an SQL server as the database. The system may be hosted on a virtual environment. The system operates on the hospital's network infrastructure, including the wired Ethernet and the hospital's existing Wi-Fi network.

VAM is to be used by qualified and trained clinical personnel only.

Using the Vocera Alarm Management Console

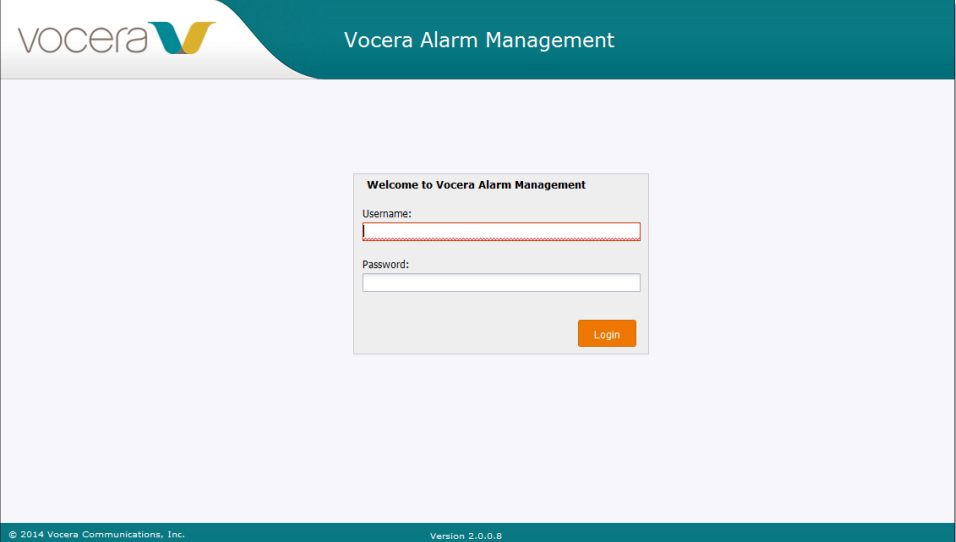
The Vocera Alarm Management Console provides administrator access to the VAM system.

Logging into the VAM Console

To launch the VAM Console, you must type its URL into a browser window.

`http://ServerIP/VoceraAlarmAdmin/login.aspx`

Replace **ServerIP** with the domain name or IP address of your VAM server. From the login screen, enter your username and password to log in into the system.



Important: Do not give out your unique username and password to anyone else. If you forget your username or password, or if you have reason to believe your login credentials have been compromised, contact your Vocera system administrator immediately.



Note: If the VAM server has just been installed, you can log in as user id **webuser** with password **webuser** to access the VAM Console.

Viewing Bed Assignments

As an administrator logged into the VAM Console, you can use the Staff Assignment screen to view bed assignments for a hospital unit. Depending on access rules, you may have access to multiple units.

To view a specific unit, click the Staff Assignment tab to display the screen, then select a group and unit from the **Select Group** and **Select Unit** dropdown lists, then select **View Beds**. This populates the Staff Assignment List for that unit.

The screenshot displays the Vocera Demo Hospital interface. At the top, there's a header with the Vocera logo and 'Vocera Demo Hospital'. Below this, a navigation bar includes 'Staff Assignment', 'View Alarms', and 'Handheld Status'. The 'Staff Assignment' tab is active. The filter section allows selecting a group (Building A) and unit (North Wing). It also includes fields for Nurse Manager 1 and Charge Nurse 1. The 'View Beds' button is highlighted. The 'Staff Assignment List' section shows a table with columns for Bed Number, Primary Nurse, and Secondary Nurses 1 through 5. The table is organized by floor, with the First Floor showing beds 1002, 1001, and 1003. The Second Floor section is currently empty. A search bar for 'Nurse' is located at the top right of the table.

The beds are organized into the bed groups in which they belong. Expand a bed group to view its beds, or type a nurse name in the **Nurse** search field to view all beds assigned to a nurse.

From this screen, you can also assign nurse roles or assign nurses to beds.

Assigning Nurse Roles

From the Staff Assignment screen, you can assign roles for a hospital unit.

The roles that you can assign are:

- The nurse manager for the unit.
- The charge nurse for the unit.

To assign roles:

1. Click **Assignment** tab to view the Staff Assignment tab.
2. Use the **Select Group** and **Select Unit** dropdown lists to select the group and unit for which you want to assign nurse roles.
3. From the **Nurse Manager 1** dropdown list, select the nurse manager for the unit. If additional Nurse Manager dropdown lists are available, you can specify additional nurse managers for this unit.
4. From the **Charge Nurse 1** dropdown list, select the charge nurse for the unit. If additional Charge Nurse dropdown lists are available, you can specify additional charge nurses for this unit.
5. Click **Save** to save your changes.

Assigning Nurses to Beds

From the Staff Assignment screen, you can assign nurses to any or all beds defined for a hospital unit.

1. Click **Assignment** to view the Staff Assignment tab.
2. Use the **Select Group** and **Select Unit** dropdown lists to select the group and unit for which you want to assign nurses to beds.
3. Click **View Beds** to display the bed groups for this unit. Expand a bed group to display its beds.



Note: Beds that are not part of a bed group are organized under Ungrouped. Expand this to display all ungrouped beds.

4. To assign nurses to a bed, select the check box next to the bed name and click Change Assignment. A popup dialog appears that enables you to assign to this bed.

5. To assign a nurse to a bed, click in the table entry whose row is the bed, and whose column is the nurse that you want to assign. (For example, click in the Primary Nurse column to assign the primary nurse for the bed.) From the dropdown list that appears, select a nurse from the list.
6. Repeat the previous step until you have completed all of the nurse assignments that you want to create for this bed.
7. Click Save to save your assignments.



Note: Handheld users can assign themselves to beds as primary nurses or secondary nurses. See the Vocera Alarm Management Handheld User Guide for more details.

Adding a Floater

You can designate a nurse to be a floater for a specified number of hours, starting at the beginning of the current hour.

To add a floater:

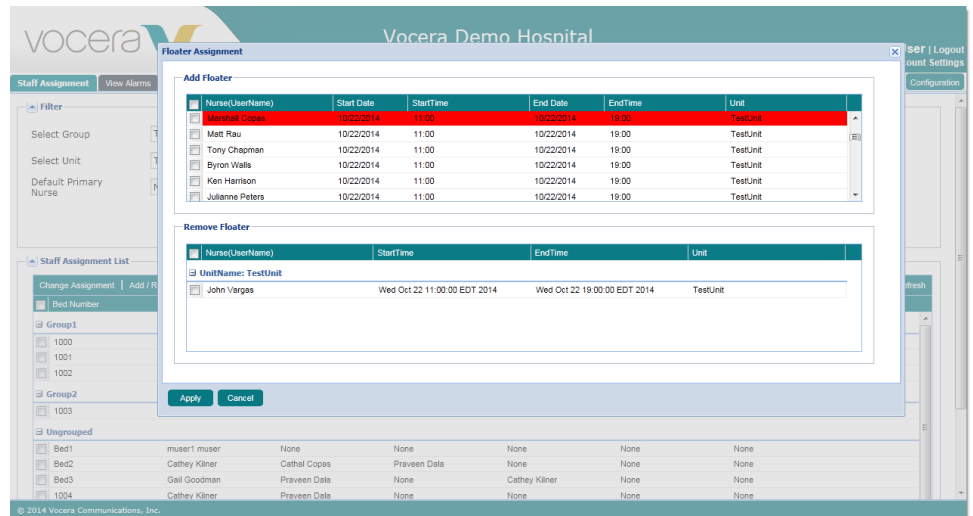
1. In the Staff Assignment screen, click Add/Remove Floater.



Note: This link is available only when the Enable Floater setting is set. See [Account Settings](#) on page 10 for more details on account settings.

2. To add a floater, in the Add Floater pane, select the checkbox of the nurse that you want to designate as a floater.

Nurses who are the primary or secondary nurse for one or more beds are displayed with a red background.



- To remove an existing floater, in the Remove Floater pane, select the checkbox of the nurse that you want to remove from the floater list.
- Click **Apply**. The floater list is now updated.

By default, a floater's shift lasts for 12 hours. To change this, set the **Default Floating Duration** option in the general account settings. See [Account Settings - General](#) on page 10 for more details.



Note: Designating a nurse to be a floater does not affect the behavior of the VAM handheld application.

Bed Locking

When a console user selects one or more beds and clicks **Change Assignment** to change their bed assignments, VAM locks these beds to ensure that another console user cannot overwrite the first user's changes.

If beds are chosen but no assignments are performed, the bed lock expires after the time period specified in the **Max Bed Locking Period** setting. The system administrator can view a list of locked beds and can unlock a locked bed.

See [Account Settings](#) on page 10 for more information on account settings.

Unlocking a Bed

The system administrator can unlock any bed that has been locked by another console user. This is useful when a console user starts to perform a bed assignment but moves away from the console before completing the assignment.

To unlock a bed:

- Click the **Show Bed Locks** link, which is located at the top right of the screen, just below the user name. (If you cannot see this link, you do not have permission to perform a bed unlock.) A list of locked beds appears.

2. Click the checkboxes of the beds that you want to unlock, or click the checkbox in the heading row to unlock all locked beds.
3. Click Update Assignment. The beds that you have selected are now unlocked.

Account Settings

Administrative users have access to general account settings and system configuration areas. To display these settings, click [Accounts](#).

Account settings are organized into the following tabs:

- General
- Admin Website
- Handheld
- Authentication
- Miscellaneous



Important: The variables described here often define fundamental operation of the system. Changing some of the variables defined here may invalidate the Installation Qualification carried out at the time of installation of the system.



Warning: Changing some of the system settings described in this section may require clinical and administrative acceptance.

Account Settings - General

The General settings configure the Vocera Alarm Management environment.

Setting	Description
Mirth output directory path	The location of the output directory that the Mirth HL7 parser uses. If this setting is changed, the Vocera Message Generator service must be restarted.
Default Download Time	The time, in minutes, for which the system will download alerts.
Patient Search Criteria	Whether the patient search is based on patient name and date of birth or on the patient ID number.
Enable Floater	Whether to allow floating nurses to be defined.
Escalation Rule At Unit Level	Whether to enable different escalation rule settings in individual hospital units. If cleared, only one set of rules governs all hospital units.

Setting	Description
Alert Level Setting At Unit Level	Whether to enable different alarm level settings in individual hospital units. If cleared, only one set of rules governs all hospital units. If this setting is changed, handheld devices must log in again.
Day Night Ring Tone	Whether to allow different ring tones and volumes to be set up for day and night shifts.
Enable Manual Escalation	Whether to allow manual escalation of alarms from devices. If this setting is changed, handheld devices must log in again.
Enable Forward User	Whether to allow users to forward alarms to another user. If this setting is changed, handheld devices must log in again.
Enable Forwarding Expiration	Whether to allow forwarding to expire.
Forwarding Expiration	If <i>Enable Forwarding Expiration</i> is selected, specify the amount of time, in minutes, before forwarding expires.
Repeated Alarm Time Interval	The amount of elapsed time, in minutes, before an alarm is repeated.
Highest Priority Alarm	The highest alarm priority that can be generated from VAM. The default is 1.
Number Of Nurse Manager Levels In Group	The number of Nurse Managers in a group.
Number Of Charge Nurse Levels In Unit	The number of Charge Nurses in a unit.
Physician Supported	Whether the Physician role is supported in VAM.
Secondary Nurse Supported	Whether the Secondary Nurse role is supported in VAM. If this setting is changed, handheld devices must log in again.
Maximum Secondary Nurses	If the Secondary Nurse role is supported, the maximum number of secondary nurses allowed. If this setting is changed, handheld devices must log in again.
Ecg Server Enabled	Whether to enable or disable the ECG Server.
Bed Last Activity Supported	Whether last bed activity information is provided.
Compulsory Bed Assignment	Whether all beds must have a nurse assigned to them.
Unassign Nurse Upon Logout	Whether to unassign a nurse's beds on logout.
XScale Override	The X coordinates of an EKG displayed in handheld devices (for example, 25.0).
YScale Override	The Y coordinates of an EKG displayed in handheld devices.
Escalation Check Interval	The time interval for the escalation, measured in seconds. If this setting is changed, the Vocera Alarm Escalator service must be restarted.
Vital Patient Drop	Whether to drop patient information from a bed for which no alarm has been received for a defined amount of time.
Vital Staff Drop	Whether to drop the staff assignment for the bed if the Vital Patient Drop time interval has been reached.
Max Bed Locking Period	The maximum amount of time that a bed can be locked.
Show Alert Detail On New Alert	Whether to show the Alert Details screen when a new Alert notification arrives. If this setting is changed, handheld devices must log in again.
AutoResize	Whether to resize the waveform on the handheld device. If this setting is changed, handheld devices must log in again.
Ignore Telemetry Suffix	If a bed is a telemetry bed, ignore the * suffix.
Enable Wifi Manager	Whether to enable a Wi-Fi check on the handheld device. If this setting is changed, handheld devices must log in again.
Network Error Tone Time	The duration of the error tone.
Min Switching Data	Minimum strength difference required to switch access points.

Setting	Description
	If this setting is changed, handheld devices must log in again.
Polling Frequency	Sleep time interval between Wi-Fi checks. If this setting is changed, handheld devices must log in again.
Preferred Network	The user-specified Wi-Fi network. If this setting is changed, handheld devices must log in again.
Roaming Signal Strength	The strength of the roaming signal. Above this value, Wi-Fi strength is poor. If this setting is changed, handheld devices must log in again.
Minimum Usable Signal Strength	The minimum required Wi-Fi strength. If this setting is changed, handheld devices must log in again.
Usable Signal Retries	The maximum number of attempts before the network error tone is played. If this setting is changed, handheld devices must log in again.
Polling Delay AP Switch	The sleep time, in seconds, when the access point is changed. If this setting is changed, handheld devices must log in again.
Reset WiFi	Reset the Wi-Fi on the handheld device. If this setting is changed, handheld devices must log in again.
Network Strength Retry Interval	The number of seconds between network strength checks. If this setting is changed, handheld devices must log in again.
Network Strength Retry Count	The maximum number of times to check the network connection. If this setting is changed, handheld devices must log in again.
Reminder Alert Limit	The time interval between reminder Alerts.
Reminder Alert Time Limit	The time limit for reminder Alerts.
Time Zone	The time zone setting for the server and handheld devices.
Default Floating Duration	The length of a floating nurse's shift. The default is 12 hours.
VOIP Settings	
Proxy Server IP	The VAM server IP address.
Proxy Server Port	The port for the VAM server.
Voice Call Enabled	Whether to active Voice Call capability (this feature is not yet available).
Acknowledge Previous Alerts From Same Beds	Acknowledgements for a particular level acknowledge all previous alarms for that bed for that particular level of alarm.
Acknowledge Previous Lower Level Alerts From Same Beds	Allows alarms of the current or lower criticality level to be acknowledged when a given alarm is acknowledged.
Night Shift Time	The start time and end time of the night shift. This determines when the night shift ring tone and volume are to be used.

Vocera Demo Hospital

Welcome Web User | Logout
Show Bed Locks | Account Settings

Home Reports Accounts Configuration Assignment

Hospital Setting

General Admin Website Handheld Authentication Miscellaneous

General

Mirth output directory path C:\Vocera\MVismum Alerts\MVismum Message G4

Default Download Time (In Minutes) 30000

Patient Search Criteria Patient Name / DOB

Enable Floater ☒

Escalation Rule At Unit Level ☒

Alert Level Setting At Unit Level ☒

Day Night Ring Tone ☒

Enable Manual Escalation ☒

Enable Forward User ☒

Enable Forwarding Expiration ☒

Forwarding Expiration (In Min) 12

Repeated Alarm Time Interval (In Min) 10

Highest Priority Alarm 1

Save Cancel

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Account Settings - Admin Website

The Admin Website settings affect the behavior of the VAM Console.

Setting	Description
Default Alarm Search Time	The default search time for the advanced search option.
Hide Only Viewed Messages	Whether to hide opened messages.

Unacknowledged messages are always shown on the front end.

Account Settings - Handheld

The Handheld settings control the behavior of handheld devices for each role.

Vocera Demo Hospital

Welcome Web User | Logout
Show Bed Locks | Account Settings

Home Reports Accounts Configuration Assignment

Hospital Setting

General Admin Website Handheld Authentication Miscellaneous

Handheld

User Role

Select Role NURSE MANAGER

Auto Logout Time (In Minutes; 0=Never Logout) 0

Auto Logout On No Wifi Time (In Minutes; 0=Never Logout) 21

Download Time (In Minutes) 300

Data Deletion Days 4

Alert List Refresh Time (In Seconds) 30

Network Refresh Time (In Seconds) 1

Wifi Recheck Time (In Seconds) 30

Show Patient Name ☒

Disable Bluetooth ☐

Save Cancel

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Setting	Description
Select Role	Select the role for which the following option values are set. Different option values can be set for each role.
Auto Logout Time	The amount of idle time, in minutes, after which the system automatically logs out the user. Setting this field to 0 prevents auto-logout.
Auto Logout On No Wifi Time	The amount of time without Wi-Fi, in minutes, after which the system automatically logs out the user. Setting this field to 0 prevents auto-logout.

Setting	Description
Download Time	The amount of time to display an alarm in a handheld device.
Data Deletion Days	The number of days to keep downloaded data on the handheld device. Older data is deleted from the handheld device automatically.
Alert List Refresh Time	The number of seconds between refreshes of the alarm list.
Network Refresh Time	The number of seconds between checks for new alarms and notifications.
WiFi Recheck Time	The amount of time to wait before checking the Wi-Fi connection.
Show Patient Name	Whether to show the patient name in the Patient List screen of the handheld device in addition to the bed list.
Disable Bluetooth	Whether to enable or disable the Bluetooth feature in handheld devices.
Alert List Download Criteria	Specify whether to download by time or by count. If By Count is selected, supply the count.
ECG/Alert History Screen Menu Setting:	
Show Refresh Show Settings Show View Show Forwarding	Control the menu choices on the handheld device and allow/disallow showing these functions on the handheld user menu. At present, Show Refresh, Show View, and Show Forwarding are not in use.
ECG/Live Stream Screen Menu Setting:	
Show XY Scale	Allows/disallows user to change the X and Y scaling on a displayed EKG.
Show Lead Selection	Allows/disallows user to choose leads to be displayed.
Show Caliper	Enables/Disables the caliper function.
Show/Hide Grid	Enables/disables the handheld user's ability to show/hide the grid.

Account Settings - Authentication

The Authentication settings control user authentication requirements.

Setting	Description
Authentication Type	Whether authentication requires a userid and password, or a password only.
Password Expiration Logic	Whether a user password expires.
Password Expiration Days	If a user password is set to expire, the number of days before expiration.
Allow User To Change Password	Whether handheld users can change their login password.
Password Strength	The password strength required. You can require at least one capital (upper-case), numeric, or special character, and you can specify the minimum password length.

Account Settings - Miscellaneous

The Miscellaneous section specifies useful settings that do not belong in any of the other sections.

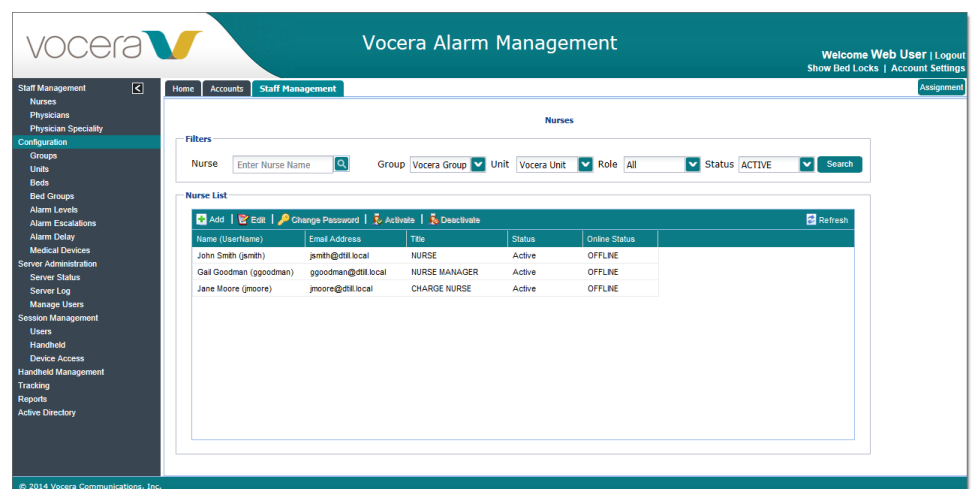
Setting	Description
Support Email Settings	
Host	The host server for support email.
Port	The port used by the support email host.
Username	The support email username.
Default Credentials	Whether to use the default credentials.
Analytics Settings	
If you change any of these settings, all Vocera Alarm Analytics dependent services must be restarted.	

Setting	Description
Listener IP	The IP address of the Vocera Alarm Analytics server.
Listener Port	The port used by the Vocera Alarm Analytics server.
Hospital ID	The unique identifier for a specific hospital.
Send Analytics Data	Whether to send analytics data information.
Handheld Settings	
Log Upload Interval	The amount of time between server log uploads.
Forward Request Timeout	The amount of time before a forward request expires.
Archive Settings	
If you change any of these settings, you must restart the Vocera Archiver Server.	
Archive Path	The path specification for the folder in which archive data is to be stored.
Archive Days	The number of days before archive data expires.
Archive Cycle Cron Expression	The time specification for the cron job that schedules the archive data.
Clean Up Service Settings	
If you change any of these settings, you must restart the Vocera Alarm Clean Up Service.	
CleanUp Directory Path	The path specification for the logs.
CleanUp Search Pattern	The regular expression search pattern to use for cleanup.
Delete	Whether to delete the logs/archive.
Archive	Whether to enable the archive.
Archive Directory Path	The path specification for the archive directory.
File Cleanup Age	The number of days that a file ages before it is cleaned up.
Change Master Password	
Change the password for the server IP address used by handheld devices.	

Displaying and Adding Nurses

In the Staff Management section, click **Nurses** to display a screen containing a list of the nurses currently defined for this hospital.

From this screen, a system administrator, charge nurse, or nurse manager can add or deactivate nurses, and you can also move a nurse from one hospital unit to another.



To create a new user, click **Add** and provide the particulars for the new nurse:

- Fill in personal information as needed (such as name, mobile number, and email address).

- Use the Role dropdown list to specify the role for this nurse (for example, Nurse Manager, Charge Nurse, or Nurse).
- From the Group Name and Unit Name dropdown lists, select the group and unit to which this nurse is to belong.
- In the User Name and Password fields, type the user name and password that the new nurse will use to log into the VAM Console. In the Confirm Password field, retype this password.
- Select the status for the user by selecting either the Active or the Inactive radio button.

The screenshot shows the Vocera Demo Hospital Staff Management console. The left sidebar contains a navigation menu with options like Staff Management, Physicians, Configuration, Groups, Units, Beds, Bed Groups, Alarm Levels, Alarm Escalations, Alarm Delay, Medical Devices, Server Administration, Server Status, Server Log, Manage Users, Session Management, Users, Handheld, Device Access, Handheld Management, Tracking, Reports, and Active Directory. The main content area is titled 'Nurses' and contains a 'Nurse Information' form. The form fields include Prefix, First Name, Middle Name, Last Name, Suffix, Role (dropdown), Group Name (dropdown), Unit Name (dropdown), Mobile Number, Email Address, Mobile Model (dropdown), User Name, Password, Confirm Password, and Status (radio buttons for Active and Inactive). At the bottom of the form are 'Save' and 'Cancel' buttons. The top of the console shows 'Vocera Demo Hospital' and a user welcome message.

To edit the information for an existing nurse, click **Edit** and edit the information as needed.

To change the password for an existing nurse, click **Change Password**.

To deactivate a nurse, click the user's name, click **Deactivate**, and confirm the deactivation. To reactivate a deactivated nurse, click **Activate**.

VAM does not allow you to delete a nurse, since this would jeopardize traceability data.



Note: In the Staff Management section, you can also display a list of physicians, and a list of specialties (such as Surgeon) that are associated with physicians.

Configuration

Administrative users can control the configuration of the VAM Console. To do this, click **Configuration**.

The configuration options are divided into the following sections:

- Groups
- Units
- Beds
- Bed Groups
- Alarm Levels
- Alarm Escalations
- Alarm Delay
- Medical Devices



Important: The variables described here often define fundamental operation of the system. Changing some of the variables defined here may invalidate the Installation Qualification carried out at the time of installation of the system.



Warning: Changing some of the system settings described in this section may require clinical and/or management acceptance.

Groups and Units Configuration

System administrators can set up or edit existing group and unit details. The ability to add groups or units may be limited by your local license.

Adding a Group

Follow these steps to add a group.

1. In the Configuration section, select **Groups**.
2. Click **Add**. The Group Information window appears.

The screenshot shows the 'Group Information' window in the Vocera Demo Hospital console. The window has a sidebar with navigation links: Staff Management, Nurses, Physicians, Physician Specialty, Configuration, Groups, Units, Beds, Bed Groups, Alarm Levels, Alarm Escalations, Alarm Delay, Medical Devices, Server Administration, Server Status, Server Log, Manage Users, Session Management, Users, Handheld, Device Access, Handheld Management, Tracking, Reports, and Active Directory. The main content area is titled 'Group Information' and contains the following fields: Name (text input), Description (text input), and Status (radio buttons for Active and In Active). At the bottom right are 'Save' and 'Cancel' buttons. The footer shows '© 2014 Vocera Communications, Inc.'.

3. In the Name field, enter the name of the new group.
4. In the Description field, optionally enter a description of the group.
5. Select **Active** to activate the new group, or select **In-Active** to make the new group inactive.
6. Click **Save** to add the group.

Adding a Unit

Follow these steps to add a unit.

1. In the Configuration section, select **Units**.
2. Click **Add**. The Unit Information window appears.

The screenshot shows the 'Unit Information' window in the Vocera Demo Hospital console. The window has the same sidebar as the Group Information window. The main content area is titled 'Unit Information' and contains the following fields: Name (text input), Description (text input), Forwarding Expiration (In Minutes) (text input with value 1), Group Name (dropdown menu), Merge with unit (checkbox), Handheld Type (dropdown menu), Min Switching Delta (text input with value 5), Polling Frequency (text input with value 2), Preferred Network (text input with value vocera.local), Roaming Signal Strength (In dBm) (text input with value -100), Minimum Usable Signal Strength (In dBm) (text input with value -100), and Usable Signal Retries (text input with value 5). At the bottom right are 'Save' and 'Cancel' buttons. The footer shows '© 2014 Vocera Communications, Inc.'.

3. Add the unit details as described in [Unit Field Details](#) on page 17.
4. Click **Save** to add the unit.

Unit Field Details

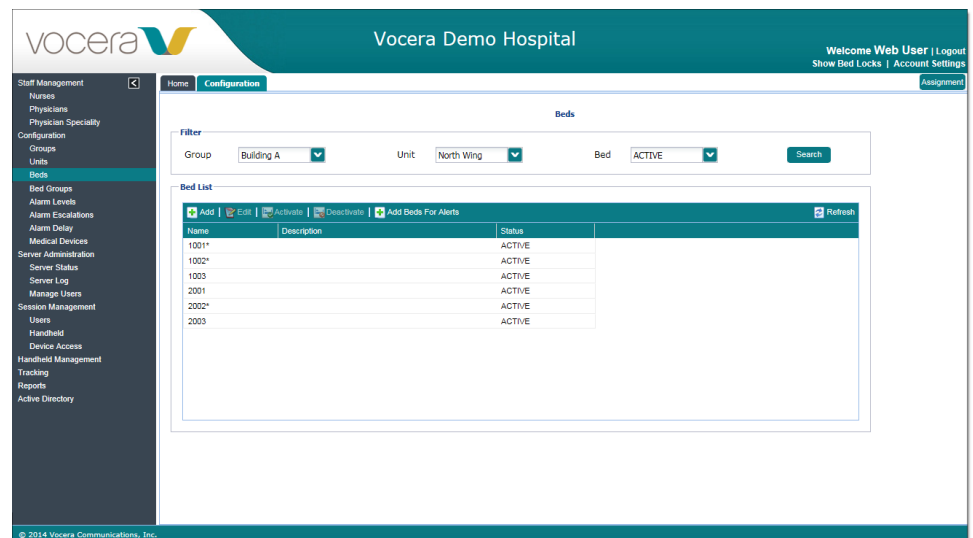
The following information fields can be specified when you create or edit a unit.

Fields	Description
Name	The name of the unit.
Description	A short description of this unit.

Fields	Description
Forwarding Expiration	Expiration time for an active forwarding, measured in minutes.
Group Name	The group to which the unit belongs.
Merge with unit	Select the unit with which this unit is to be merged. This option is disabled when adding a new unit and is enabled when editing a unit.
Handheld Type	Select either <i>Phone</i> (a handheld device) or <i>Badge</i> (a Vocera badge).
Min Switching Delta	The strength difference required between access points before switching from one access point to another.
Polling Frequency	The amount of time to wait before re-accessing the Wi-Fi connection (for example, 2 seconds).
Preferred Network	The user-specified preferred WiFi network name.
Roaming Signal Strength	The roaming signal strength required (for example, -100).
Minimum Usable Signal Strength	The minimum WiFi strength required (for example, -80).
Usable Signal Retries	The number of times to try to obtain a usable signal (for example, 5).
Polling Delay AP Switch	The amount of time to sleep, in seconds, when the access point is changed.
Reset WiFi	Reset the WiFi on handheld devices.
Manual Escalation	Whether manual escalation is supported for this unit.
Status	Indicates whether the unit is active or inactive.

Bed Configuration

System administrators can use the Bed configuration section to add new beds.





Beds can be added in two different ways:

- **Adding beds by alarms:** VAM adds every alarm it receives from a recognized floor to a database, regardless of configured bed numbers. The system administrator can easily import these bed numbers by clicking on *Add Beds For Alarms* in the Beds Configuration screen and choosing the beds from the database.
- **Adding beds manually:** The system administrator may choose to manually add beds by entering their details.

Creating Beds From Alarms

If VAM receives an alarm from a bed that is not in its list of configured beds, you can add it to the list. This is useful when you are setting up a VAM environment.

To add a bed to the configured bed list:

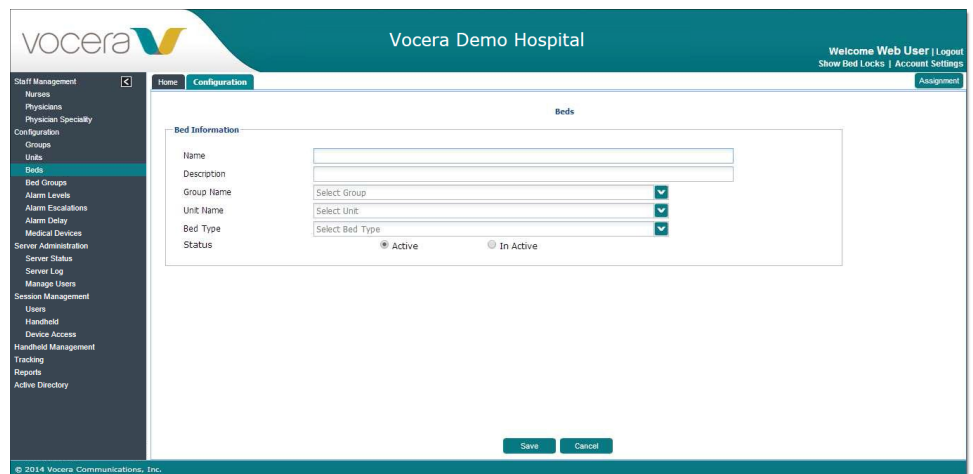
1. In the Configuration section, select **Beds**.
2. Click **Add Beds For Alerts**.
3. From the **Select Group** and **Select Unit** dropdown lists, select the group and unit for which you want to view the bed list.
4. Click **Search**. The **Available** pane now displays the list of unconfigured beds for this unit.
5. To add a bed, click in the bed number in the **Available** column and click .
6. To remove a bed, click in the bed number in the **Selected** column and click .
7. Click **Save** to add the selected beds and return to the **Beds** configuration screen.

Adding a Bed

You can use the VAM Console to add a bed manually.

To add a bed:

1. In the Configuration section, select **Beds**.
2. Click **Add**. The **Bed Information** window appears.



3. Add the bed details as described in [Bed Field Details](#) on page 19.
4. Click **Save** to add the bed.

Bed Field Details

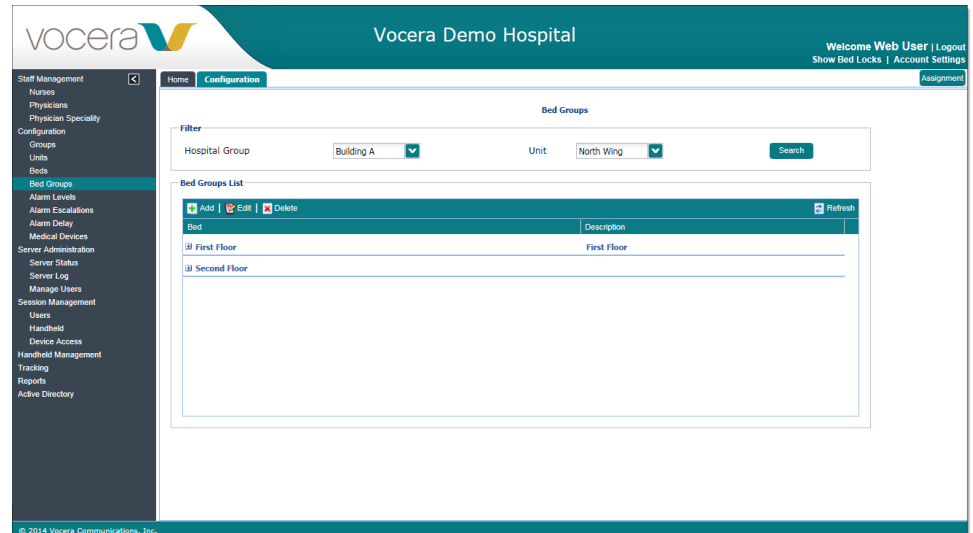
These information fields can be specified when you create a bed.

Fields	Description
Name	The name of the bed.
Description	A short description of this unit.
Group Name	The name of the group to which this bed belongs.
Unit Name	The name of the unit to which this bed belongs.
Bed Type	The bed type. This is either Telemetry or Non-Telemetry .
Status	Indicates whether the bed is active or inactive.

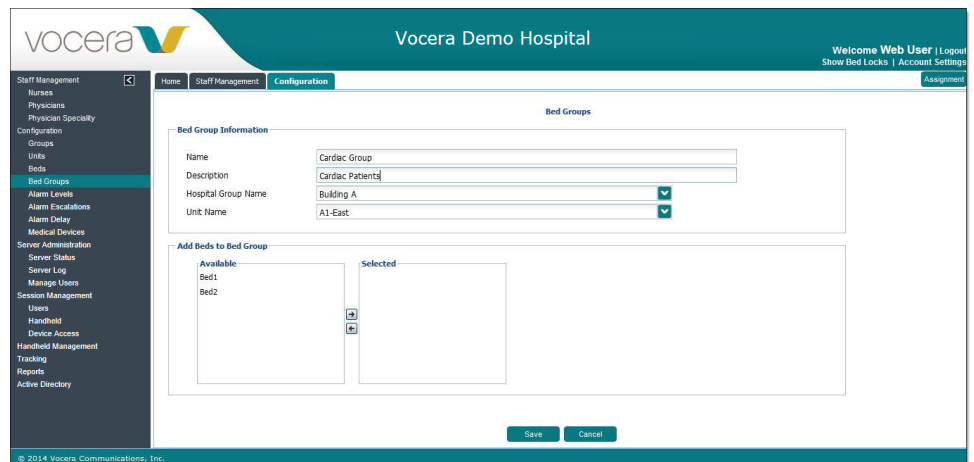
Bed Groups Configuration

The Bed Groups Configuration section enables you to organize beds into groups, such as by floor or by ward.

Each bed group is associated with a hospital group and a unit. You must create hospital groups and units before you can create bed groups.



1. In the Configuration section, select Bed Groups.
2. Click Add. The Bed Group Information window appears.



3. In the Name field, type the name of the new bed group.
4. In the Description field, type a short description of the bed group.
5. From the Hospital Group Name dropdown list, select the hospital group to which the bed group is to belong.
6. From the Unit Name dropdown list, select the unit to which the bed group is to belong.
7. Follow the steps in [Editing a Bed Group](#) on page 21 to add beds to the group. (You can also do this after you have created the bed group.)
8. Click Save to add the bed group.

The following images show how bed groups are displayed:

The screenshot shows the 'Vocera Demo Hospital' interface. The top navigation bar includes 'Home', 'Staff Management', and 'Configuration'. The left sidebar lists various management options, with 'Bed Groups' highlighted. The main content area is titled 'Bed Groups' and features a filter section with 'Hospital Group' set to 'Building A' and 'Unit' set to 'A1-East'. Below the filter is a 'Bed Groups List' table with columns for 'Bed' and 'Description'. The table lists two beds: 'A1East101' and 'A1East102'. At the bottom of the page, there is a copyright notice: '© 2014 Vocera Communications, Inc.'.

The screenshot shows the 'Vocera Demo Hospital' interface. The top navigation bar includes 'Home', 'Staff Management', and 'Configuration'. The left sidebar lists various management options, with 'Staff Assignment' highlighted. The main content area is titled 'Staff Assignment' and features a filter section with 'Select Group' set to 'Building A', 'Select Unit' set to 'A1-East', and 'Default Primary Nurse' set to 'None'. There are also dropdowns for 'Nurse Manager 1' and 'Charge Nurse 1'. Below the filter is a 'Staff Assignment List' table with columns for 'Bed Number', 'Primary Nurse', 'Secondary Nurse1', 'Secondary Nurse2', and 'Locked By'. The table lists three rows: 'A1East101', 'A1East102', and 'Ungrouped'. At the bottom of the page, there is a copyright notice: '© 2014 Vocera Communications, Inc.'.

Beds that are not part of a bed group are listed under Ungrouped.





Note: You can assign a bed group as a secondary assignment to a nurse. Assigning a nurse as a primary assignment is possible on individual beds only.

Editing a Bed Group

Follow these steps to add beds to a bed group.

1. In the Configuration section, select Bed Groups.
2. Select the bed group that you want to edit.
3. Click Edit. This displays a list of the beds in the group.

4. To add a bed to the group, click in the bed number in the *Available* column and click .
5. To remove a bed from the group, click in the bed number in the *Selected* column and click .
6. Click **Save** to save the changes to the bed group and return to the Bed Groups configuration screen.

Alarm Levels Configuration

The alarm level specifics, such as ring tone and display color, can be set up in this section.

Configurations can be set by group, unit, and alarm level. Refer to your Patient Monitoring system manual for alarm condition definitions and priority. Typically, you will find at least three different alarm conditions for physiological alarms and one or more levels defined for system alarms.

VAM maps each of these alarm conditions into various levels (for example, level 1 through level 4). You can configure the alarm behavior on the handheld device for each level that you define.

As part of the installation process, VAM configures the system to receive alarms in all the criticality levels in which the patient monitoring network generates them.

For each alarm level, you can set the following:

Setting	Description
Ringing Tone	The tone used to announce the particular level of alarm. You can specify different ringing tones for Day and Night use.
Ringing Volume	The relative volume of ring in a scale of 0 to 100, with 0 being Mute. You can specify different ringing volumes for Day and Night use.
Color Effects	The color of the alarm notification, and the background color of the alarm displayed on the handheld. This is also the color in which the alarm is displayed on the administrative console.
Ring Play Count	The number of times the selected ring tone will be played by the handheld device when an alarm of that particular level is received.
Vibrating Alert	Sets the vibrating alarm on or off for that particular handheld.

The screenshot shows the Vocera Alarm Management Console interface. The top navigation bar includes 'Home', 'Configuration', and 'Staff Management'. The left sidebar lists various management options like Staff Management, Configuration, Alarm Escalations, and Server Administration. The main content area is titled 'Alarm Levels' and contains two sections: 'Alarm Level' and 'Alarm Settings'. The 'Alarm Level' section has dropdowns for Group (TestGroup), Unit (TestUnit), and Alarm Level (1 - Patient Crisis). The 'Alarm Settings' section has tabs for Day and Night. Under the Night tab, there are controls for Ringing Tone (crisis_alarm_noise.mp3), Ringing Volume (100), Color Effects (red), Ring Play Count (2), and Vibrating Alert (On). At the bottom, there are checkboxes for User Response (Accept and Ignore) and 'Save' and 'Cancel' buttons.

The ring tone and ring volume controls for the Night section take effect if:

- Day Night Ring Tone is enabled under Hospital Settings.
- The current time is between the start and end times defined under Night Shift Time under Hospital Settings.



Important: The hospital administrator should set separate colors and ring tones for alarms of varying criticality and basis to be compliant to IEC 60601-1-8. Refer to IEC 60601-1-8 for proper ring tone definition.



Important: Alarms of a lower numeric Level designation are given higher priority by the system than alarms of a higher Level designation. Hence, Level 1 should be assigned to the most critical alarm level.



Important: The system is validated to handle multiple alarms of equal priority in parallel. A maximum processing delay of 5 seconds can be expected in the processing of parallel alarms.



Important: IEC 60601-1-8 compliance requires use of Red for the high priority alarms and Yellow for Medium priority alarms.

If other information is being sent through the system, such as general paging or lab results, it should be classified as a separate level, and the ring tone and color of display should be distinctly different from those used for Alarms. Vocera recommends not using red or yellow for any purposes other than Level 1 and Level 2 alarms.



Important: Other information sent through the system should have a different color and ring tone setting to avoid confusion with alarms.

The ring tones available as default on VAM for Level 1, Level 2, and Level 3 alarms meet requirements of IEC 60601-1-8. Vocera recommends the use of these default ring tones.

Alarm Escalations

Alarm escalation rules indicate how an alarm is to be handled when the person to whom the alarm has been sent has not responded. Escalation rules can be defined for an entire group, an individual unit, or a specific alarm level.



Important: Alarm escalation rules must be in place before alarms can be sent to a handheld device.

The screenshot displays the 'Vocera Demo Hospital' interface. The left sidebar contains a navigation menu with options like Staff Management, Nurses, Physicians, Configuration, and Alarm Escalations (which is highlighted). The main content area is titled 'Alarm Escalations' and includes several configuration sections: 'Primary Message Delivery' with fields for Max Retry Count (1) and Retry Interval (10 seconds); 'Alarm Reminders Delivery' with fields for Reminders (0-5) (2) and Reminders Interval (10 seconds); 'Alarm Generation Action' with a dropdown for Action (Send to Primary Nurse) and a field for Response Time (30 seconds); 'Default Alarm Escalation Action' with a checkbox for Default Action and a dropdown for Select Default Alarm Escalation A; and 'Escalation Actions' at the bottom. At the bottom right, there are buttons for 'Save for all Units', 'Save', and 'Cancel'.

The following can be defined:

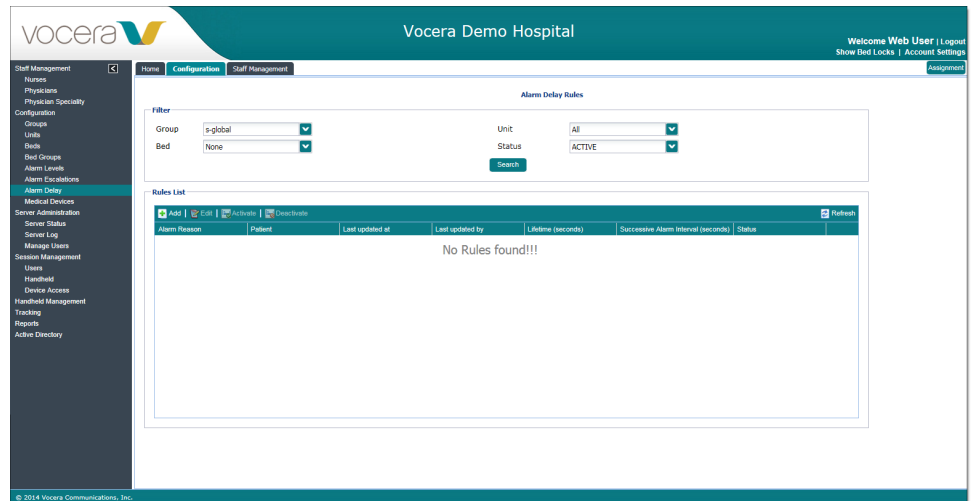
Setting	Description
Primary Message Delivery	The number of times to retry sending the message before escalation, and the time in seconds to wait between retry attempts.
Alarm Reminders Delivery	The number of times reminders are provided (up to 5 per alarm) and the time interval between reminders.
Alarm Generation Action	The primary delivery of the alarm immediately on receipt. Choices include: None, Send to Primary Nurse, Send to Secondary Nurse, Send to All Nurses in Unit, and Send to All Nurses in the Group. Select None to not deliver the alarm to any nurse. In the Response Time field, specify the number of seconds after which an alarm is escalated if the people in the specified role do not acknowledge the alarm.
Default Alarm Escalation Action	Select the Default Action checkbox to specify a default alarm escalation action. This action defines the process followed if the primary nurse device is not available on the network. Choices include: None, Send to Primary Nurse, Send to Secondary Nurse, Send to All Nurses in Unit, and Send to All Nurses in the Group.
Escalation Actions	This defines the escalation tree. If the primary nurse does not acknowledge an alarm in the predefined timeframe (see Response Time above), the system starts escalating alarms from sequence 1 and proceeds up the sequence tree until the last defined sequence is reached, with each step being executed with a delay equal to the Response Time set. If the alarm is acknowledged by any receiver at any point during this escalation process, the server stops executing the escalation tree.

Alarm Delay

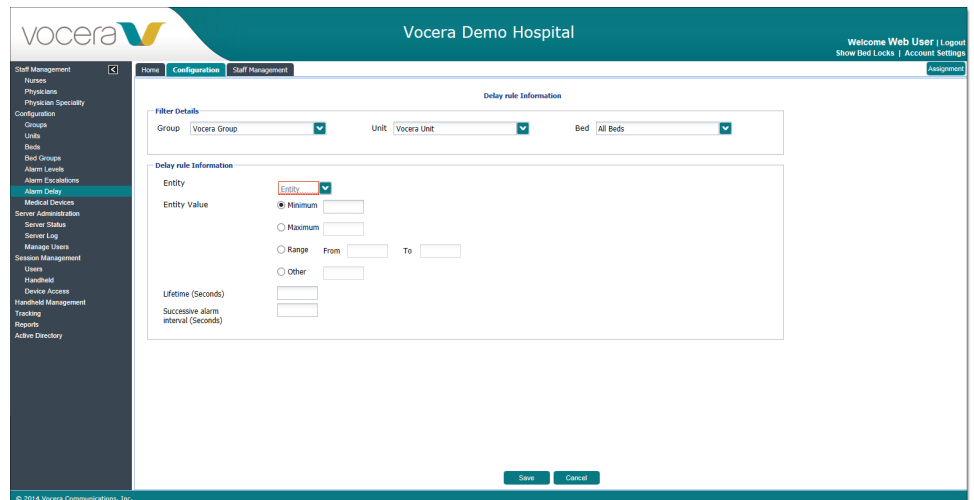
In the Alarm Delay configuration section, you can add, edit, activate, and deactivate alarm delay rules.

To configure an alarm delay rule:

1. In the Configuration section, go to *Alarm Delay*.



2. Select the group, unit, and bed for which you want to specify an alarm delay.
3. Click Search. A list of previously existing alarm delay rules appears.
4. Click Add to add a new alarm delay rule. Specify the entity, entity value, lifetime, and successive alarm interval.



5. Click Save to save the settings.

Similarly, alarm delay rules can be edited from this section:

1. To edit an alarm delay rule, select the rule and click Edit.
2. To activate an alarm delay rule that is currently deactivated, select the rule and click Activate.
3. To deactivate an alarm delay rule, select the rule and click Deactivate. Alarm delay rules cannot be deleted.

Medical Devices

The Medical Devices section displays the medical devices associated with beds.

From this section, you can:

- Select All from the Status dropdown list to display all medical devices, or select Active to display active devices only. Click Search to update the medical device list.
- Click Add to add a medical device. For each device, specify:
 - The name of the device
 - An optional short description
 - The device type (Telemetry or Non-telemetry)

- The group, unit, and bed with which the device is associated
- The device status: active or inactive
- Select a device, then:
 - Click [Edit](#) to edit the device information.
 - Click [Activate](#) to activate an inactive device.
 - Click [Deactivate](#) to deactivate an active device.
- Click [Refresh](#) to refresh the medical device list.

Server Administration

The Server Administration section of the VAM Console enables you to perform VAM system administration tasks.

It contains the following subsections:

- [Server Status](#)
- [Server Log](#)
- [Manage Users](#)



Note: If you are using a load balancer with multiple VAM servers, the [Server Status](#) and [Server Log](#) screens may not function as expected.

Server Status

The [Server Status](#) section of the VAM Console provides a real-time view of the status of the various VAM services.

This is in addition to the [Server Health Monitor](#) service, which is configured to send email alerts to predefined email addresses if any anomaly is observed in the operation of the system.

Server Log

The [Server Log](#) section of the VAM Console enables you to view the server log for any specific day.

To view a server log:

1. From the [Date](#) field, select the date for which you want to view the server log.
2. From the [Component](#) dropdown list, select the service for which you want to view the log.
3. Click [View Log](#) to view the server log for that date.

Manage Users

The [Manage Users](#) section of the VAM Console enables you to create and manage users.

To add a new user, click [Add](#), complete the user information, and click [Save](#).

To manage an existing user, click the user name. After you have done this, you can:

- Click [Edit](#) to edit the user information for that user.
- Click [Change Password](#) to change the user password.
- Click [Activate](#) to activate a user that is not yet active.
- Click [Deactivate](#) to deactivate an active user.

Click [Refresh](#) to refresh the user list.



Note: Users cannot be deleted - they can only be deactivated.

Session Management

The Session Management section shows the currently active sessions on the consoles and handheld devices.

This section is divided into three subsections:

- The Users subsection displays VAM Console users. You can display a list of either all users or currently active users. To expire the session of a currently active user, select the user and click Expire Session.

Vocera Demo Hospital

Welcome Web User | Logout
Show Bed Locks | Account Settings

Home Reports Accounts Configuration **Session Management** Assignment

Filter
Select Status: ACTIVE Search

Expire Session Refresh

User Name	Name	Device Number	Title	Mobile Model	Login Time	Last Access Time
jking	Josh King	97774	NURSE	Android-Droid-1.6	07/24/2014 19:43:52	07/24/2014 22:54:44
mchambers	Marshall Cha...	24955	NURSE	Apple-iPhone-3.0	08/26/2014 19:22:04	08/26/2014 20:07:35
dhill	Dave Hill	76371	NURSE	Android-Droid-1.6	10/16/2014 13:18:51	10/16/2014 14:33:23
webuser	Web User		HOSPITAL AD...	UNASSIGNED	10/16/2014 15:18:14	10/16/2014 15:18:14

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- The Handheld subsection displays handheld users. You can display a list of all users, all assigned users, or all logged in users. To view detailed information for a user, select the user and click View Details.
- The Device Access subsection displays a list of devices, and when and by whom they were last used.

Handheld Management

The Handheld Management section lists the device IDs currently generated for the system, whether each device ID is registered or unregistered, the last user of the device and when it was accessed, and the current online status.

A device ID becomes registered when a user provides it when logging into a handheld device for the first time.

Vocera Demo Hospital

Welcome Web User | Logout
Show Bed Locks | Account Settings

Home **Handheld Management** Session Management Configuration Test Alarms Assignment

Handheld Device List Refresh

Device Number	Activation Status	Registration Status	Current / Last Login User	Last Device Access Time	Online Status
90967	ACTIVE	REGISTERED	1 Nurse	07/26/2015 16:08:52	
30827	ACTIVE	REGISTERED	1 Nurse	07/26/2015 19:22:44	
80542	ACTIVE	REGISTERED	Srinivasan, Sunana	07/22/2015 22:14:22	
27347	ACTIVE	REGISTERED	71 Nurse	07/22/2015 22:52:03	
41361	ACTIVE	REGISTERED	198 Nurse	07/22/2015 21:55:47	
56200	ACTIVE	REGISTERED	115 Nurse	07/22/2015 22:52:08	
60445	ACTIVE	REGISTERED	1 Nurse	07/22/2015 17:57:26	
68224	ACTIVE	UNREGISTERED			
26254	INACTIVE	UNREGISTERED			
78888	ACTIVE	UNREGISTERED			
87462	ACTIVE	UNREGISTERED			
41242	ACTIVE	REGISTERED	107 Nurse	07/22/2015 21:55:47	

Device Activation Statistics

Active : 270 Inactive : 1 Registered : 160 Unregistered : 111

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From this section, you can:

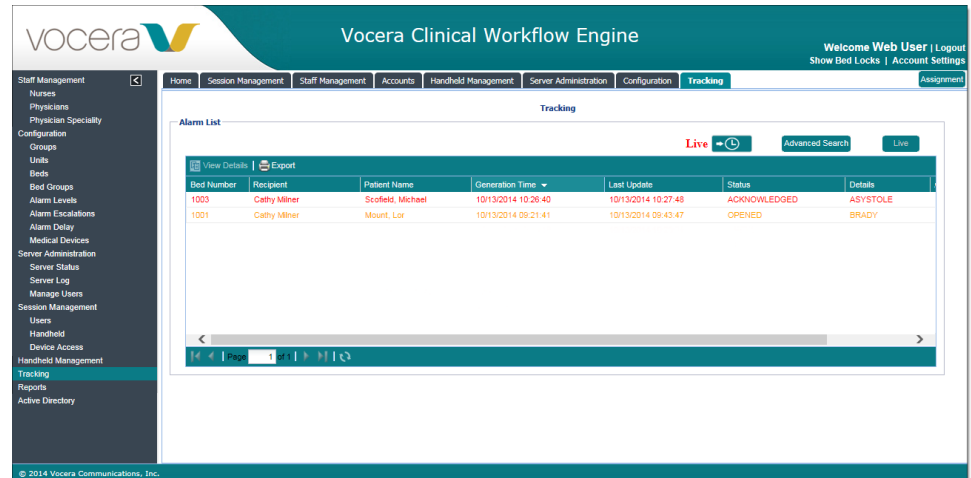
- Select a device ID and click **Activate** to activate a deactivated device.
- Select a device ID and click **Deactivate** to deactivate an activated device.
- Click **Generate** to generate a new device ID. The number of device IDs may be limited by your license.

This screen also lists the total number of active, inactive, registered, and unregistered devices.

Tracking

The Tracking screen provides the tools necessary to trace the history of a particular alarm.

Choosing any particular alarm provides time-stamped details of every step of the alarm delivery and escalation process.



Alarm Status

These are the alarm statuses that are available.

Alarm Status	Handheld Status	Description
New		The initial status when the alarm arrives. Ideally, not shown in tracking.
Generated	Badge, Phone	An alarm which was generated but not yet received by any user.
Sent	Badge, Phone	For badge: Delivered to the badge. For phone: When the user views the alarm on the Alarm history screen.
Opened	Badge, Phone	For badge: When the alarm is played on the badge. For example: for alarm level 1, this is always the Opened status. For phone: When the user views the alarm by clicking on it in the Alarm history screen or by clicking View in the notification popup.
Acknowledged	Badge, Phone	When the user acknowledges or accepts the selected alarm.
Escalated	Phone	When manual escalation is performed on the selected alarm.
System Acknowledged	Badge, Phone	A previously unacknowledged alarm from a bed gets acknowledged when any other alarm from the same bed is acknowledged. This can be set on the Account Settings page in the VAM Console. It is not set by default.
Ack Cancelled Escalated	Phone	When the user wants to undo acknowledgement and manually escalate an alarm to the next level. This is a special form of manual escalation.

Alarm Status	Handheld Status	Description
Silenced	Phone	When the user triggers Silence Alarm.
Canceled	Phone	When the user triggers Cancel Alarm.
Not Notified	Phone	The user is not online, so is not notified about the alarm. The alarm does not appear in the alarm list in the user's handheld app.
Failed	Phone	The alarm status is changed from Not Notified to Failed if the user is still not online after the maximum number of alarm retries is reached. This number is set in the Max Retry Count field in the Alarm Escalations screen. For more details on alarm escalations, see Alarm Escalations on page 23.

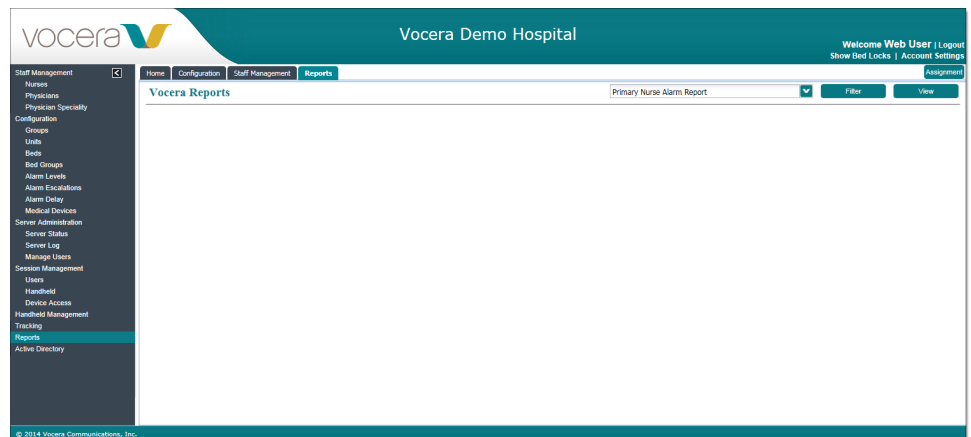
Reports

The reports section of the server may be used to generate tracking reports for alarms. Choose the appropriate report needed and click **View** or **Filter**.



Note: Your local installation may also have custom reports deployed.

From the popup that appears, choose the appropriate time, date, bed, unit, and group as appropriate. Click **Generate** to generate the report.



The report is presented in a tabular format, which can be exported to Microsoft Excel or as a PDF document and saved to any available location.

Active Directory

From the VAM Console, you can specify an Active Directory server from which to obtain user information.

After you have specified the server, you can:

- Import users from the Active Directory server.
- List the users that you have imported.
- Map user information fields from the Active Directory server to VAM.
- Set up a time for automatic synchronization of the Active Directory server with the VAM server.

Adding an Active Directory Server

From the Configuration screen, you can specify one or more Active Directory servers to use with VAM.

To specify an Active Directory server:

1. In the Configuration screen, select **Active Directory**.
2. Click **Add**. The Configuration screen appears.

The screenshot shows a dialog box titled "Active Directory Configuration". It has a "Configuration" tab. Inside, there are several input fields: "Domain Name", "Server IP/Name", "User Name", "Password", "Port" (with a default value of 389), and "SSL Enabled" (a checkbox). There are also checkboxes for "Vocera Alarm Management" and "Enable Active Directory Login". At the bottom, there are three buttons: "Save", "Cancel", and "Test Connection".

3. Select the **Enable Active Directory Login** checkbox if users are to use Active Directory login credentials when logging in.
4. In the **Domain Name** field, type the domain name associated with the Active Directory server.
5. In the **Server IP/Name** field, type the IP address or name of the Active Directory server.
6. In the **User Name** field, type the user name to use to access the Active Directory server.
7. In the **Password** field, type the password for this user name.
8. In the **Port** field, type the port that this Active Directory server will use. The default value for this field depends on whether the **SSL Enabled** checkbox is selected.
9. Select the **SSL Enabled** checkbox if communication with this Active Directory server is through SSL.
10. Click **Save** to save this configuration information.



Note: Click **Test Connection** to test whether the connection to the Active Directory server is working.

The Active Directory server is now displayed in the Active Directory Configuration screen.

The screenshot shows the "Vocera Demo Hospital" interface. The "Active Directory" tab is selected in the top navigation bar. On the left, there is a sidebar menu with various options. The main content area shows the "Active Directory Configuration" screen. It has a "Hospital" dropdown menu set to "Vocera Alarm Manager". Below this, there is a table with columns: "Domain Name", "Host Name/SA", "User Name", "SSL", "Enabled", "Import Users", "Users", "Field Mapping", "Synchronization", and "Delete". The table contains one entry: "Vocera.local", "Vocera.local", "ssrinivasan", "No", "Yes", and icons for "Import Users", "Users", "Field Mapping", "Synchronization", and "Delete".




Note: To delete an Active Directory server from this screen, click

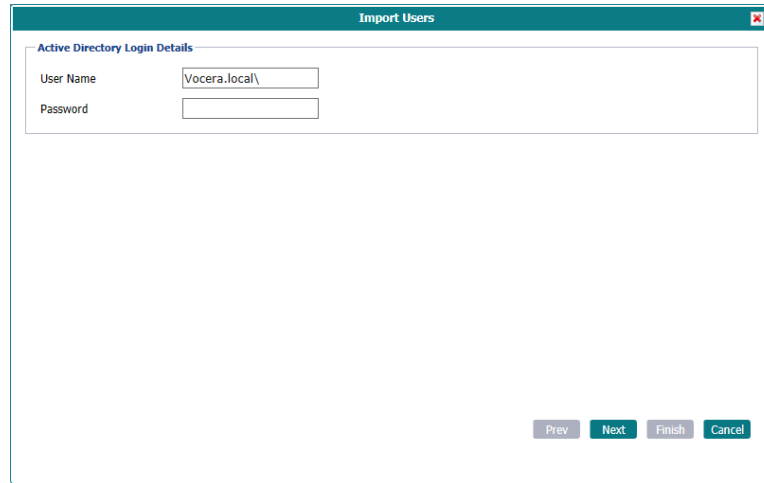


Delete.

Importing Active Directory Users

You can import users from an Active Directory server into a VAM unit.

1. In the Configuration screen, select **Active Directory**.
2. Locate the Active Directory server from which you want to import users and click  **Import Users**. The Import Users screen appears.

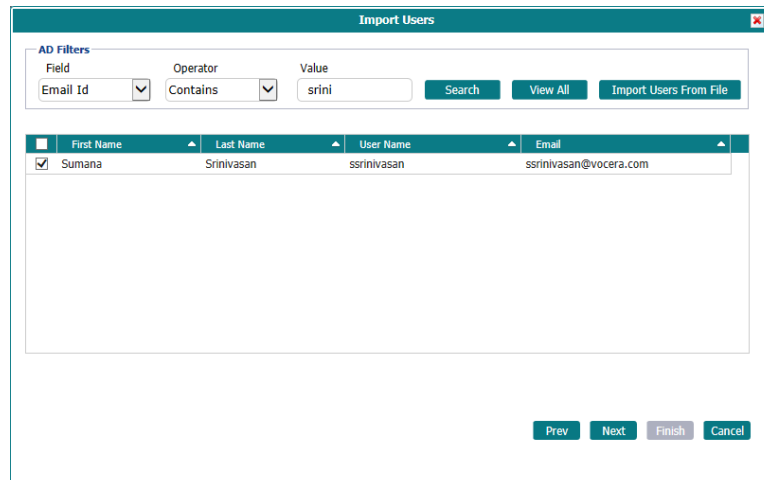


Import Users

Active Directory Login Details

User Name: Vocera.local\
 Password:
 Prev Next Finish Cancel

3. In the **User Name** and **Password** fields, type the user name and password that you use to access this Active Directory server. Click **Next** to display a screen in which you can select the users to be imported.



Import Users

AD Filters

Field: Email Id Operator: Contains Value: srimi Search View All Import Users From File

	First Name	Last Name	User Name	Email
<input checked="" type="checkbox"/>	Sumana	Srinivasan	ssrinivasan	ssrinivasan@vocera.com

Prev Next Finish Cancel

4. In the **AD Filters** pane, specify the users to be imported, using any of the following options:
 - a. Use the **Field**, **Operator**, and **Value** fields to specify a search criterion to be matched. Click **Search** to display all users that match this criterion.
 - b. Click **View All** to view all users on this Active Directory server.
 - c. Click **Import Users From File** to import a list of users from an external file. Type the name of the file or browse to its location, and click **Import**.
5. Select the checkboxes next to the users that you want to import, and click **Next**. A list of the users to be imported is displayed.

Import Users

Role, Unit And Group Assignments:

Select Default Settings

Role: Group: Unit:

Users	User Name	Role	Group	Unit
Sumana Srinivasan	ssrinivasan	NURSE	Vocera Group	Vocera Unit

Prev Next Finish Cancel

- To change the role for a user that you are importing, double-click in the Role column. From the dropdown list that appears, select an option. Similarly, double-click in the Unit or Group column to change the unit or group.
- Click **Finish**. A message appears, indicating that the import was successful.
- Click **Close** to close the Import Users window.

Viewing Imported Users

After you have imported users from an Active Directory server, you can view the list of users.

- In the Configuration screen, select **Active Directory**.
- Locate the Active Directory server for which you want to view users and click **Users**. A screen appears that contains a list of imported users.

Imported Users

First Name	Last Name	User Name	Email Id
Sumana	Srinivasan	ssrinivasan@vocera.local	ssrinivasan@vocera.com
Anup	Zambre	azambre@vocera.local	azambre@vocera.com
Sivabalarajan	Madasamy	smadasamy	smadasamy@vocera.com
Ganesh	Shirpurkar	gshirpurkar	gshirpurkar@vocera.com
Anup	Zambre	azambre	azambre@vocera.com
Sumana	Srinivasan	ssrinivasan	ssrinivasan@vocera.com
Manish	Jain	mjain	mjain@vocera.com

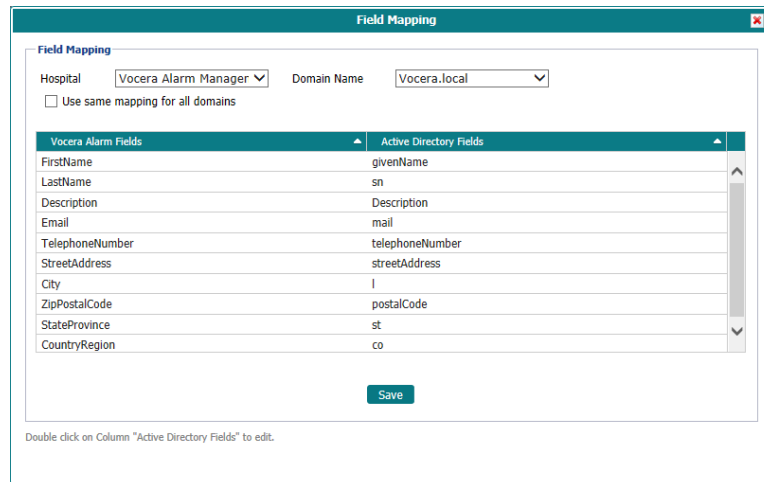
- Click to close this screen.

Mapping Active Directory Fields

You can specify which user information fields are to be mapped from an Active Directory user entry to a VAM user entry.

To set up field mapping:

- In the Configuration screen, select **Active Directory**.
- Locate the Active Directory server from which you want to import users and click **Field Mapping**. The Field Mapping screen appears.



Field Mapping

Hospital: Vocera Alarm Manager Domain Name: Vocera.local

☐ Use same mapping for all domains

Vocera Alarm Fields	Active Directory Fields
FirstName	givenName
LastName	sn
Description	Description
Email	mail
TelephoneNumber	telephoneNumber
StreetAddress	streetAddress
City	l
ZipPostalCode	postalCode
StateProvince	st
CountryRegion	co


Save

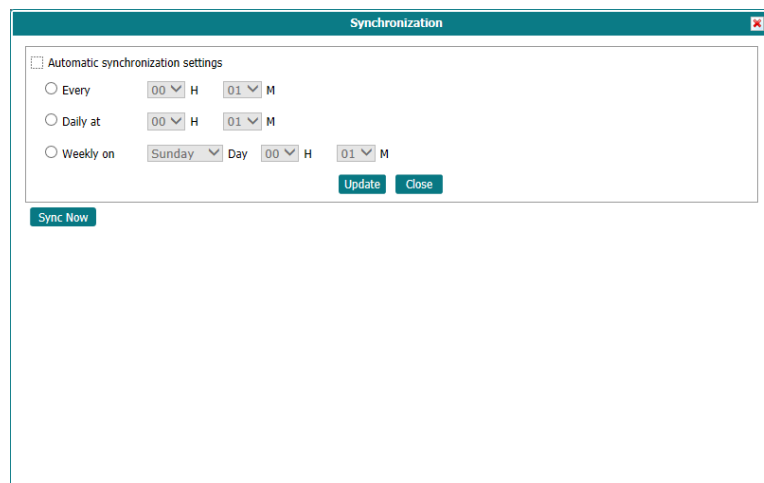
Double click on Column "Active Directory Fields" to edit.

- From the Hospital dropdown list, select the hospital for which you want to specify the field mapping.
- From the Domain Name dropdown list, select the Active Directory server for which you want to specify the field mapping. Click Use same mapping for all domains to use this mapping for all servers.
- To edit a mapping, double-click a value in the Active Directory Fields column. From the dropdown list that appears, select an Active Directory field to map to a Vocera Alarm field. Repeat this step on other fields as needed.
- Click Save to save this mapping.

Synchronizing With the Active Directory Server

You can specify that the VAM server is to be synchronized with the Active Directory after a certain elapsed time, daily, or weekly.

- In the Configuration screen, select Active Directory.
- Locate the Active Directory server from which you want to import users and click  Synchronization. The Import Users screen appears.



Synchronization

☐ Automatic synchronization settings

☐ Every 00 H 01 M
☐ Daily at 00 H 01 M
☐ Weekly on Sunday Day 00 H 01 M

Update Close

Sync Now

- To synchronize after a specified time, select the Every radio button, and use the H and M fields to specify the number of hours and minutes between synchronizations.
- To synchronize once a day, select the Daily at radio button, and use the H and M fields to specify the time of day on which to synchronize.
- To synchronize weekly, select the Weekly on radio button, and use the Day, H, and M fields to specify the day of the week and the time of day on which to synchronize.

6. Click **Update** to update the synchronization schedule. Click **Sync Now** to synchronize the Active Directory server with the VAM server immediately.
7. Click **Close** to close this screen.



Note: The H field uses a 24-hour clock.