



# **Vocera Report Gallery User Guide**

Version 5.3.3

# Notice

---

Stryker Corporation or its divisions or other corporate affiliated entities own, use or have applied for the following trademarks or service marks: Stryker, Vocera. All other trademarks are trademarks of their respective owners or holders. The absence of a product or service name or logo from this list does not constitute a waiver of Stryker's trademark or other intellectual property rights concerning that name or logo. Copyright © 2023 Stryker.

**Last modified:** 2023-02-21 11:25

VRS-533-Docs build 220

# Contents

---

|   |    |
|---|----|
| Report Gallery.....   | 5  |
| Report Categories.....  | 5  |
| Summary Reports.....  | 5  |
| Simultaneous User Login Report.....                                 | 6  |
| Device Type Usage Report.....                                       | 6  |
| Inactive Users Report.....  | 7  |
| Inactive Groups Report.....   | 8  |
| Inactive Address Book Entries Report.....                           | 9  |
| Group Entry Summary Report.....                                     | 10 |
| Address Book Entry Summary Report.....                              | 11 |
| Hourly Usage Summary Report.....                                    | 12 |
| Genie Session Summary Report.....                                   | 13 |
| Average Call Duration Statistics Report.....                        | 14 |
| Telephony Usage Trend Report.....                                   | 15 |
| Tiered Administration Audit Report.....                             | 16 |
| Command Usage Report.....   | 18 |
| System Call Volume Trend Report.....                                | 19 |
| PBX Call Volume Trend Report.....                                   | 20 |
| Unassigned APs Report.....  | 21 |
| Call Reports.....   | 22 |
| User Activity Report.....   | 22 |
| Incoming Calls Reports.....   | 23 |
| Outgoing Calls by User Reports (Summary and Detail).....            | 25 |
| Outgoing Calls Summary Report.....                                  | 27 |
| Broadcasts Report.....  | 27 |
| Speech Reports.....   | 28 |
| Speech Recognition Results by User Detail Report.....               | 29 |
| Speech Recognition Results by User Report.....                      | 30 |
| Speech Recognition Results by Access Point Report.....              | 31 |
| Speech Recognition Results by Department Report.....                | 32 |
| Speech Recognition Results by Device Report.....                    | 32 |
| Speech Recognition Distribution Chart.....                          | 33 |
| Speech Recognition Trend Report.....                                | 34 |
| Integration Reports.....  | 35 |
| Integration Messages Group Activity, Ordered By Transaction ID..... | 36 |
| Integration Messages Group Activity, Ordered By ID.....             | 36 |
| Integration Messages Group Activity, Ordered By Time.....           | 37 |

|  |    |
|--|----|
| Integration Messages User Activity, Ordered By ID.....   | 38 |
| Integration Messages User Activity, Ordered By Time..... | 38 |
| Average Response Time Detailed Report.....               | 39 |
| Average Response Time Trend Report.....                  | 41 |
| Device Reports.....                                      | 45 |
| Device Last User Access Report.....                      | 45 |
| Device Last Network Access Report.....                   | 46 |
| Device Inventory - Summary Report.....                   | 47 |
| Device Inventory - Detail Report.....                    | 47 |
| Device Usage Report.....                                 | 48 |
| Device Status Tracking Report.....                       | 48 |
| Asset Tracking Reports.....                              | 49 |
| Badge Last Used Report.....                              | 49 |
| Badge Usage Report.....                                  | 49 |
| Department Inventory - Summary and Detailed Reports..... | 50 |
| Exporting Data Reports.....                              | 51 |
| Data - Outgoing Calls by Badge Users Report.....         | 51 |
| Data - Incoming Phone Calls Report.....                  | 52 |
| Data - Recognition Results Report.....                   | 52 |
| Data - Inventory Report.....                             | 53 |
| Data - Broadcasts Report.....                            | 53 |
| Data - Badge Last Used Report.....                       | 54 |
| Data - Device Migration Report.....                      | 54 |
| Data - Device Last User Access Report.....               | 55 |
| Data - Device Last Network Access Report.....            | 56 |
| Scheduler Diagnostics Reports.....                       | 56 |
| Task Scheduler Diagnostics - Standard Report.....        | 57 |
| Task Scheduler Diagnostics - Filter Report.....          | 57 |
| Custom Reports.....                                      | 58 |
| Sample Custom Report- Badge Firmware.....                | 58 |

# Report Gallery

Vocera Report Server generates a wide selection of reports which can be used to get information on the system call volume, detect speech recognition issues, manage devices, export data, troubleshoot problems with running report packages, and finally to create custom reports. This section explains how to interpret reports that chart the usage of the Vocera System.

## Report Categories

The following table summarizes the report categories available for the Vocera Report Server:

Table 1: Report categories

| Type of Report   | Description  |
|--|--|
| <a href="#">Summary Reports</a> on page 5                | Snapshots of system call volume and speech recognition rates.  |
| <a href="#">Call Reports</a> on page 22                  | Information about calls made and received by users, groups, and so on.   |
| <a href="#">Speech Reports</a> on page 28                | Pinpoint equipment or users experiencing speech recognition problems.  |
| <a href="#">Integration Reports</a> on page 35           | Information about external systems that send messages to Vocera devices.   |
| <a href="#">Device Reports</a> on page 45                | Account for devices that have been placed into service with the Vocera server. The reports are filtered by the owning group or department as well as the site.               |
| <a href="#">Asset Tracking Reports</a> on page 49        | Account for devices that have been placed into service with the Vocera server. They should be used only if you do not have a Vocera license that includes Device Management. |
| <a href="#">Exporting Data Reports</a> on page 51        | Export selected data to a comma-separated values (CSV) file.   |
| <a href="#">Scheduler Diagnostics Reports</a> on page 56 | Assist administrators determine why a scheduled report package or a system task did not run successfully.  |
| <a href="#">Custom Reports</a> on page 58                | Custom reports are reports that you create with Crystal Reports and add to the Report Console. A sample custom report is provided.   |

## Summary Reports

Summary reports provide snapshots of system call volume and speech recognition rates. To access summary reports, click **Summary Reports** in the navigation bar.

## Simultaneous User Login Report

The Simultaneous User Login report shows the number of simultaneous Vocera users trending hourly, daily, or both. You can use this report to determine whether you need to purchase additional Vocera licenses.

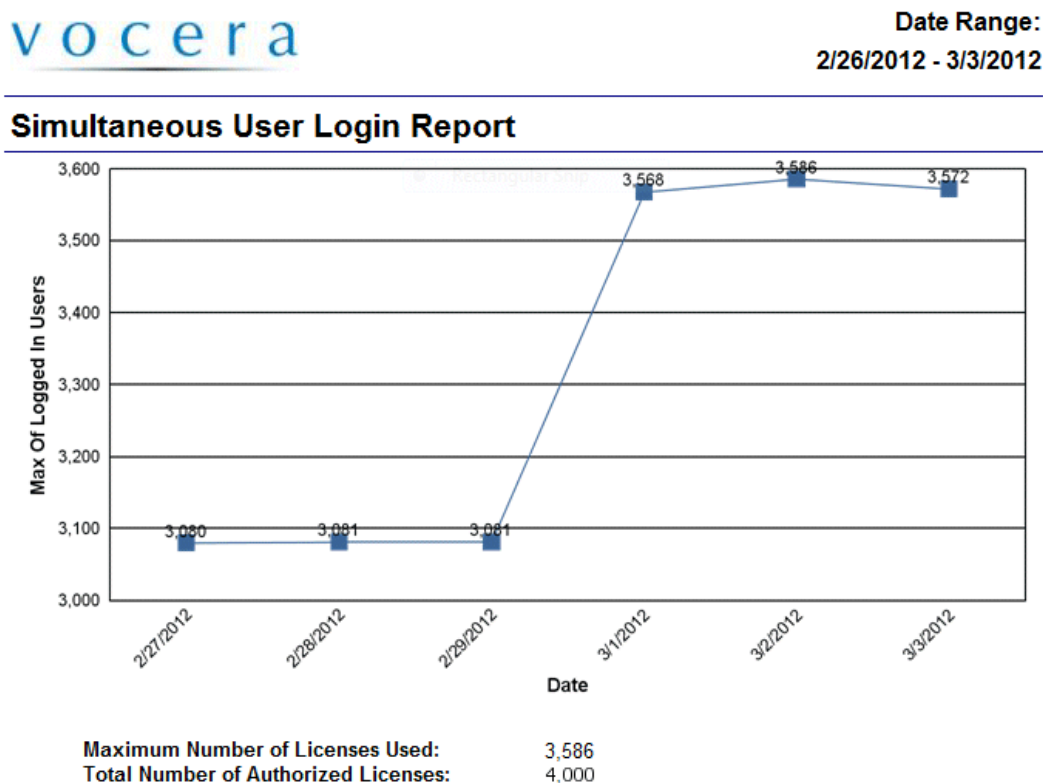


Figure 1: Simultaneous User Login report

## Device Type Usage Report

The Device Type Usage report shows daily, weekly, or monthly calls made using the following Vocera devices:

- B1000A
- B2000
- B3000
- Vocera Collaboration Suite for Android (Wi-Fi calls only)
- Vocera Collaboration Suite for iPhone (Wi-Fi calls only)
- Vocera Connect for Cisco
- Vocera Smartphone
- Vocera Access Anywhere (includes calls made from Vocera Connect for Cisco and Vocera Collaboration Suite apps over the cellular network)

You can use this report to determine usage trends for Vocera devices. Depending on call volume and the date range you specify, this report can take a long time to generate. Consequently, you should schedule this report to run at periodic intervals.

**Device Type Usage**

Device Type: B3000

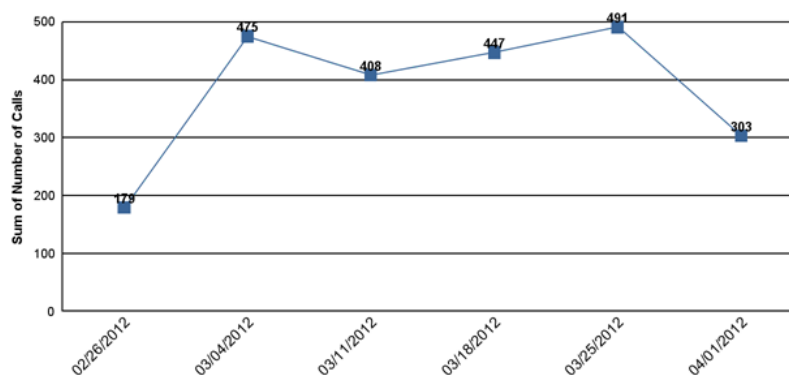


Figure 2: Device Type Usage report



**Note:** The Device Type Usage report shows only call usage. Call logs saved before the installation of Vocera Server 4.3 do not include device type information and therefore show up as “Unknown” in the report.

**Inactive Users Report**

The Inactive Users report shows users that have not logged into Vocera during the specified date range. The users are listed by userID, first name, and last name. The users can be grouped by site and department. The report can be used to remove inactive users and improve name recognition.



**Note:** When you remove inactive users, make sure you do not inadvertently remove Vocera Connect users who connect to the Vocera Server remotely over the cellular network and therefore do not log in.

**Users not using the Vocera Communications System**

| Site: Global                           |            |                   |
|--|------------|-------------------|
| C C U+I C U+Nursing Administration     |            |                   |
| UserID                                 | First Name | Last Name         |
| LGrimes                                | Lauren     | Grimes            |
| Total Inactive Users for Department: 1 |            |                   |
| C C U+Nursing Administration           |            |                   |
| UserID                                 | First Name | Last Name         |
| CCampos                                | Candice    | Campos            |
| lhargraves                             | Lizzie     | Hargraves         |
| Total Inactive Users for Department: 2 |            |                   |
| C T I C U                              |            |                   |
| UserID                                 | First Name | Last Name         |
| membernton                             | Melisa     | Emberton          |
| Total Inactive Users for Department: 1 |            |                   |
| C T I C U+Nursing Administration       |            |                   |
| UserID                                 | First Name | Last Name         |
| MBurkhard                              | Marives    | Burkhard          |
| IDalisay-Macavinta                     | Irene      | Dalisay-Macavinta |
| Total Inactive Users for Department: 2 |            |                   |

Figure 3: Inactive Users report

**Inactive Groups Report**

The Inactive Groups report shows groups that were not called or broadcasted to during the specified date range. The groups can be filtered by site and department. The report can be used to remove inactive groups and improve name recognition. The following figure shows a page from an Inactive Groups report.



**Note:** A call to a user within a group or department (for example, "Call Amy Wilson in Pharmacy") is not counted as a call to a group.



**Groups Not Called - By Site****Global****Department: Inpatient Rehabilitation Services**Group Name

Inpatient Pediatric Physical Therapy  
Lift Team  
Occupational Therapy  
Physical Therapists  
Speech Pathologists

Total Inactive Groups for Inpatient Rehabilitation Services : 5

**Department: L and D**Group Name

L and D Charge Nurse  
L and D Nurse  
L and D Nursing Assistant  
O B residents  
O B G Y N Doctors  
Room 1502  
Room 1504  
Room 1506  
Room 1508  
Room 1509

Total Inactive Groups for L and D : 10

Figure 4: Inactive Groups report

### Inactive Address Book Entries Report

The Inactive Address Book Entries report shows address book entries that were not called during the specified date range. The report can be used to remove inactive address book entries and improve name recognition. The following figure shows a page from an Inactive Address Book Entries report.

**Address Book Entries Not Called - By Site****Site: Global**

| <u>Address Book Entry</u>    | <u>Type</u> |
|------------------------------|-------------|
| A C T PAT                    | PLACE       |
| CARE COORDINATION            | PLACE       |
| CARPENTER SHOP               | PLACE       |
| CENTER FOR HOSPICE           | PLACE       |
| CLASSROOM B                  | PLACE       |
| CLINICAL NUTRITION           | PLACE       |
| COMMAND CENTER               | PLACE       |
| CONTROL DESK RADIOLOGY       | PLACE       |
| CORAM                        | PLACE       |
| DIETARY OUTPATIENT NUTRITION | PLACE       |
| DIETICIAN OFFICE             | PLACE       |
| HEALTH SERVICES LIBRARY      | PLACE       |
| HEMODIALYSIS                 | PLACE       |
| HUDSON HOME CARE             | PLACE       |
| KESSLER WEST                 | PLACE       |
| MATERIALS MANAGEMENT         | PLACE       |
| MEDICAL EDUCATION            | PLACE       |
| MEDICINE OFFICE              | PLACE       |
| NEONATOLOGY                  | PLACE       |
| NICU Pharmacist              | PLACE       |

Figure 5: Inactive Address Book Entries report

**Group Entry Summary Report**

The Group Entry Summary report shows the total calls made to a Group entry. You can use this report to find out which groups are getting the most calls. You can also use this report to learn which entries are unused and can be removed from the system. Removing unused Group entries can improve overall name recognition. The following figure shows a page from a Group Entry Summary report.

**Group Usage Counts****Site: Global****Department: P A C U**

|               | Times Used |
|---------------|------------|
| P A C U Nurse | 8          |
| Room 1524     | 3          |
| Room 1546     | 2          |

**Department: P I C U**

|                           | Times Used |
|---------------------------|------------|
| Room 1901                 | 19         |
| P I C U Nursing Assistant | 15         |
| Room 1903                 | 10         |
| Room 1915                 | 4          |
| Room 1906                 | 1          |

Figure 6: Group Entry Summary report

**Address Book Entry Summary Report**

The Address Book Entry Summary report shows the total calls made to an Address Book entry. You can use this report to find out which Address Book entries are getting the most calls. You can also use this report to learn which entries are unused and can be removed from the system. Removing unused Address Book entries can improve overall name recognition. The following figure shows a page from an Address Book Entry Summary report.

**Address Book Entry Usage Counts****Site: Global**

|                         | Times Used |
|-------------------------|------------|
| CARDIAC SERVICES        | 5          |
| CHILDRENS CANCER CENTER | 4          |
| I C U                   | 4          |
| A C T MAIN              | 3          |
| CASE MANAGER OFFICE     | 3          |
| CELLULAR THERAPY        | 3          |
| I T N and S             | 3          |
| CARDIAC SERVICES        | 2          |
| CARE ONE                | 2          |
| CHAPLAIN                | 2          |

Figure 7: Address Book Entry Summary report

**Hourly Usage Summary Report**

The Hourly Usage Summary report shows the number of Genie sessions per hour during a 24-hour period by each site. The first page of the report charts the information in a graph; the second page tabulates the number of genie sessions each hour. You can use this information to schedule system maintenance. As a best practice, perform maintenance operations when system usage is light. Shows the overall usage of the system by hour.

Based on the data in the report shown in the following figure, system maintenance can be performed starting around 8:00 p.m., as long as it is complete by 6:00 a.m.

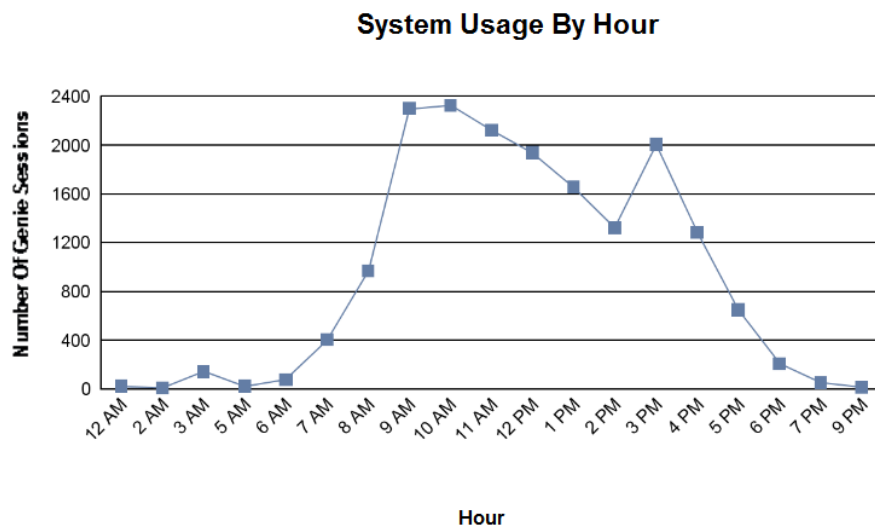
**Hourly Usage Summary****Overall Totals**

Figure 8: Hourly Usage Summary report

**Genie Session Summary Report**

The Genie Session Summary report summarizes Genie interaction data for each day in the specified date range. The first page of the report plots the data in a graph; subsequent pages show detailed data in a table. Data includes maximum simultaneous sessions, average session duration, number of unique users, and total sessions. The following figure shows a graph from a sample Genie Session Summary report.

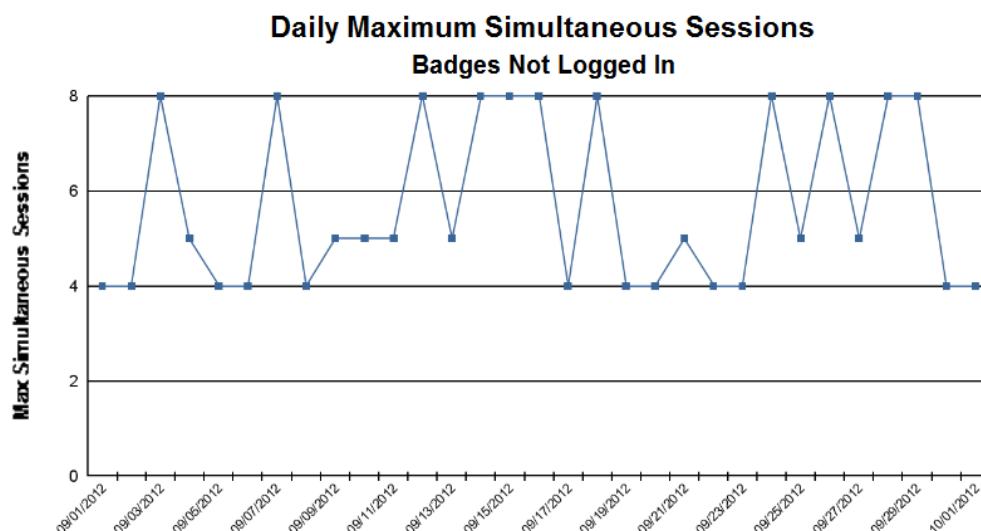
**Genie Session Summary****Badges Not Logged In**

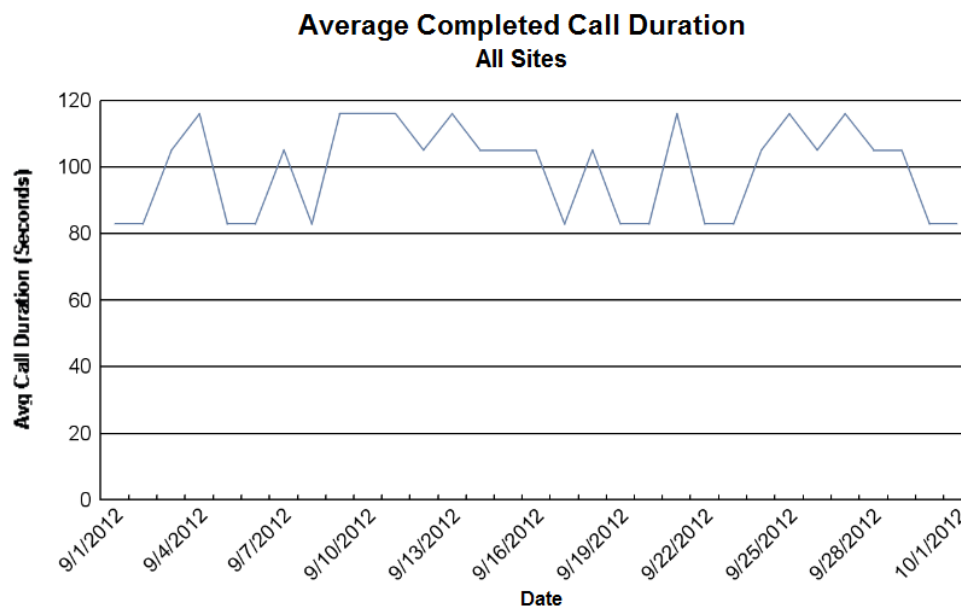
Figure 9: Genie Session Summary report

**Average Call Duration Statistics Report**

The Average Call Duration Statistics report summarizes the average duration of completed calls for the system in the selected time frame. The report also represents the information in a graph per site and for the overall system. The following figure shows a page from an Average Call Duration Statistics report.

Average Call Duration Statistics report

## Average Call Duration Statistics



### Telephony Usage Trend Report

The Telephony Usage Trend report provides data about telephony port usage for each principal site. It can be generated to show daily or weekly trends, or both.

A principal site may share its telephony server with other sites. The Telephony Usage Trend report lists only principal sites, but it shows the cumulative port usage of all sites that share a particular telephony server.

This report can help you determine if the number of licensed telephony ports available is sufficient to meet peak demand. During peak usage periods, calls can be delayed or dropped if the number of calls exceeds the number of ports available. If the number of ports is insufficient to meet your needs, you may want to consider licensing more ports.

The report charts usage based on the maximum number of telephony ports in use on a given date. It also provides the maximum number of ports in use during a specified date range and the total number of ports allocated for each principal site.



**Note:** For information about configuring telephony see the [Vocera Administration Guide](#). For more information about sharing telephony service and servers across multiple sites, see the [Multiple Site Scenarios](#) section in the [Vocera Installation Guide](#).

Following is an example Telephony Usage Trend report:

## Telephony Usage Trend Report

Principal Site: Vocera Canada

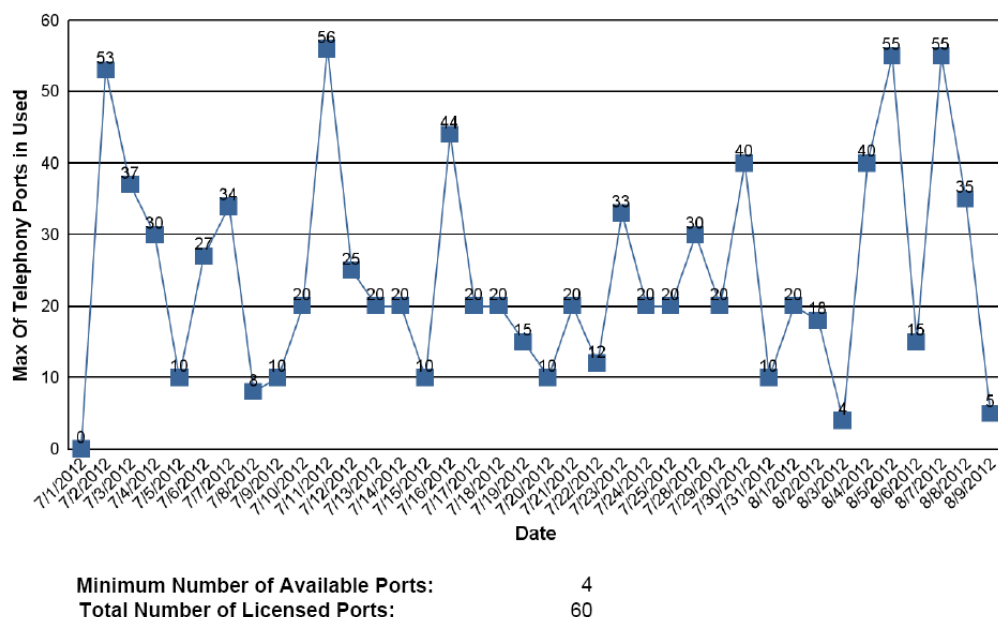


Figure 10: Telephony Usage Trend Report

### Tiered Administration Audit Report

The Tiered Administration Audit report shows all modifications and system actions performed via theAdministration Console.

The following figure shows a page from a Tiered Administration Audit report.



**Admin Console Audit Report****Site: Global****Emergency Department****11/12/2010**

| Time      | Modified By      | Operation | Modified Entity Type | Modified Entity   |
|-----------|------------------|-----------|----------------------|-------------------|
| 9:04:10AM | David Candelaria | Update    | User                 | Candelaria, David |

**11/13/2010**

| Time      | Modified By | Operation          | Modified Entity Type | Modified Entity |
|-----------|-------------|--------------------|----------------------|-----------------|
| 9:31:25AM | Jim McEnrue | Login User Console | User                 | McEnrue, Jim    |
| 9:32:37AM | Jim McEnrue | Update             | User                 | McEnrue, Jim    |

**11/14/2010**

| Time       | Modified By    | Operation           | Modified Entity Type | Modified Entity |
|------------|----------------|---------------------|----------------------|-----------------|
| 11:04:27AM | Shenma Bernard | Login Admin Console | User                 | Bernard, Shenma |
| 11:09:02AM | Shenma Bernard | Delete              | Location             | 4BaseTech       |
| 11:11:23AM | Shenma Bernard | Update              | Location             | Mike Kim - Home |

**11/15/2010**

| Time      | Modified By          | Operation          | Modified Entity Type | Modified Entity       |
|-----------|----------------------|--------------------|----------------------|-----------------------|
| 9:31:25AM | Lizabeth Defillippis | Login User Console | User                 | Defillippis, Lizabeth |
| 9:32:37AM | Lizabeth Defillippis | Update             | User                 | Defillippis, Lizabeth |

**11/21/2010**

| Time       | Modified By | Operation         | Modified Entity Type | Modified Entity |
|------------|-------------|-------------------|----------------------|-----------------|
| 9:50:08AM  | Ray Velez   | Update            | User                 | Velez, Ray      |
| 9:50:43AM  | Ray Velez   | Update            | User                 | Velez, Ray      |
| 10:21:40AM | Ray Velez   | Send Text Message | User                 | gibson, michele |

Figure 11: Tiered Administration Audit report

The following table describes the report columns.

Table 2: Tiered Administration Audit report Columns

| Column      | Description  |
|-------------|--|
| Time        | The Time column shows when a change was made.  |
| Modified By | The Modified By column shows who made the change. This value corresponds to a User ID specified via the Administration Console or the User Console on the Vocera server, unless the user logged in with the built-in login ID Administrator. If the operation was performed automatically by the Vocera system—for example, an automated restore of the database—the value is System. If the operation is a login by Report Server to the Vocera Voice Server to perform a dataload, this value is null. |

| Column               | Description  |
|----------------------|--|
| Operation            | <p>The Operation column specifies the operation that changed the Vocera database. Here are some possible values:</p> <ul style="list-style-type: none"> <li>• <b>Auto Restore</b>—The Vocera system automatically restored data from the database.</li> <li>• <b>Backup</b>—The database was backed up.</li> <li>• <b>Create</b>—An entity was created.</li> <li>• <b>Delete</b>—An entity was deleted.</li> <li>• <b>Login Admin Console</b>—Someone logged in using the default administrator user name and password.</li> <li>• <b>Login Tiered Admin Console</b>—Someone logged in using a user name and password that has administration rights.</li> <li>• <b>Login User Console</b>—Someone logged into the Vocera User Console.</li> <li>• <b>Login VAI</b>—Someone logged into a Vocera Administration Interface (VAI) client.</li> <li>• <b>Send Text Message</b>—Someone sent a text message to another user's device.</li> <li>• <b>Update</b>—One or more of an entity's property values changed.</li> <li>• <b>Update Conference Group</b>—The list of members of a conference group was changed.</li> <li>• <b>Update System</b>—One or more system property values changed.</li> </ul> |
| Modified Entity Type | <p>The ModifiedEntityType column specifies the type of the entity that was changed. If no entity was changed, this value is empty. Possible values:</p> <ul style="list-style-type: none"> <li>• <b>AddrBook</b> (address book entry)</li> <li>• <b>Group</b></li> <li>• <b>User</b></li> </ul>  |
| Modified Entity      | <p>The ModifiedEntityID column identifies the entity that was changed. For a user, the value is the user ID. For a group, the value is the group name. For an address book entry, the value is the address book entry name. If the Vocera database was not changed, for example, when a Backup operation occurs, the displayed value is <b>N/A</b>.</p>  |

### Command Usage Report

The Command Usage report shows Vocera voice commands that have been used by each department. The report shows a total of how many times each command was used and the percentage.

This report includes commands that are spoken when users access the Vocera system from a phone using Vocera Access Anywhere.

The following figure shows a page from a Command Usage report, available from the Summary Reports page.

## Command Usage Summary

**Site: Global**
**Case Management**

| Command                                | Number of Times Used | Percentage of Total Commands |
|--|----------------------|------------------------------|
| Call                                   | 178                  | 67.42                        |
| PlayVMessages                          | 27                   | 10.23                        |
| LogOut                                 | 15                   | 5.68                         |
| SendMessage                            | 9                    | 3.41                         |
| WhereIs                                | 6                    | 2.27                         |
| DeleteMessage                          | 5                    | 1.89                         |
| Conference                             | 4                    | 1.52                         |
| TransferToExtension                    | 3                    | 1.14                         |
| Invite                                 | 3                    | 1.14                         |
| Cancel                                 | 3                    | 1.14                         |
| RecordName                             | 2                    | 0.76                         |
| StopForwarding                         | 2                    | 0.76                         |
| DeleteVMessages                        | 2                    | 0.76                         |
| Transfer                               | 1                    | 0.38                         |
| Broadcast                              | 1                    | 0.38                         |
| WhereAmI                               | 1                    | 0.38                         |
| WhatTimeIsIt                           | 1                    | 0.38                         |
| DeleteTMessages                        | 1                    | 0.38                         |
| <b>Total:</b>                          | <b>264</b>           |                              |
| <b>Total Commands for Site Global:</b> |                      | <b>264</b>                   |
| <b>Total Commands:</b>                 |                      | <b>264</b>                   |

Figure 12: Command Usage report

## System Call Volume Trend Report

The following figure shows a page from a System Call Volume Trend report, available from the Summary Reports page.

## System Call Volume Trend Report

## Weekly Call Volume

Site: Vocera

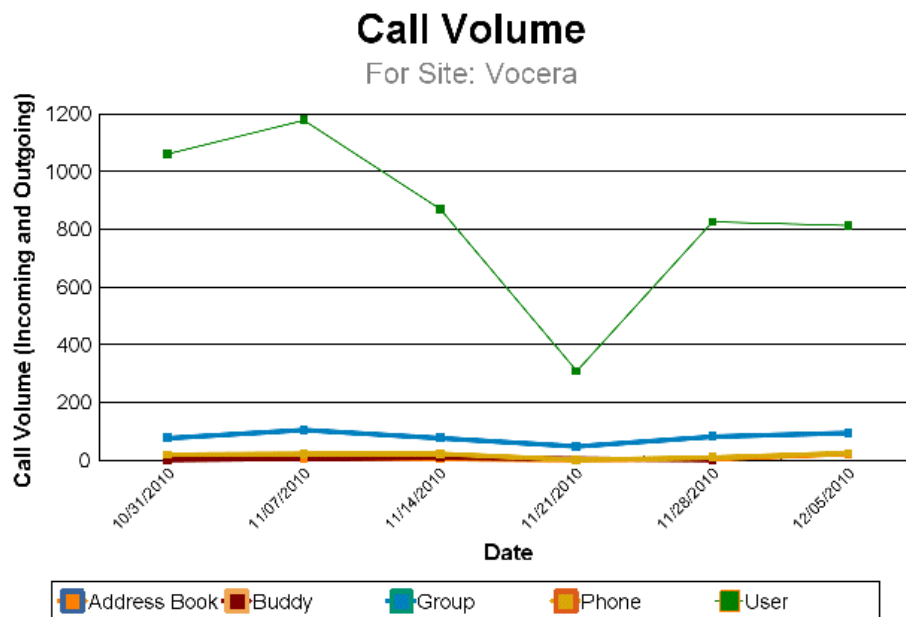


Figure 13: System Call Volume Trend report

The System Call Volume Trend report shows incoming and outgoing call volume trends over a specified date range. It shows all Vocera calls, including PBX calls, and it replaces the daily, weekly, and monthly System Call Volume reports available in previous versions. You can plot the trend over daily, weekly, or monthly periods. If you generate the report for multiple sites, the report provides data for each site as well as the overall system.

Call volume results are grouped by site. For each site, three different reports are provided:

- A line chart showing call volume trends over time
- A pie chart showing slices for each category of call volume results
- A table showing detailed call volume data

Call volume results are categorized as follows:

- To Badge User
- To Group
- To Phone
- To Address Book Entry
- To Personal Buddy

**PBX Call Volume Trend Report**

The following figure shows a page from a PBX Call Volume Trend report, available from the Summary Reports page.

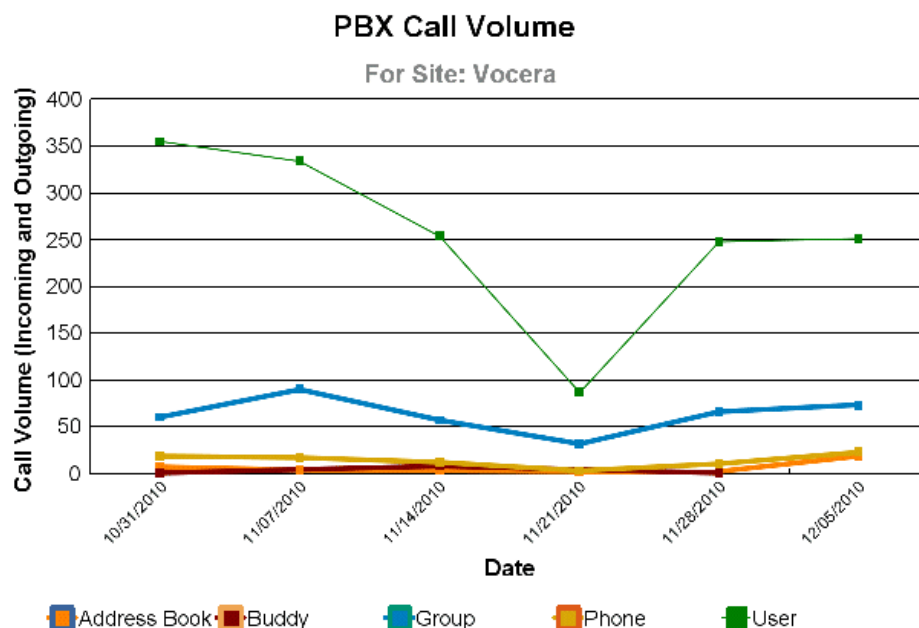
**PBX Call Volume Trend Report****Weekly PBX Call Volume****Site: Vocera**

Figure 14: PBX Call Volume Trend report

The PBX Call Volume Trend report shows incoming and outgoing PBX call volume trend over a specified date range. You can plot the trend over daily, weekly, or monthly periods. It replaces the daily, weekly, and monthly PBX Call Volume reports available in previous versions. If you generate the report for multiple sites, the report provides data for each site as well as overall totals.

Call volume results are grouped by site. For each site, three different reports are provided:

- A line chart showing call volume trends over time
- A pie chart showing slices for each category of call volume results
- A table showing detailed call volume data

Call volume categories are the same as in the System Call Volume Trend report; see [System Call Volume Trend Report](#) on page 19.

### Unassigned APs Report

The Unassigned APs report shows access points that do not have corresponding Vocera locations. Users must have had a Genie interaction within the specified date range while connected to an unassigned AP for the AP to appear in this report. The unassigned access points are sorted by MAC address.

The following figure shows a page from an Unassigned APs report, available from the Summary Reports page.

v o c e r a

Date Range:  
12/1/2010 - 12/12/2010

---

**List of Unassigned Access Points**

---

0015c7a8b5a3  
 00169c48f665  
 0023045986e0  
 002304599790  
 0023045998a0  
 0025456b1f80  
 0025456b21a0  
 00260b919080

---

**Total Access Points: 8**

---

**Figure 15: Unassigned APs report**

Best practice is to filter this report by a small date range (one or two weeks) to identify unassigned APs. It's possible that an unassigned AP is actually a rogue AP that may be active on your network for a short time and for which you would not want to assign a corresponding Vocera location. Consequently, a rogue AP may appear on the report for a particular date range and then drop off when you run the report for a later date range even though you did not assign the AP to a Vocera location.

Unassigned access points can cause Vocera devices to roam from their current site to the Global site incorrectly, which can result in speech recognition problems because of the difference in site grammars. Each site has its own dynamic grammar, which includes the names of users, groups, sites, locations, address book entries, and all their possible alternates.

Access points without location names also affect the location-related voice commands: **Locate**, **Where Is?**, and **Where Am I?**. These commands allow users to find the physical location of a particular user or member of a group. If an access point is not assigned a location name, the Genie will respond with the MAC address of the access point instead, which is not useful to most Vocera users.

---

## Call Reports

Call reports provide different views of how the system is being used. To access Call reports, click **Call Reports** in the navigation bar.

Administrators can track call volume and average call duration by department, group, user, and location. Call reports show both completed and incomplete calls. Incomplete calls occur when the caller hangs up before reaching the called party, or when the called party is unavailable (whether or not the caller leaves a message).

## User Activity Report

The User Activity report shows the activities of selected users or of all users from selected departments. It provides a detailed view of the following activities of users on each day:

- Incoming Calls
- Outgoing Calls
- Broadcasts
- Login/Logout
- DND (turning Do Not Disturb on or off)
- Push-to-Talk (Instant Conference)
- Voice Messages

- Add/Remove from Group

There are several events the report cannot capture. It only captures events that occur when users are connected to the organization's Wi-Fi network. Consequently, it cannot capture when users roam off network or power off their devices. It also does not report on automatic logouts or on calls made remotely using Vocera Collaboration Suite or Vocera Access Anywhere.

The User Activity report can take a long time to generate. Consequently, you may want to schedule this report to run overnight.

vocera

Date Range:  
6/27/2012 - 6/27/2012

User Activity Report

Site: Global

Department: Radiology Department

User: Clavin, Paul

|            |             |   |          |
|------------|-------------|---|----------|
| 06/27/2012 | 08:41:03 AM | Missed call from Erin Carroll due to not answered/rejected    | 00:00:00 |
|            | 08:53:58 AM | Accepted call from Irene Dalisay                              | 00:00:41 |
|            | 09:26:15 AM | Accepted call from Erin Carroll                               | 00:00:33 |
|            | 09:39:35 AM | Called Mary Brady; Incomplete due to not online               | 00:00:00 |
|            | 09:39:54 AM | Left message for Mary Brady                                   | 00:00:18 |
|            | 09:41:46 AM | Called Elric Elias; Incomplete due to busy                    | 00:00:00 |
|            | 09:41:59 AM | Left message for Elric Elias                                  | 00:00:05 |
|            | 09:42:26 AM | Called Erin Carroll; Accepted by Erin Carroll                 | 00:00:13 |
|            | 10:49:45 AM | Missed call from Erin Carroll due to not answered/rejected    | 00:00:00 |
|            | 10:49:49 AM | DND on  |          |
|            | 01:57:31 PM | DND off   |          |
|            | 01:59:10 PM | Called Rachel Holmes; Incomplete due to not answered/rejected | 00:00:00 |
|            | 01:59:30 PM | Left message for Rachel Holmes                                | 00:00:10 |
|            | 02:09:22 PM | Called Esperanza Sandell; Accepted by Esperanza Sandell       | 00:01:29 |
|            | 02:17:19 PM | Accepted call from 4134                                       | 00:02:02 |
|            | 02:45:02 PM | Called Erin Carroll; Incomplete due to not answered/rejected  | 00:00:00 |
|            | 02:45:14 PM | Left message for Erin Carroll                                 | 00:00:07 |
|            | 02:48:43 PM | Accepted call from Erin Carroll                               | 00:00:18 |
|            | 02:50:37 PM | Called Erin Carroll; Incomplete due to call wait rejected     | 00:00:00 |
|            | 02:51:05 PM | Left message for Erin Carroll                                 | 00:00:04 |
|            | 03:25:12 PM | Called Stan Alston; Incomplete due to DND/blocked call        | 00:00:00 |
|            | 03:25:25 PM | Left message for Stan Alston                                  | 00:00:21 |
|            | 03:27:35 PM | Accepted call from Stan Alston                                | 00:01:18 |
|            | 04:02:13 PM | Called Erin Carroll; Accepted by Erin Carroll                 | 00:00:08 |
|            | 04:58:02 PM | Accepted call from Kelsey Kleckner                            | 00:00:25 |

Figure 16: User Activity report

## Incoming Calls Reports

Incoming Calls reports summarize the number of completed and incomplete calls, average duration of each call and the total time spent on the calls by each user or group or address book entry.

Vocera Report Server provides the following incoming call reports:

- **Incoming Calls to Users (Summary and Detail)**—lists calls made directly to users.



**Note:** Calls to groups that are answered by users are NOT included in this report; they are included in the Incoming Calls to Groups reports instead.

- **Incoming Calls to Groups (Summary and Detail)**—lists calls made to groups.
- **Incoming Calls to Address Book Entries (Summary and Detail)**—lists calls made to Vocera address book entries.

These Call reports can help you identify users, groups, and address book entries that are not being used. By removing unused entities (groups, users, and address book entries) from the Vocera database, you can improve speech recognition and system performance.

The **Incoming Call to Users - Summary** provides information on the number of completed calls and incomplete calls, average duration of each call and the total time spent on the calls.

The following figure shows a page from the Incoming Calls to Users summary report.

|  |   |   |
|--|---|---|
| v o c e r a                                    |   | Date Range:                                   |
|  |   | 11/1/2010 - 11/15/2010                        |
| <b>Incoming Calls to Badge Users - Summary</b> |   |   |
| <b>Site: Global</b>                            |   |   |
| <b>Case Management</b>                         |   |   |
| <b>Ayala, Cat</b>                              |   | Total Calls: 4                                |
| Completed Calls                                | 1 |   |
| Incomplete Calls                               | 3 |   |
| Average Duration: 24 Seconds                   |   | Total Call Time: 0 Hours 0 Minutes 24 Seconds |
| <b>Barreiro, Jeff</b>                          |   | Total Calls: 6                                |
| Completed Calls                                | 5 |   |
| Incomplete Calls                               | 1 |   |
| Average Duration: 52 Seconds                   |   | Total Call Time: 0 Hours 4 Minutes 22 Seconds |
| <b>Bowles, Mary</b>                            |   | Total Calls: 5                                |
| Completed Calls                                | 3 |   |
| Incomplete Calls                               | 2 |   |
| Average Duration: 155 Seconds                  |   | Total Call Time: 0 Hours 7 Minutes 46 Seconds |
| <b>Brune, Pam</b>                              |   | Total Calls: 5                                |
| Completed Calls                                | 3 |   |
| Incomplete Calls                               | 2 |   |
| Average Duration: 142 Seconds                  |   | Total Call Time: 0 Hours 7 Minutes 5 Seconds  |
| <b>Cavanagh, Claudia</b>                       |   | Total Calls: 5                                |
| Completed Calls                                | 3 |   |
| Incomplete Calls                               | 2 |   |
| Average Duration: 77 Seconds                   |   | Total Call Time: 0 Hours 3 Minutes 51 Seconds |

Figure 17: Incoming Calls to Users summary report

The **Incoming Call to Users - Detail** reports the following information about each call:

- Date and time of the call
- Caller's Name
- Recipient's name or number if call forwarding is set up
- Duration of the call
- Reason the call was not answered if the call was incomplete

The following figure shows a page from the Incoming Calls to Users detail report. This report can take a relatively long time to generate.



## Incoming Calls to Badge Users - Detailed

Site: Global

## Case Management

Barreiro, Jeff

Total Calls: 6

## Completed Calls

| Date / Time         | Called By    | Accepted By   | Duration (Seconds) |
|---------------------|--------------|---------------|--------------------|
| 11/7/2010 4:21:45PM | Farah Dinvil | Jeff Barreiro | 121                |

## Incomplete Calls

| Date / Time          | Called By | Reason Unanswered |
|----------------------|-----------|-------------------|
| 11/6/2010 11:19:19AM | 4242      | Call rejected     |

Average Duration: 52 Seconds

Total Call Time: 0 Hours 4 Minutes 22 Seconds

Bowles, Mary

Total Calls: 5

## Completed Calls

| Date / Time          | Called By            | Accepted By | Duration (Seconds) |
|----------------------|----------------------|-------------|--------------------|
| 11/7/2010 11:38:36AM | Evan PECSON          | Mary Bowles | 95                 |
| 11/7/2010 12:58:13PM | Sara Pankratz        | Mary Bowles | 303                |
| 11/7/2010 3:13:23PM  | Jessica Clarke-Cuffy | Mary Bowles | 68                 |

## Incomplete Calls

| Date / Time         | Called By       | Reason Unanswered |
|---------------------|-----------------|-------------------|
| 11/7/2010 9:04:30AM | Genevieve Sakyi | Not online        |
| 11/9/2010 8:32:30AM | Betty Dittilo   | Not logged in     |

Average Duration: 155 Seconds

Total Call Time: 0 Hours 7 Minutes 46 Seconds

Brune, Pam

Total Calls: 5

## Completed Calls

| Date / Time           | Called By     | Accepted By | Duration (Seconds) |
|-----------------------|---------------|-------------|--------------------|
| 11/12/2010 10:10:22AM | Lydia Midura  | 6786124659  | 5                  |
| 11/15/2010 10:34:53AM | Mary Brady    | Pam Brune   | 407                |
| 11/15/2010 11:00:18AM | Samuel Foster | Pam Brune   | 13                 |

## Incomplete Calls

| Date / Time          | Called By     | Reason Unanswered |
|----------------------|---------------|-------------------|
| 11/15/2010 9:11:23AM | Samuel Foster | Call rejected     |

Average Duration: 142 Seconds

Total Call Time: 0 Hours 7 Minutes 5 Seconds

Figure 18: Incoming Calls to Users detail report

In the Completed Calls table for each user, the **Accepted By** column shows the user or phone that accepted a call. Use the **Accepted By** column to determine whether a user has forwarded calls to another user or phone.

In the Incomplete Calls table for each user, the **Reason Unanswered** column shows the reason a call was not answered. Possible reasons a user did not answer a call include:

- **Busy**—The user was busy on another call.
- **Call rejected**—The user declined to accept the call.
- **Call wait rejected**—The call was placed in Call Waiting, but the user did not accept it.
- **Caller blocked**—The user blocked calls from that caller or was in Do Not Disturb mode.
- **Not logged in**—The user was not logged into Vocera.
- **Not online**—The user roamed off network.
- **Phone not answered**—No one answered the phone.
- **Phone line unavailable**—All available telephony phone lines are in use.
- **Conference too large**—Tried to conference too many parties.
- **Unavailable**—The user was unavailable for another reason.
- **Unknown**—Report Server cannot determine why the call was not answered.

## Outgoing Calls by User Reports (Summary and Detail)

The Outgoing Calls by User report provides information about each outgoing call including the date and time of call, the number or the person called, and the duration of the call. Information on the total number of calls placed by the user and the total time spent on the calls is also provided.



**Note:** Outgoing Calls reports include calls that were made using Vocera Connect apps and Vocera Access Anywhere.

The following figure shows a page from an Outgoing Calls by User summary report, available from the Call Reports page:

vocera

Date Range: 11/1/2010 - 11/15/2010

Outgoing Calls by User - Summary

Site: Global

O R

Frischman, Rowland

Total Calls: 19

Completed Calls 15

Incomplete Calls 4

Average Duration: 145 Seconds

Total Call Time: 0 Hours 36 Minutes 22 Seconds

Martins, Nancy

Total Calls: 3

Completed Calls 1

Incomplete Calls 2

Average Duration: 340 Seconds

Total Call Time: 0 Hours 5 Minutes 40 Seconds

P A C U

Bushway, Tyrone

Total Calls: 16

Completed Calls 9

Incomplete Calls 7

Average Duration: 25 Seconds

Total Call Time: 0 Hours 3 Minutes 42 Seconds

Mikel, Lucy

Total Calls: 3

Completed Calls 3

Average Duration: 195 Seconds

Total Call Time: 0 Hours 9 Minutes 45 Seconds

Figure 19: Outgoing Calls by User summary report

The following figure shows a page from a detailed report about outgoing calls by a specified user:

vocera

Date Range:

11/1/2010 - 11/15/2010

Outgoing Calls by Users - Detailed

Site: Global

Emergency Department

Fink, Gloria

Total Calls: 14

Completed Calls

Called

Accepted By

Duration (Secs)

11/7/2010 4:27:53PM

Carla DeNunzio

Carla DeNunzio

14

11/7/2010 4:48:55PM

Nicky Jackman

Nicky Jackman

30

11/9/2010 1:16:03PM

Kelly Bajwa

Kelly Bajwa

22

11/10/2010 2:00:56PM

Patty Peirano

Patty Peirano

94

Subtotal: 9

Incomplete Calls

Called

Reason Incomplete

11/7/2010 9:39:46AM

Jackie Anderson

Not logged in

11/7/2010 10:07:25AM

Norma Finlay

Not logged in

11/7/2010 2:05:19PM

Emile Guevara

Call rejected

11/9/2010 9:45:45AM

Jessica Fischer

Call rejected

11/9/2010 2:05:34PM

Lyra Espolong

Not logged in

Subtotal: 5

Average Duration: 37 Seconds

Total Call Time: 0 Hours 5 Minutes 30 Seconds

Galvan, Rossy

Total Calls: 4

Completed Calls

Called

Accepted By

Duration (Secs)

11/12/2010 11:12:41AM

Karen DeFilippis

Karen DeFilippis

23

11/12/2010 1:20:59PM

Tessa Migliaccio

Tessa Migliaccio

57

11/12/2010 3:34:35PM

Jemilat Fadojutimi

Jemilat Fadojutimi

15

11/12/2010 4:38:22PM

Karen DeFilippis

Karen DeFilippis

97

Subtotal: 4

Average Duration: 48 Seconds

Total Call Time: 0 Hours 3 Minutes 12 Seconds

Figure 20: Outgoing Calls by User detail report

## Outgoing Calls Summary Report

The Outgoing Calls Summary report summarizes information on each user's outgoing calls. The information is categorized by number of calls placed to another user, to a group, to an Address Book Entry and to a personal buddy.

The following figure shows a page from an Outgoing Calls Summary report.

Date Range:  
11/1/2010 - 11/30/2010

**vocera**

**Outgoing Calls Summary by User**

**Site: Global**

**Dietary**

|              | Total       |                      | To User |                      | To Personal Buddy |
|--------------|-------------|----------------------|---------|----------------------|-------------------|
|              | Total Calls | Avg. Duration (Secs) | Total   | Avg. Duration (Secs) | Total             |
| West, Brenda | 5           | 59                   | 5       | 59                   | 0                 |

**Emergency Department**

|                   | Total       |                      | To User |                      | To Group |                      | To Phone |                      | To Personal Buddy |
|-------------------|-------------|----------------------|---------|----------------------|----------|----------------------|----------|----------------------|-------------------|
|                   | Total Calls | Avg. Duration (Secs) | Total   | Avg. Duration (Secs) | Total    | Avg. Duration (Secs) | Total    | Avg. Duration (Secs) | Total             |
| Arroyo, Yanni     | 5           | 53                   | 5       | 53                   | 0        | 0                    | 0        | 0                    | 0                 |
| Barnhardt, Rory   | 19          | 333                  | 19      | 333                  | 0        | 0                    | 0        | 0                    | 0                 |
| Bernard, Shenma   | 15          | 103                  | 15      | 103                  | 0        | 0                    | 0        | 0                    | 0                 |
| Candelaria, David | 9           | 151                  | 7       | 54                   | 0        | 0                    | 0        | 2                    | 248               |
| Chan, Natalia     | 11          | 57                   | 11      | 57                   | 0        | 0                    | 0        | 0                    | 0                 |

Figure 21: Outgoing Calls Summary Report

## Broadcasts Report

The Broadcasts report summarizes the broadcasts sent by a user to groups. The information includes the date and time of each broadcast, the user who initiated the broadcast, and the duration of each broadcast. The information is listed by the group receiving the broadcast.



**Note:** The Broadcasts report includes broadcasts that were made using Vocera Connect apps.

The following figure shows a page from a Broadcasts report:

v o c e r a

Date Range:  
10/1/2010 - 10/31/2010**Broadcasts to Groups****Site: Global****Department: N I C U****N I C U Charge Nurse**

| Date / Time          | User           | Cost Centers                 | Duration (Secs) |
|----------------------|----------------|------------------------------|-----------------|
| 10/13/2010 1:04:47PM | Ross, Kristine |                              | 10              |
| 10/13/2010 2:02:48PM | Blake, Eliza   |                              | 33              |
| Total Broadcasts: 2  |                | Average Duration: 22 Seconds |                 |

**Department Total:** 2**Department: O R****O R 9 Scrub Nurse**

| Date / Time          | User             | Cost Centers                | Duration (Secs) |
|----------------------|------------------|-----------------------------|-----------------|
| 10/3/2010 10:43:38AM | Diaz, Mia        |                             | 8               |
| 10/3/2010 10:45:00AM | Garcia, Cesar    |                             | 1               |
| 10/3/2010 12:18:47PM | Bandayrel, Julia |                             | 4               |
| Total Broadcasts: 3  |                  | Average Duration: 4 Seconds |                 |

**O R Nurse Manager**

| Date / Time           | User             | Cost Centers                | Duration (Secs) |
|-----------------------|------------------|-----------------------------|-----------------|
| 10/31/2010 10:16:10AM | Anderson, Jackie |                             | 5               |
| Total Broadcasts: 1   |                  | Average Duration: 5 Seconds |                 |

**O R Operations Nurse Manager**

| Date / Time           | User           | Cost Centers                | Duration (Secs) |
|-----------------------|----------------|-----------------------------|-----------------|
| 10/16/2010 10:43:38AM | Blair, Danny   |                             | 8               |
| 10/16/2010 10:45:00AM | Zellers, Naomi |                             | 1               |
| 10/16/2010 12:18:47PM | Hassan, Amanda |                             | 4               |
| Total Broadcasts: 3   |                | Average Duration: 4 Seconds |                 |

Figure 22: Broadcasts report

## Speech Reports

Speech reports provide recognition statistics to help pinpoint devices, access points, departments, or users experiencing speech recognition problems. To access Speech Reports, click **Speech Reports** in the navigation bar.

Speech reports are generated for one or all sites.



**Note:** For details on how speech recognition results are calculated, see "Understanding Speech Recognition" in the [Vocera Report Server Guide](#).

The following table describes the possible fields in the generated report:

Table 3: Recognition Result Report Generation Fields

| Field                          | Description   |
|--------------------------------|---|
| <b>AP MAC Addr</b>             | This report field indicates the MAC address of the AP, for reports that show results by AP.   |
| <b>Department Name</b>         | The name of the department, for reports that show results by department.  |
| <b>No. of Total Users</b>      | The total number of devices users in the department, for reports that show results by department.   |
| <b>Active Users</b>            | The number of active users in the department, based on the report date range, for reports that show results by department.  |
| <b>User Name</b>               | The name of the user.   |
| <b>Speech - Recognized</b>     | The amount of recognized communication attempts and the percentage of successful attempts, by the user on the indicated device. This field shows the number of occurrences, and the percentage, based on the total number of speech attempts. |
| <b>Speech - Rejected</b>       | The amount of rejected communication attempts, by the user, on the indicated device. This field shows the number of occurrences, and the percentage, based on the total number of speech attempts.  |
| <b>Speech - Others</b>         | Speech was received, but the Vocera system was unable to process it. This can happen if the duration of the speech exceeds the system's ability to interpret it, or if the speech started earlier than the Genie prompt.                      |
| <b>Speech - Attempts</b>       | The amount of communication attempts by the user on the indicated device. This total value includes: <ul style="list-style-type: none"> <li>• Speech - Recognized</li> <li>• Speech - Rejected</li> <li>• Speech - Others</li> </ul>          |
| <b>No Speech - Occurrences</b> | The amount of communication attempts, by the indicated user, where no speech occurred. This field shows the number of occurrences, and the percentage, based on the total number of attempts.   |
| <b>Total Attempts</b>          | The total number of Speech Attempts, and No Speech Attempts, by the user, on the indicated device.  |

### Speech Recognition Results by User Detail Report

The Recognition Results by User Detail report provides speech recognition result metrics listed by user and sorted by last name. The report can be generated to show results by site, department, or for one or more specific users.

This report allows you to generate filtered results to obtain very specific report data. You can filter the results to show only high recognition rates, or filter the information for results specific to users with speech recognition problems. For example, a **Recognition Filter** set to **Below** and a **Recognition Filter Rate** set to **70%**, would filter the results to include only data with a recognition rate of 0% to 69.9%. To see all data, leave the **Recognition Filter** set to **Above** and the **Recognition Filter Rate** set to **0%**.


Login attempts are not included in the recognition results.



**Note:** No speech results reflect a no speech timeout occurrence. A no speech timeout occurs when the call is ended after three attempts to prompt the user for a command.

When Vocera users respond to Genie prompts, they can press the Call button to signify "Yes" or the DND button to signify "No." These button responses are not treated as speech attempts, and are not included in the speech recognition reports.

The following figure shows a page from a Recognition Results by User - Detail report.



**Date Range:**  
9/1/2012 - 10/1/2012

| Recognition Results by User      |                            |               |               |           |                |  |                |
|----------------------------------|----------------------------|---------------|---------------|-----------|----------------|--|----------------|
| Site: Global                     |                            |               |               |           |                |  |                |
| Department: Emergency Department |                            |               |               |           |                |  |                |
| User Name                        | MAC Addr<br>Device Type    | Speech        |               |           | No Speech      |  | Total Attempts |
|                                  |                            | Recognized    | Rejected      | Attempts  | Occurrences    |  |                |
| Esqueda, Maryann                 | 0009ef065ada<br>B2000      | 12 80%        | 3 20%         | 15        | 0              |  | 15             |
|                                  | 0009ef07d8b5<br>B2000      | 1 100%        | 0             | 1         | 0              |  | 1              |
|                                  | 002210b93a32<br>Smartphone | 3 38%         | 5 63%         | 8         | 1 11%          |  | 9              |
|                                  | 0023a2b063f9<br>Smartphone | 1 50%         | 1 50%         | 2         | 0              |  | 2              |
|                                  | <b>Total</b>               | <b>17 65%</b> | <b>9 35%</b>  | <b>26</b> | <b>1 4%</b>    |  | <b>27</b>      |
| Gray, Sonia                      | 0009ef0341f2<br>B1000A     | 1 100%        | 0             | 1         | 0              |  | 1              |
|                                  | 0009ef0732a2<br>B2000      | 8 100%        | 0             | 8         | 0              |  | 8              |
|                                  | 0009ef079627<br>B2000      | 1 50%         | 1 50%         | 2         | 0              |  | 2              |
|                                  | 002210b93a32<br>Smartphone | 3 38%         | 5 63%         | 8         | 1 11%          |  | 9              |
|                                  | <b>Total</b>               | <b>13 68%</b> | <b>6 32%</b>  | <b>19</b> | <b>1 5%</b>    |  | <b>20</b>      |
| <b>Total</b>                     |                            | <b>30 67%</b> | <b>15 33%</b> | <b>45</b> | <b>2 4.26%</b> |  | <b>47</b>      |

Figure 23: Speech Recognition Results by User Detail Report

### Speech Recognition Results by User Report

The **Recognition Results by User** report describes overall recognition statistics for specific users. The data is sorted by user and provides speech, no speech, and total attempts detail. This report includes speech recognition attempts made after users have successfully logged into the device. Login attempts are not included in the recognition results.



**Note:** No speech results reflect a no speech timeout occurrence. A no speech timeout occurs when the call is ended after three attempts to prompt the user for a command.

Following is an example of the Recognition Results by User report where the data was filtered by user and two users were selected.

## Recognition Results by User

Site: Global

Department: P I C U

| User Name         |            |          |          |             |    | Total Attempts |
|-------------------|------------|----------|----------|-------------|----|----------------|
|                   | Speech     |          |          | No Speech   |    |                |
|                   | Recognized | Rejected | Attempts | Occurrences |    |                |
| Argain, Jody      | 11 92%     | 1 8%     | 12       | 1           | 8% | 13             |
| Coppola, Joni     | 13 87%     | 2 13%    | 15       | 1           | 6% | 16             |
| Friedman, Deborah | 18 100%    | 0        | 18       | 0           | 0% | 18             |
| Ghaly, Maged      | 5 100%     | 0        | 5        | 0           | 0% | 5              |
| Midura, Lydia     | 18 100%    | 0        | 18       | 0           | 0% | 18             |
| Tigner, Helen     | 11 73%     | 4 27%    | 15       | 0           | 0% | 15             |
| Total             | 76 92%     | 7 8%     | 83       | 2           | 2% | 85             |

Reported Active Users in Department: 6

Total Users in Department: 6

Figure 24: Speech Recognition Results by User report

## Speech Recognition Results by Access Point Report

The Recognition Results by Access Point report shows recognition statistics for each access point. This information can help you determine if a specific access point is failing, overloaded, or incorrectly configured, and causing poor speech recognition.

This report allows you to generate filtered results to obtain very specific report data. You can filter the results to show only high recognition rates, or filter the information for results specific to access points with speech recognition problems. For example, a **Recognition Filter** set to **Below** and a **Recognition Filter Rate** set to **70%**, would filter the results to include only data with a recognition rate of 0% to 69.9%. To see all data, leave the **Recognition Filter** set to **Above** and the **Recognition Filter Rate** set to **0%**.

Because users may experience login issues due to access point issues, this report includes login attempts in the recognition results.



**Note:** No speech results reflect a no speech timeout occurrence after the Call button is pressed and no speech is recognized by the Genie. A no speech timeout occurs when the call is ended after three attempts to prompt the user for a command.

The following figure shows a page from a Recognition Results by Access Point report.

## Recognition Results by AP

Site: Global

Location: I C U

| AP MAC Addr  |            |          |        |          |             | Total Attempts |
|--------------|------------|----------|--------|----------|-------------|----------------|
|              | Speech     |          |        |          | No Speech   |                |
|              | Recognized | Rejected | Others | Attempts | Occurrences |                |
| 001da17587c5 | 1,302 86%  | 172 11%  | 34 2%  | 1,508    | 35 2%       | 1,543          |
| 001da1759905 | 954 82%    | 205 18%  | 0      | 1,159    | 35 3%       | 1,194          |
| Total        | 2,256 85%  | 377 14%  | 34 1%  | 2,667    | 70 3%       | 2,737          |

Figure 25: Speech Recognition Results by AP Report

## Speech Recognition Results by Department Report

The Recognition Results by Department report shows recognition statistics for each department, sorted by department name. The report includes speech recognition attempts made after users have successfully logged into the Vocera device. It does not include login attempts in the recognition results.

In addition to the speech recognition statistics for each department, the report provides data on the total number of users in each department, and users that actively placed calls within the specified date range.

The following figure shows a page from a Recognition Results by Department report.

Date Range:  
7/1/2012 - 8/31/2012

**Recognition Results by Department**

Site: Global

| Department           | No. Of Total Users | Active Users | Speech     |          |        |          | No Speech   | Total Attempts |
|----------------------|--------------------|--------------|------------|----------|--------|----------|-------------|----------------|
|                      |                    |              | Recognized | Rejected | Others | Attempts | Occurrences |                |
| Patient Relations    | 4                  | 4            | 196 89%    | 24 11%   | 0      | 220      | 15 6%       | 235            |
| PET                  | 1                  | 1            | 61 92%     | 5 8%     | 0      | 66       | 3 4%        | 69             |
| Pharmacy Department  | 19                 | 19           | 878 91%    | 90 9%    | 1 0%   | 969      | 80 8%       | 1,049          |
| Radiation Oncology   | 1                  | 1            | 66 97%     | 2 3%     | 0      | 68       | 1 1%        | 69             |
| Radiology Department | 10                 | 10           | 554 91%    | 54 9%    | 0      | 608      | 47 7%       | 655            |
| Respiratory          | 13                 | 13           | 668 90%    | 71 10%   | 1 0%   | 740      | 77 9%       | 817            |
| Same Day Surgery     | 1                  | 1            | 16 100%    | 0        | 0      | 16       | 0           | 16             |
| Standards            | 1                  | 1            | 51 88%     | 7 12%    | 0      | 58       | 1 2%        | 59             |
| T M S                | 4                  | 4            | 178 86%    | 30 14%   | 0      | 208      | 1 0%        | 209            |
| TeleCom              | 2                  | 2            | 121 93%    | 9 7%     | 0      | 130      | 5 4%        | 135            |
| Transportation       | 11                 | 11           | 452 89%    | 57 11%   | 0      | 509      | 77 13%      | 586            |
| Unit Management      | 28                 | 28           | 1,353 91%  | 136 9%   | 1 0%   | 1,490    | 97 6%       | 1,587          |
| Total                |                    |              | 17,016 91% | 1,698 9% | 18 0%  | 18,732   | 1,176 6%    | 19,908         |

Total Departments: 42

Figure 26: Speech Recognition Results by Department report

## Speech Recognition Results by Device Report

The Recognition Results by Device report shows speech recognition statistics per device. If devices are shared, the report lists the user of each device. You can use this report to identify if poor speech recognition on a specific device is consistent for all devices or specific to only certain devices. Login attempts are not included in the recognition results.

This report allows you to generate filtered results to obtain very specific report data. You can filter the results to show only high recognition rates, or filter the information for results specific to devices with speech recognition problems. For example, a **Recognition Filter** set to **Below** and a **Recognition Filter Rate** set to **70%**, would filter the results to include only data with a recognition rate of 0% to 69.9%. To see all data, leave the **Recognition Filter** set to **Above** and the **Recognition Filter Rate** set to **0%**.



**Note:** When Vocera users respond to Genie prompts, they can press the Call button to signify "Yes" or the DND button to signify "No." These button responses are not treated as speech recognitions and therefore are not included in the speech recognition reports.

The following figure shows a page from a Recognition Results by Device report:



## Recognition Results by Device

Site: Global

Owner: Emergency Department

| MAC Addr<br>Device Type    | Speech     |          |          | No Speech   | Total<br>Attempts |
|----------------------------|------------|----------|----------|-------------|-------------------|
|                            | Recognized | Rejected | Attempts | Occurrences |                   |
| 0009ef0013f1<br>B1000A     | 8 100%     | 0        | 8        | 0           | 8                 |
| 0009ef0136dd<br>B1000A     | 12 100%    | 0        | 12       | 0           | 12                |
| 0009ef0246bc<br>B1000A     | 153 100%   | 0        | 153      | 0           | 153               |
| 0009ef034481<br>B1000A     | 16 46%     | 19 54%   | 35       | 0           | 35                |
| 0009ef055bb8<br>B2000      | 322 95%    | 16 5%    | 338      | 0           | 338               |
| 0009ef05c91d<br>B2000      | 38 100%    | 0        | 38       | 0           | 38                |
| 0009ef06b876<br>B2000      | 123 82%    | 27 18%   | 150      | 8 5%        | 158               |
| 0009ef0732a2<br>B2000      | 64 100%    | 0        | 64       | 0           | 64                |
| 001641f8116c<br>B2000      | 132 71%    | 55 29%   | 187      | 0           | 187               |
| 002210b939c6<br>Smartphone | 22 50%     | 22 50%   | 44       | 11 20%      | 55                |

Figure 27: Speech Recognition Results by Device Report

## Speech Recognition Distribution Chart

The Speech Recognition Distribution Chart shows speech recognition distribution statistics for selected sites. The results are represented in two pie charts for each site. If you show all sites, the report also includes charts that summarize results across all sites. The report includes recognition attempts for users who are not assigned to a department.

For more information, see "How Speech Recognition Rates Are Calculated " in the [Vocera Report Server Guide](#).

The following table describes the data provided in the two charts that make up the generated report:

Table 4: Speech Recognition Distribution Charts

| Chart             | Description  |
|-------------------|--|
| Speech Statistics | This chart shows the distribution of recognized speech attempts compared to rejected, and other speech attempts in a pie chart format. The other category considers all other speech attempts that are not otherwise recognized or rejected. The chart includes speech recognition attempts made after users have successfully logged into their devices. It does not include login attempts in the recognition results. |
| Total Statistics  | This chart shows the distribution of total of speech attempts compared to no speech occurrences, in a pie chart format.  |

Following is an example of the Speech Recognition Distribution report:

**Speech Recognition Distribution Chart**

Overall Statistics (All Sites)



Figure 28: Speech Recognition Distribution chart

**Speech Recognition Trend Report**

The Speech Recognition Trend report can be configured to show daily, weekly, and monthly speech recognition trends. You can generate results for site and department combinations, or specify one or more users. This report includes two charts:

- **% of Recognition Type** - This chart shows the distribution of recognized speech attempts compared to rejected, and other speech attempts in a line chart format. The other category considers speech attempts where speech occurred, but was not recognized.
- **% of Speech vs. No Speech** - This chart shows the percentage of speech attempts compared to no speech occurrences in a line chart format.

In the following Speech Recognition Trend Report example, the report parameters are configured to include data based on site, including one department, and filtered to include a weekly trend type:

## Speech Recognition Trend

Site: Global

Department: Cancer Center

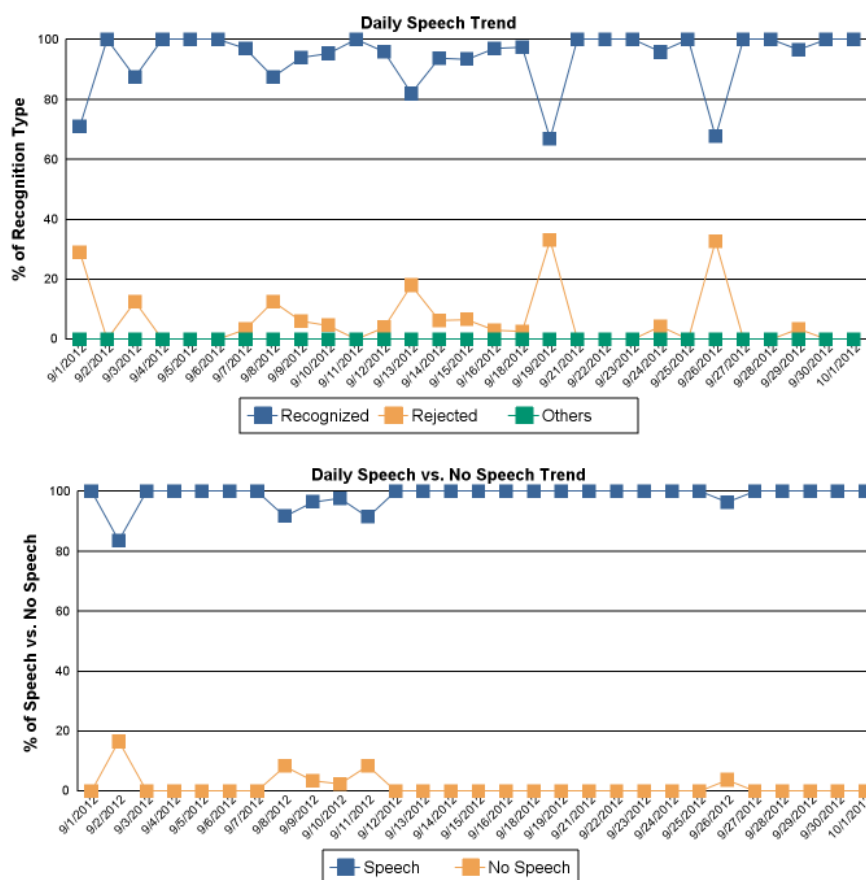


Figure 29: Speech Recognition Trend Report

## Integration Reports

Integration Reports provide information about external systems that send messages to Vocera devices. Examples of external systems that integrate with Vocera include nurse call and patient monitoring systems that access Vocera devices using the Vocera Messaging Interface (VMI). To access Integration reports, click **Integration Reports** in the navigation bar. The Integration reports can be filtered by department, group, or user.

Each of the Integration reports has a **Status** column that shows the current status of a VMIMessage, and a **Detail** column that shows responses (if any). Here are some possible status values:

- **Server Accepted**—The message has been received on the Vocera Voice Server.
- **Server Rejected**—The message has been rejected by the Vocera Voice Server. If the message was sent to a single user, the user may not be logged in. If the message was sent to a group, a user from that group may not be available.
- **Delivered to Device**—The Vocera Voice Server delivered the message to the recipient.
- **Read/Enunciated**—The recipient opened the message, or the message was automatically played aloud. However, the Vocera system cannot determine whether the recipient fully read or heard the message.
- **Message Response**—The recipient replied with a response shown in the **Detail** column.

- **Call Started**—The recipient called the optional callback phone number.
- **Call Ended**—The call to the callback phone number ended.



**Important:** Integration report data may include Protected Health Information (PHI). Any report that includes PHI data must not be distributed via email. For specific information about PHI regulations, see [HIPAA 'Protected Health Information': What Does PHI Include?](http://www.hipaa.com/2009/09/hipaa-protected-health-information-what-does-phi-include/)<sup>1</sup>

### Integration Messages Group Activity, Ordered By Transaction ID

The Integration Messages Activity, Ordered By Transaction ID report lists messages to groups, ordered by the associated Transaction ID. This report reveals integration message activity per client group, with messages listed by message ID.



**Note:** This report produces data only for integrated systems leveraging the `VMI::LogEvent()` method. For more information about the Vocera Administration Interface, see the [Vocera Messaging Interface Guide](#).

This report provides insight into the efficiency of the integrated system workflow. The time lapse data is provided to track workflow forwarding of urgent and non-urgent messages, until the transaction is completed. This information can help you determine the efficiency of the workflow response times.

The following figure shows an example of the generated report:

Date Range:  
3/18/2013 - 3/18/2013

| Integration Message Activity, Ordered By Transaction ID |          |                     |                     |                      |                      |
|---|----------|---------------------|---------------------|----------------------|----------------------|
| Site: Global  |          |                     |                     |                      |                      |
| Department: 4 West                                      |          |                     |                     |                      |                      |
| Client: WTCVOCERAB                                      |          |                     |                     |                      |                      |
| Transaction ID: {B28B0F2B-366B-4F25-8928-A50D63AE7648}  |          |                     |                     |                      |                      |
| Message ID  | Priority | Date / Time         |                     | Message Destination  | Message              |
| 5377  | Urgent   | 3/18/2013 9:21:06AM |                     | Room 4101 Nurse      | Room 4101 Nurse Call |
|   |          | Elapsed Time        | Date / Time         | Message Responder    | Status               |
|   |          | 00:00:00            | 3/18/2013 9:21:06AM | Room 4101 Nurse      | Server Accepted      |
|   |          | 00:00:00            | 3/18/2013 9:21:06AM | Cathy Jenkins        | Delivered to device  |
|   |          | 00:00:31            | 3/18/2013 9:21:37AM | Cathy Jenkins        | CallStarted          |
| 5378  | Urgent   | 3/18/2013 9:21:46AM |                     | Cathy Jenkins        | CallEnded            |
|   |          | 3/18/2013 9:21:36AM |                     | Room 4101 Assistant  | Room 4101 Nurse Call |
|   |          | Elapsed Time        | Date / Time         | Message Responder    | Status               |
|   |          | 00:00:30            | 3/18/2013 9:21:36AM | Room 4101 Assistant  | Server Accepted      |
|   |          | 00:00:30            | 3/18/2013 9:21:36AM | Brent James          | Delivered to device  |
| N/A   | 00:00:31 | 3/18/2013 9:21:41AM |                     | Brent James          | Read/Enunciated      |
|   |          | 3/18/2013 9:21:37AM |                     | Transaction Canceled |                      |

Figure 30: Integration Messages Group Activity, Ordered By ID report

### Integration Messages Group Activity, Ordered By ID

The Integration Messages Group Activity, Ordered By ID report provides details about integration call messages sent to groups. This information can help you determine the efficiency of the workflow.

The generated report data includes:

- Information about the routing and progression of urgent and non-urgent messages.
- Details about message activity data, including activity per group, with messages listed by ID.
- The elapsed time between message initiation and message termination.
- Information about how the message was initiated and the accepting responder.

<sup>1</sup> <http://www.hipaa.com/2009/09/hipaa-protected-health-information-what-does-phi-include/>

## Integration Messages Group Activity, Ordered By ID

| Site: Global        |          |                      |                      |                           |                             |
|---------------------|----------|----------------------|----------------------|---------------------------|-----------------------------|
| Department: B I C U |          |                      |                      |                           |                             |
| Group: Room 1206    |          |                      |                      |                           |                             |
| Client: Nurse Call  |          |                      |                      |                           |                             |
| Message ID          | Priority | Date / Time          | Message Destination  | Message                   |                             |
| 508124              | Normal   | 5/8/2012 8:47:27AM   | Room 1206            | Room 1206 pillow          |                             |
|                     |          | <u>Elapsed Time</u>  | <u>Date / Time</u>   | <u>Message Responder</u>  | <u>Status</u> <u>Detail</u> |
|                     |          | 00:00:05             | 5/8/2012 8:47:32AM   | Ken Griffin               | Message Response Accept     |
| 4011210             | Normal   | 4/1/2012 11:13:19AM  | Room 1206            | Room 1206 pillow          |                             |
|                     |          | <u>Elapsed Time</u>  | <u>Date / Time</u>   | <u>Message Responder</u>  | <u>Status</u> <u>Detail</u> |
|                     |          | 00:00:00             | 4/1/2012 11:13:19AM  | Room 1206                 | Server Accepted             |
| 4021214             | Urgent   | 4/2/2012 4:47:13PM   | Room 1206            | Room 1206 high heart rate |                             |
|                     |          | <u>Elapsed Time</u>  | <u>Date / Time</u>   | <u>Message Responder</u>  | <u>Status</u> <u>Detail</u> |
|                     |          | 00:00:00             | 4/2/2012 4:47:13PM   | Room 1206                 | Server Accepted             |
|                     |          | 00:00:01             | 4/2/2012 4:47:14PM   | Debbie Rosenblatt         | Delivered to device         |
|                     |          | 00:00:03             | 4/2/2012 4:47:16PM   | Debbie Rosenblatt         | Message Response Accept     |
| 4191220             | Urgent   | 4/19/2012 10:34:58AM | Room 1206            | Room 1206 Code Blue       |                             |
|                     |          | <u>Elapsed Time</u>  | <u>Date / Time</u>   | <u>Message Responder</u>  | <u>Status</u> <u>Detail</u> |
|                     |          | 00:00:00             | 4/19/2012 10:34:58AM | Room 1206                 | Server Accepted             |
|                     |          | 00:00:01             | 4/19/2012 10:34:59AM | Eli Drendall              | Delivered to device         |

Figure 31: Integration Messages Group Activity, Ordered By ID report

## Integration Messages Group Activity, Ordered By Time

The Integration Messages Group Activity, Ordered By Time report provides details about call messages sent to groups, with messages listed in chronological order. This information can help you determine the efficiency staff response times.

The generated report data includes:

- Information about the routing and progression of urgent and non-urgent messages.
- Details about message activity data, including activity per group, with messages ordered by time.
- The elapsed time between message initiation and message termination.
- Information about how the message was initiated and the accepting responder.

## Integration Messages Group Activity, Ordered By Time

| Site: Global        |            |            |          |                             |                   |                     |        |              |
|---------------------|------------|------------|----------|-----------------------------|-------------------|---------------------|--------|--------------|
| Department: B I C U |            |            |          |                             |                   |                     |        |              |
| Group: Room 1217    |            |            |          |                             |                   |                     |        |              |
| 05/09/2012          | Client ID  | Message ID | Priority | Message                     | Message Responder | Status              | Detail | Elapsed Time |
| 12:04:26 PM         | Nurse Call | 5091215    | Urgent   | Room 1217 high saturation   | Room 1217         | Server Accepted     |        | 00:00:00     |
| 12:04:29 PM         | Nurse Call | 5091215    | Urgent   | Room 1217 high saturation   | James Franco      | Delivered to device |        | 00:00:03     |
| 12:04:31 PM         | Nurse Call | 5091215    | Urgent   | Room 1217 high saturation   | James Franco      | Message Response    | Accept | 00:00:05     |
| 05/13/2012          | Client ID  | Message ID | Priority | Message                     | Message Responder | Status              | Detail | Elapsed Time |
| 06:59:19 AM         | Nurse Call | 5131213    | Urgent   | Room 1217 pillow            | Room 1217         | Server Accepted     |        | 00:00:00     |
| 06:59:20 AM         | Nurse Call | 5131213    | Urgent   | Room 1217 pillow            | Debbie Rosenblatt | Message Response    | Accept | 00:00:01     |
| Department: I C U   |            |            |          |                             |                   |                     |        |              |
| Group: Room 2116 B  |            |            |          |                             |                   |                     |        |              |
| 04/14/2012          | Client ID  | Message ID | Priority | Message                     | Message Responder | Status              | Detail | Elapsed Time |
| 12:04:26 PM         | Nurse Call | 4141215    | Urgent   | Room 2116 B leads off       | Room 2116 B       | Server Accepted     |        | 00:00:00     |
| 12:04:29 PM         | Nurse Call | 4141215    | Urgent   | Room 2116 B leads off       | Eli Drendall      | Delivered to device |        | 00:00:03     |
| 12:04:31 PM         | Nurse Call | 4141215    | Urgent   | Room 2116 B leads off       | Eli Drendall      | Message Response    | Accept | 00:00:05     |
| 04/26/2012          | Client ID  | Message ID | Priority | Message                     | Message Responder | Status              | Detail | Elapsed Time |
| 10:34:58 AM         | Nurse Call | 4261220    | Urgent   | Room 2116 B leads off       | Room 2116 B       | Server Accepted     |        | 00:00:00     |
| 10:34:59 AM         | Nurse Call | 4261220    | Urgent   | Room 2116 B leads off       | Mary Cherbonneau  | Delivered to device |        | 00:00:01     |
| 01:38:20 PM         | Nurse Call | 4261225    | Urgent   | Room 2116 B IV beeping      | Room 2116 B       | Server Accepted     |        | 00:00:00     |
| 01:38:21 PM         | Nurse Call | 4261225    | Urgent   | Room 2116 B IV beeping      | Amelia Carneiro   | Delivered to device |        | 00:00:01     |
| 01:38:24 PM         | Nurse Call | 4261225    | Urgent   | Room 2116 B IV beeping      | Amelia Carneiro   | Message Response    | Accept | 00:00:04     |
| 05/02/2012          | Client ID  | Message ID | Priority | Message                     | Message Responder | Status              | Detail | Elapsed Time |
| 10:53:28 AM         | Nurse Call | 502126     | Urgent   | Room 2116 B high heart rate | Room 2116 B       | Server Accepted     |        | 00:00:00     |
| 10:53:38 AM         | Nurse Call | 502126     | Urgent   | Room 2116 B high heart rate | Barbara Frischman | Delivered to device |        | 00:00:10     |

Figure 32: Integration Messages Group Activity, Ordered By Time report

## Integration Messages User Activity, Ordered By ID

The Integration Messages User Activity, Ordered By ID report provides information about integration messages received by users. This report provides insight about user message activity, with messages listed by ID.

The generated report data includes:

- Information about the routing and progression of urgent and non-urgent messages
- Details about user message activity, with messages ordered by ID
- The elapsed time between message initiation and message termination
- Information about how the call was initiated and the user activity associated with the message

Date Range:  
4/1/2012 - 5/17/2012

**vocera**

**Integration Messages User Activity, Ordered By ID**

**Site: Global**

**Department: I C U**

**User: Angelica Feiger**

**Client: Nurse Call**

| Message ID | Priority | Date / Time          | Message Destination | Message                     |                     |               |
|------------|----------|----------------------|---------------------|-----------------------------|---------------------|---------------|
| 403126     | Urgent   | 4/3/2012 10:53:28AM  | Room 2123 B         | Room 2123 B leads off       |                     |               |
|            |          | <u>Elapsed Time</u>  | <u>Date / Time</u>  | <u>Message Responder</u>    | <u>Status</u>       | <u>Detail</u> |
|            |          | 00:00:10             | 4/3/2012 10:53:38AM | Angelica Feiger             | Delivered to device |               |
| 407125     | Urgent   | 4/3/2012 10:53:40AM  | Angelica Feiger     | Message Response            | Reject              |               |
|            |          | 4/7/2012 11:09:56AM  | Room 1212           | Room 1212 high saturation   |                     |               |
|            |          | <u>Elapsed Time</u>  | <u>Date / Time</u>  | <u>Message Responder</u>    | <u>Status</u>       | <u>Detail</u> |
| 417126     | Urgent   | 4/7/2012 11:09:58AM  | Angelica Feiger     | Message Response            | Accept              |               |
|            |          | 4/17/2012 10:53:28AM | Room 1210           | Room 1210 IV beeping        |                     |               |
|            |          | <u>Elapsed Time</u>  | <u>Date / Time</u>  | <u>Message Responder</u>    | <u>Status</u>       | <u>Detail</u> |
| 503125     | Urgent   | 4/17/2012 10:53:38AM | Angelica Feiger     | Delivered to device         |                     |               |
|            |          | 4/17/2012 10:53:40AM | Angelica Feiger     | Message Response            | Reject              |               |
|            |          | <u>Elapsed Time</u>  | <u>Date / Time</u>  | <u>Message Responder</u>    | <u>Status</u>       | <u>Detail</u> |
| 503125     | Urgent   | 5/3/2012 11:09:56AM  | Room 2124 B         | Room 2124 B high heart rate |                     |               |
|            |          | <u>Elapsed Time</u>  | <u>Date / Time</u>  | <u>Message Responder</u>    | <u>Status</u>       | <u>Detail</u> |
|            |          | 00:00:02             | 5/3/2012 11:09:58AM | Angelica Feiger             | Message Response    | Accept        |

Figure 33: Integration Messages User Activity, Ordered By ID report

## Integration Messages User Activity, Ordered By Time

The Integration Messages User Activity, Ordered By Time report provides information about integration messages received by users, in chronological order.

The generated report data includes:

- Information about the routing and progression of urgent and non-urgent messages
- Details about user message activity, with messages ordered by time
- The elapsed time between message initiation and message termination
- Information about how the message was initiated and the user activity associated with the call

Date Range:  
4/1/2012 - 5/17/2012

### Integration Messages User Activity, Ordered By Time

| Site: Global          |            |            |          |                             |                     |                     |        |              |
|-----------------------|------------|------------|----------|-----------------------------|---------------------|---------------------|--------|--------------|
| Department: B I C U   |            |            |          |                             |                     |                     |        |              |
| User: Amelia Carneiro |            |            |          |                             |                     |                     |        |              |
| 04/01/2012            | Client ID  | Message ID | Priority | Message                     | Message Destination | Status              | Detail | Elapsed Time |
| 10:53:38 AM           | Nurse Call | 401126     | Urgent   | Room 2124 A IV beeping      | Room 2124 A         | Delivered to device |        | 00:00:10     |
| 10:53:40 AM           | Nurse Call | 401126     | Urgent   | Room 2124 A IV beeping      | Room 2124 A         | Message Response    | Reject | 00:00:12     |
| 04/02/2012            | Client ID  | Message ID | Priority | Message                     | Message Destination | Status              | Detail | Elapsed Time |
| 04:49:23 PM           | Nurse Call | 4021226    | Normal   | Room 1209 bathe patient     | Room 1209           | Delivered to device |        | 00:00:01     |
| 04:49:24 PM           | Nurse Call | 4021226    | Normal   | Room 1209 bathe patient     | Room 1209           | Read/Enunciated     |        | 00:00:02     |
| 04/06/2012            | Client ID  | Message ID | Priority | Message                     | Message Destination | Status              | Detail | Elapsed Time |
| 08:47:29 AM           | Nurse Call | 406124     | Normal   | Room 1211 bathroom assist   | Room 1211           | Delivered to device |        | 00:00:02     |
| 08:47:30 AM           | Nurse Call | 406124     | Normal   | Room 1211 bathroom assist   | Room 1211           | Read/Enunciated     |        | 00:00:03     |
| 08:47:32 AM           | Nurse Call | 406124     | Normal   | Room 1211 bathroom assist   | Room 1211           | Message Response    | Accept | 00:00:05     |
| 01:38:21 PM           | Nurse Call | 4061225    | Urgent   | Room 1211 IV beeping        | Room 1211           | Delivered to device |        | 00:00:01     |
| 01:38:24 PM           | Nurse Call | 4061225    | Urgent   | Room 1211 IV beeping        | Room 1211           | Message Response    | Accept | 00:00:04     |
| 04:47:14 PM           | Nurse Call | 4061214    | Urgent   | Room 2123 A high heart rate | Room 2123 A         | Delivered to device |        | 00:00:01     |
| 04:47:16 PM           | Nurse Call | 4061214    | Urgent   | Room 2123 A high heart rate | Room 2123 A         | Message Response    | Accept | 00:00:03     |
| 04/13/2012            | Client ID  | Message ID | Priority | Message                     | Message Destination | Status              | Detail | Elapsed Time |
| 08:47:29 AM           | Nurse Call | 413124     | Normal   | Room 1205 bed pan           | Room 1205           | Delivered to device |        | 00:00:02     |
| 08:47:30 AM           | Nurse Call | 413124     | Normal   | Room 1205 bed pan           | Room 1205           | Read/Enunciated     |        | 00:00:03     |
| 08:47:32 AM           | Nurse Call | 413124     | Normal   | Room 1205 bed pan           | Room 1205           | Message Response    | Accept | 00:00:05     |
| 01:38:21 PM           | Nurse Call | 4131225    | Urgent   | Room 1207 IV beeping        | Room 1207           | Delivered to device |        | 00:00:01     |
| 01:38:24 PM           | Nurse Call | 4131225    | Urgent   | Room 1207 IV beeping        | Room 1207           | Message Response    | Accept | 00:00:04     |
| 04/18/2012            | Client ID  | Message ID | Priority | Message                     | Message Destination | Status              | Detail | Elapsed Time |
| 01:38:21 PM           | Nurse Call | 4181225    | Urgent   | Room 1211 high saturation   | Room 1211           | Delivered to device |        | 00:00:01     |

Figure 34: Integration Messages User Activity, Ordered By Time report

### Average Response Time Detailed Report

The Average Response Time Detailed report shows data for specific users and provides information more granularly than what is available on the Average Response Time Trend report.

The generated report data includes:

- **Site and Client:** Lists the location and client (for example, in the graphic below the client is the User Name).
- **Alerted:** User at a Vocera site that was alerted by a VMI device.
- **Alert Type:** Type of alert (request for service) from a user at a Vocera site.
- **Message ID:** Unique ID of the message that was sent by a user and accepted by the recipient.
- **Priority:** The default priorities include:
  - Urgent
  - High
  - Normal
- **Action Type:**  
The table below lists the action types and includes a description of each.

Table 5: Action Types

| Action Types | Definition  |
|--------------|---|
| Accepted     | The communication (call, alert) is accepted by the VMI Server.  |
| CallEnded    | The communication (call, alert) was terminated before the client could accept the Vocera client device. |
| Delivered    | The communication (call, alert) was delivered to the Vocera client device.                              |
| Read         | The communication (call, alert) was read by user receiving the communication (call, alert).             |
| Rejected     | The communication (call, alert) was rejected by the user receiving the communication (call, alert).     |
| Response     | The user responded to the communication (call, alert) from their Vocera Client device.                  |

- **Response Time:** Length of time it take the client to respond.



vocera

3/26/2015 - 4/24/2015

Shift: 00:00 - 23:59

| Average Response Time   |                               |                 |                   |          |                               |              |
|-------------------------|-------------------------------|-----------------|-------------------|----------|-------------------------------|--------------|
| Department: Engineering |                               |                 | No. of Alerts: 83 |          | Average Response Time: 47.70s |              |
| Year: 2015              |                               |                 | No. of Alerts: 83 |          | Average Response Time: 47.70s |              |
| April Sub totals:       |                               |                 | No. of Alerts: 83 |          | Average Response Time: 47.70s |              |
| Site & Client           | Alerted                       | Alert Type      | MessageID         | Priority | ActionType                    | ResponseTime |
| <u>Day: 20</u>          |                               |                 |                   |          |                               |              |
| Vocera - ocardinal      | Candace Cardinal (ccardinal)  | test message on | 0                 | Urgent   | Accepted                      | 0s           |
| Vocera - ocardinal      | Candace Cardinal (ccardinal)  | test message on | 0                 | Urgent   | Delivered                     | 0s           |
| Vocera - ocardinal      | Candace Cardinal (ccardinal)  | test message on | 0                 | Urgent   | Read                          | 19s          |
| Vocera - ocardinal      | Candace Cardinal (ccardinal)  | test message on | 1                 | Urgent   | Accepted                      | 0s           |
| Vocera - ocardinal      | Candace Cardinal (ccardinal)  | test message on | 1                 | Urgent   | Delivered                     | 0s           |
| Vocera - ocardinal      | Candace Cardinal (ccardinal)  | test message on | 1                 | Urgent   | Read                          | 14s          |
| <u>Day: 22</u>          |                               |                 |                   |          |                               |              |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 1                 | Normal   | Accepted                      | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 1                 | Normal   | Delivered                     | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 1                 | Normal   | Read                          | 3s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 2                 | Normal   | Accepted                      | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 2                 | Normal   | Delivered                     | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 2                 | Normal   | Read                          | 3s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 3                 | Normal   | Accepted                      | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 3                 | Normal   | Delivered                     | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 3                 | Normal   | Read                          | 211s         |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 4                 | Normal   | Accepted                      | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 4                 | Normal   | Delivered                     | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 4                 | Normal   | Read                          | 2s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 5                 | Normal   | Accepted                      | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 5                 | Normal   | Delivered                     | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 5                 | Normal   | Read                          | 172s         |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 6                 | Normal   | Accepted                      | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 6                 | Normal   | Delivered                     | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 6                 | Normal   | Read                          | 164s         |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 7                 | Normal   | Accepted                      | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 7                 | Normal   | Delivered                     | 0s           |
| Vocera - vmimartin      | Martin Schlapfer (mschlapfer) | Room 123        | 7                 | Normal   | Read                          | 140s         |

10/24/2016

Vocera Communications Server  
Vocera Report Console 5.2 [Build 101]

Page 2 of 59

Figure 35: Average Response Time Detailed Report

### Average Response Time Trend Report

The Average Response Time Trend report shows the average response time in a visual format containing chart types and graphs which displays your data in multiple formats.

These include line, column, histogram, bar, and donut charts.

The generated report data includes:

- Alert response time by departments
- Alert response time by user
- Average response by department for each month within a year
- Average response by department per month

### Average Response Time by Department

This report shows the number of alerts and the average response time for each department displayed in a combination chart. The measures on the chart include:

- Average response time in seconds
- Number of alerts

vocera

3/26/2015 - 10/24/2016

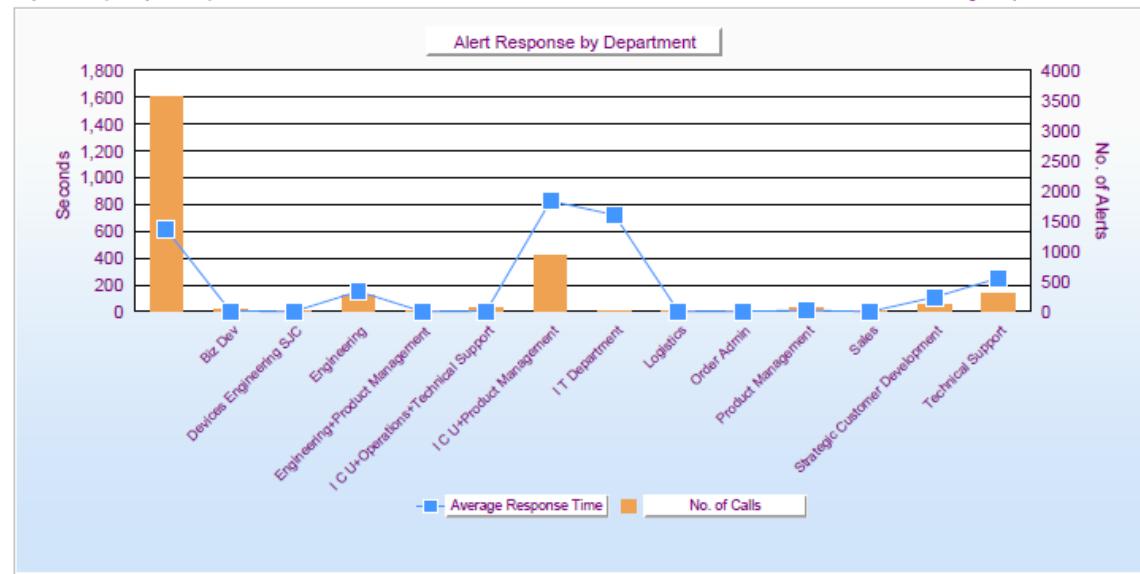
Shift: 00:00 - 23:59

## Average Response Time Trends

Report Totals (All Departments)

No. of Alerts: 5,421

Average Response Time: 571.26s



10/24/2016

Vocera Report Console [Build ]

Page 1 of 99

Figure 36: Average Response Time by Department

**User Alert Response**

This report displays the average response time for each user in your environment measured in seconds across all departments.

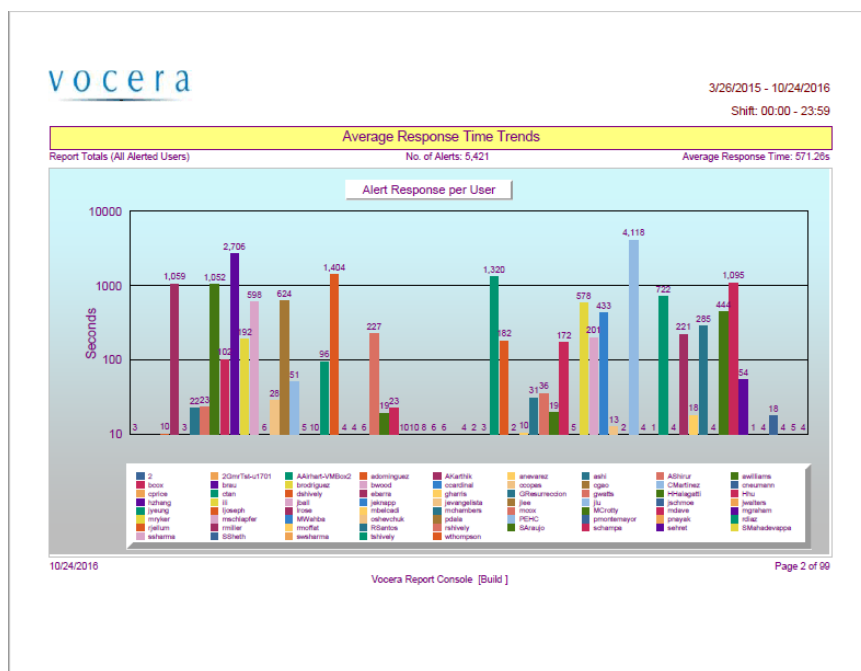


Figure 37: Alert Responses per User

### Call Response Activity by Department

This report displays alert information categorized by department within a specified year. The generated report data includes:

- Number of alerts and average response time per month
- Number of alerts by priority
- Number of alerts by action type

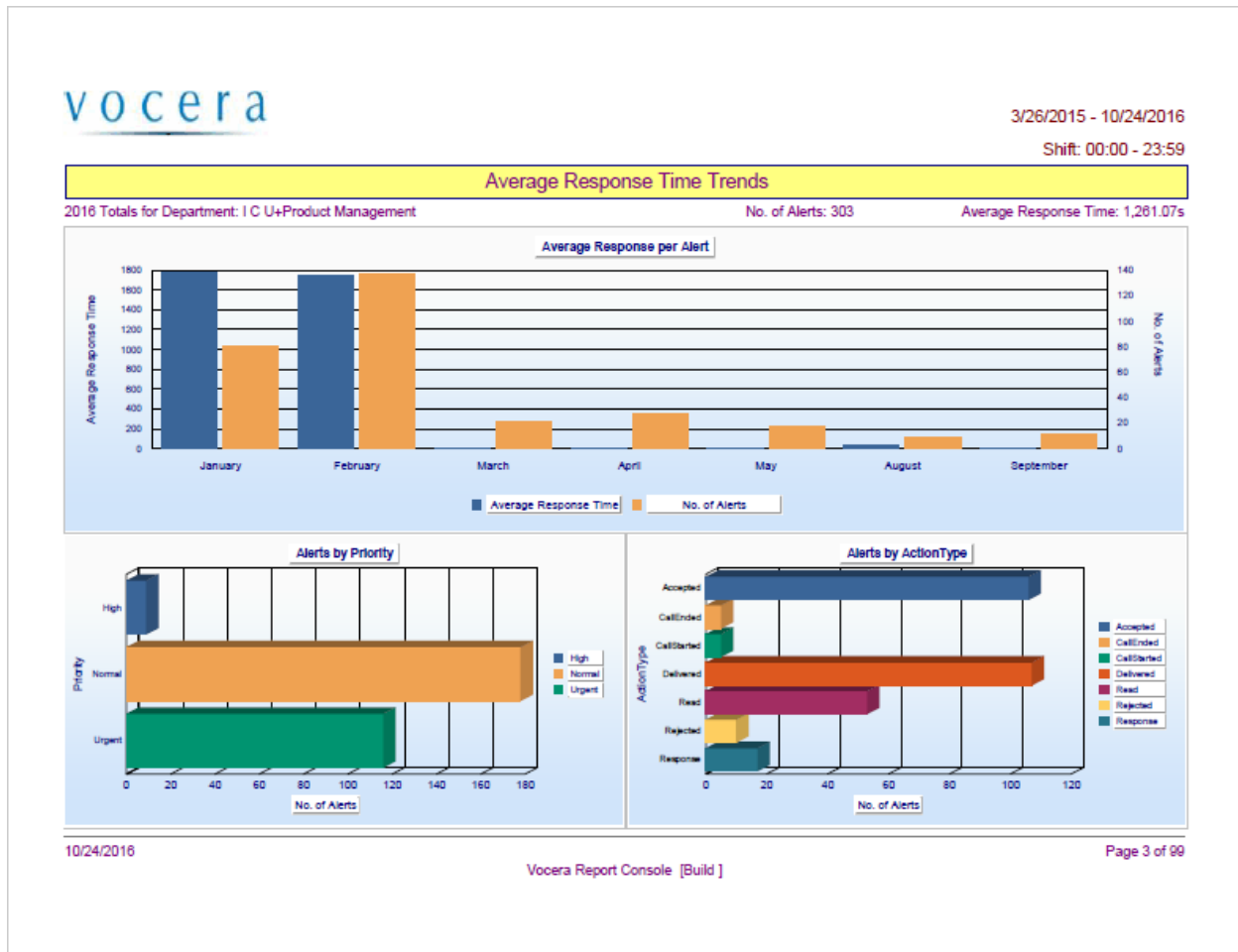


Figure 38: Response Activity report

### Monthly Call Response Activity

This report shows the call and alert trends on a monthly basis. The generated report data includes:

- Donut chart: Shows the average user response for each user
- Line chart: Shows the number of alerts by alert type per month
- Cross tab report: Shows the number of alerts by site, client, and priority

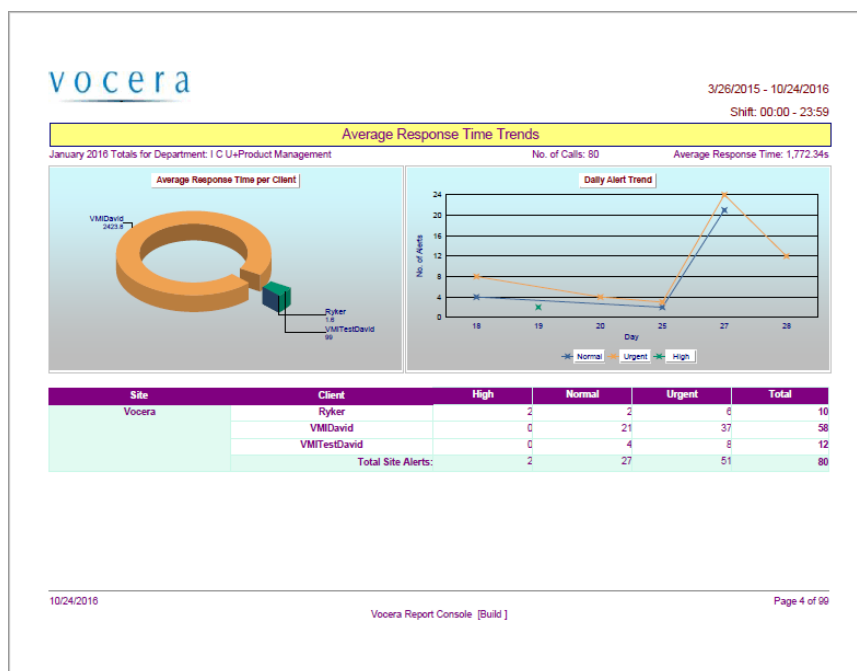


Figure 39: Monthly Call Response Activity report

## Device Reports

Device reports are similar to Asset Tracking reports except they are grouped by device owner instead of department. If you do not have a Vocera license that includes Device Management, some fields (such as label, owner, and tracking date) will not appear in the reports.

To access Device reports, click **Device Reports** in the navigation bar.

The Device reports allow you to filter reports by device type. If you choose "All Device Types," you include all devices, including non-Vocera devices running the Vocera Collaboration Suite app. When a non-Vocera device connects to the Vocera Voice Server, the server automatically assigns it a special 4-character MAC address prefix for identification purposes.

Table 6: MAC address prefixes for non-vocera devices

| MAC Address Prefix | Device   |
|--------------------|--|
| aaaa               | Apple iPhone, iPod, or iPad                            |
| cccc               | Cisco Unified Wireless IP Phone 7921G, 7925G, or 7926G |
| dddd               | Android smartphone                                     |
| eeee               | Vocera Smartphone (from Motorola)                      |

## Device Last User Access Report

The Device Last User Access report displays the last user to log in to a device. This report can be configured to show all devices that have accessed the Vocera system, devices where users have not logged in for several days (lost devices), and devices that users have logged in for the first time ever (unregistered devices) or for the first time in a long time (lost devices that have been found).

Use the **Shared Device** parameter to choose whether to report on all devices, devices that are assigned to an individual user, or devices that are shared between multiple users.

Use the **Device Last Used** and **Number of Days** parameters to include devices that have not been used less than or equal to or greater than or equal to the specified number of days. To include devices in the report regardless of when they were last used, make sure the **Device Last Used** parameter is set to "Greater than or equal to" and the **Number of Days** parameter is set to 0.

The Device Last User Access report does not provide a date range in its report parameters. Instead, the report's date range is calculated by subtracting the threshold of days the device was not used from today's date.

Devices that have never logged in display in red. If these devices are spares, retired, or RMA'd, the system device manager should select the appropriate device status for them and assign them to an owning group.

The following figure shows a page from a Device Last User Access report:

v o c e r a

| Device Last User Access   |               |              |               |                      |                       |              |                 |                            |
|---|---------------|--------------|---------------|----------------------|-----------------------|--------------|-----------------|----------------------------|
| Site: Global <span style="color: red;">■</span> Devices never logged in |               |              |               |                      |                       |              |                 |                            |
| Total Devices Used by Owner: 1  |               |              |               |                      |                       |              |                 |                            |
| <b>I C U</b>  |               |              |               |                      |                       |              |                 |                            |
| Label   | Serial No.    | MAC Address  | Device Status | Days Since Last Used | Date Device Last Used | Location     | User            | Department                 |
| I C U-001   | C3DB1005D57D  | 0009ef05d57d | Active        | 3                    | 11/30/2010 1:01:43PM  | 001da17587c5 | Ataide, Katy    | Nursing Administration+Sa  |
| I C U-002   | B2EC09066C94  | 0009ef066c94 | Active        | 5                    | 11/28/2010 5:45:05PM  | 001e4abe4f76 | Walcott, Barrie | Central Distribution       |
| Total Devices Used by Owner: 2  |               |              |               |                      |                       |              |                 |                            |
| <b>L and D</b>  |               |              |               |                      |                       |              |                 |                            |
| Label   | Serial No.    | MAC Address  | Device Status | Days Since Last Used | Date Device Last Used | Location     | User            | Department                 |
|   | A24A08053321  | 0009ef053321 | Active        | 3                    | 11/30/2010 1:02:57PM  | 001e7a276a45 | Hassan, Amanda  | Inpatient Rehabilitation   |
| L and D-001   | A2BC08054A26  | 0009ef054a28 | Active        | 3                    | 11/30/2010 12:52:50PM | 0015c7a8b5a3 | Cala, Michigan  | Unit Management            |
| L and D-002   | B2KA10073BE3  | 0009ef073be3 | Active        | 3                    | 11/30/2010 12:58:55PM | 001da1759905 | Ratto, Nelli    | Nursing Administration     |
| Total Devices Used by Owner: 3  |               |              |               |                      |                       |              |                 |                            |
| <b>N I C U</b>  |               |              |               |                      |                       |              |                 |                            |
| Label   | Serial No.    | MAC Address  | Device Status | Days Since Last Used | Date Device Last Used | Location     | User            | Department                 |
| N I C U-001   | A24JM07050F60 | 0009ef050f60 | Active        | 3                    | 11/30/2010 12:43:47PM | 001a30c3cef5 | Helberg, Todd   | Emergency Department+Nursi |

Figure 40: Device Last User Access report

### Device Last Network Access Report

The Device Last Network Access report shows when a device last accessed the Vocera server and what access point or area it was associated with. If a user is not logged in to the device at the last access time, the user is identified as "Not Logged In." Otherwise, the actual user name is displayed. Devices are grouped by the owning group. This report includes more detail than the Device Last User Access report, including the device serial number, the tracking date, and any notes for the device. Each device's data spans two rows to accommodate all of the information. Values in the **Days Since Last Used** column are red when they are greater than 5.

The following figure shows a page from a Device Last Network Access report.

vocera

Date Range:  
11/1/2010 - 11/30/2010

## Device Last Network Access

Site: Global ■ Devices not in use for more than 5 days

| NICU                                |                 |  |               |                      |                       |               |  |
|-------------------------------------|-----------------|--|---------------|----------------------|-----------------------|---------------|--|
| Label                               | Serial Number   | MAC Address                                    | Device Status | Days Since Last Used | Date Device Last Used | Last Location |  |
| User                                | Department      |  | Tracking Date | Notes                |                       |               |  |
| N I C U-005<br>Carney, Ellen        |                 | 002210b938ef<br>Administration                 | Active        | 0                    | 11/30/2010 1:06:12PM  | 001da17587c5  |  |
| N I C U-006<br>Lozano, Mary         |                 | 0023a2b068ba<br>N I C U+Nursing Administration | Active        | 0                    | 11/30/2010 1:02:49PM  | 002304598fa0  |  |
| Total Devices Used by Owner: 6      |                 |  |               |                      |                       |               |  |
| Nursing Administration              |                 |  |               |                      |                       |               |  |
| Label                               | Serial Number   | MAC Address                                    | Device Status | Days Since Last Used | Date Device Last Used | Last Location |  |
| User                                | Department      |  | Tracking Date | Notes                |                       |               |  |
| Nursing Admin-003<br>Zellars, Naomi | X00983GG0700046 | 0009ef01c773                                   | Active        | 0                    | 11/30/2010 1:03:57PM  | 001e4abe4f76  |  |
| Nursing Admin-004<br>Martin, Linda  |                 | 0009ef01dced<br>Nursing Administration+P A C U | Active        | 0                    | 11/30/2010 12:12:31PM | 001e4abe4f76  |  |
| Nursing Admin-005                   | A00983FA0703566 | 0009ef0215c3                                   | Active        | 0                    | 11/30/2010 12:30:57PM | 001da174b805  |  |

Figure 41: Device Last Network Access report

## Device Inventory - Summary Report

The Device Inventory - Summary report summarizes which devices each department is using. Information is grouped by department, and within each department, by label and device MAC address.

The following figure shows a page from a Device Inventory - Summary report.

vocera

Date Range:  
11/1/2010 - 11/30/2010

## Device Inventory Report - Summary

| Site: Global                       |                 |              |                        |           |                 |                |                  |               |
|------------------------------------|-----------------|--------------|------------------------|-----------|-----------------|----------------|------------------|---------------|
| Owner: O R                         |                 |              |                        |           |                 |                |                  |               |
| Label                              | Serial Number   | MAC Address  | Department             | Days Used | Date First Used | Date Last Used | % of Days in Use | Device Status |
| O R-001                            | A24N07050030    | 0009ef050030 | Emergency Department   | 30        | 11/1/2010       | 11/30/2010     | 100.00           | Active        |
|                                    |                 | 0009ef05459f | Nursing Administration | 20        | 11/1/2010       | 11/28/2010     | 66.67            | Active        |
| Devices Used by Owner: O R : 2     |                 |              |                        |           |                 |                |                  |               |
| Owner: P A C U                     |                 |              |                        |           |                 |                |                  |               |
| Label                              | Serial Number   | MAC Address  | Department             | Days Used | Date First Used | Date Last Used | % of Days in Use | Device Status |
| P A C U-001                        |                 | 0009ef012401 | Administration         | 30        | 11/1/2010       | 11/30/2010     | 100.00           | Active        |
| Devices Used by Owner: P A C U : 1 |                 |              |                        |           |                 |                |                  |               |
| Owner: P I C U                     |                 |              |                        |           |                 |                |                  |               |
| Label                              | Serial Number   | MAC Address  | Department             | Days Used | Date First Used | Date Last Used | % of Days in Use | Device Status |
| P I C U-001                        | A00983KE0800003 | 0009ef034104 | Cancer Center          | 20        | 11/1/2010       | 11/30/2010     | 66.67            | Active        |
| P I C U-002                        | A00983KE0800264 | 0009ef03434e | Radiology Department   | 10        | 11/1/2010       | 11/28/2010     | 33.33            | Active        |
| P I C U-003                        |                 | 001641f72ea  | Unit Management        | 30        | 11/1/2010       | 11/30/2010     | 100.00           | Active        |
| Devices Used by Owner: P I C U : 3 |                 |              |                        |           |                 |                |                  |               |

Figure 42: Device Inventory - Summary report

## Device Inventory - Detail Report

The Device Inventory - Detail report shows details about which devices each user in each department is using. Information is grouped by department, and within each department, by device MAC address.

vocera

Date Range:  
12/1/2010 - 12/10/2010

## Device Inventory Report - Detailed

Site: Global

NICU

| Label: NICU-001             |                   | MAC Address: 0009ef050f60 |              | Days Used: 2                   |
|-----------------------------|-------------------|---------------------------|--------------|--------------------------------|
| Serial Number: A24M07050F80 |                   | Last Status: Active       |              | Percentage of Days Used: 20.00 |
| Date                        | User              | Department                | Cost Centers | Last Location                  |
| 12/01/2010                  | Hays, Sarah       | NICU                      |              | 001a30c3cef5 NICU              |
| 12/03/2010                  | Gonzalez, Rogelio | NICU                      |              | 001a30c3cef5 NICU              |

| Label: NICU-002             |                  | MAC Address: 0009ef072322 |              | Days Used: 2                   |
|-----------------------------|------------------|---------------------------|--------------|--------------------------------|
| Serial Number: B2JN09072322 |                  | Last Status: Active       |              | Percentage of Days Used: 20.00 |
| Date                        | User             | Department                | Cost Centers | Last Location                  |
| 12/01/2010                  | Price, Loretta   | NICU                      |              | 001da174fc95 NICU              |
| 12/01/2010                  | Martins, Nancy   | NICU                      |              | 001da174fc95 NICU              |
| 12/03/2010                  | Guevara, Emile   | Transportation            |              | 001da174fc95 NICU              |
| 12/03/2010                  | Anderson, Jackie | TMS                       |              | 001da174fc95 NICU              |

Figure 43: Device Inventory - Detail report

## Device Usage Report

The Device Usage report shows which devices each user in each department is using. This report helps identify devices that have moved to a different department and devices that may not be working properly (based on short periods of use). You can also determine if devices have been returned after each shift.

The following figure shows a page from a Device Usage report:

vocera

Date Range:  
12/1/2010 - 12/3/2010

## Device Usage Report

Site: Global

Owner: Cancer Center

| Label                 | Serial Number   | MAC Address   | Device Status              |
|-----------------------|-----------------|---------------|----------------------------|
| Cancer-001            | X3FC0906E457    | 0009ef05e457  | Active                     |
| Date / Time Last Used | User            | Department    | Last Location              |
| 12/1/2010 12:55:29PM  | Deseo, Alegria  | Cancer Center | 001e4abe4f76 Cancer Center |
| 12/2/2010 4:55:56PM   | Boakye, Akinta  | Cancer Center | 001e4abe4f76 Cancer Center |
| 12/3/2010 12:55:29PM  | Everson, Sandra | Cancer Center | 001e4abe3d16 Cancer Center |
| Label                 | Serial Number   | MAC Address   | Device Status              |
| Cancer-003            | A00963BA0603513 | 0009ef0136dd  | Active                     |
| Date / Time Last Used | User            | Department    | Last Location              |
| 12/1/2010 1:06:20PM   | Wong, Yu        | Cancer Center | 001e4abe4f76 Cancer Center |
| 12/2/2010 4:49:14PM   | Gozsa, Peter    | Cancer Center | 001e4abe4f76 Cancer Center |
| 12/3/2010 1:06:20PM   | Grimes, Lauren  | Cancer Center | 001e4abe3d16 Cancer Center |

Total Devices with Owner: 2

Figure 44: Device Usage report

## Device Status Tracking Report

The Device Status Tracking report shows the device status changes that occurred for each device. You can track when each status change happened, and you can filter the report by different status types. This report helps identify which devices are currently Unregistered, Lost, In Repair, or RMA'ed. Information is grouped by device owner, changed device MAC Address, and changed date.

The following figure shows a page from a Device Status Tracking report.



vocera

Date Range:12/1/2010 - 12/2/2010

Device Status Tracking Report

Site: Global

Owner: Administration

Label: Admin-001

Status Changed To

Sent for Repair

Serial Number: A00983BK0502900

Date Changed

12/02/2010

MAC Address: 0009ef011519

Current Status: Sent for Repair

Total Devices for : 1

Owner: P A C U

Label: P A C U-001

Status Changed To

Active

Serial Number:

Date Changed

12/01/2010

MAC Address: 0009ef012401

Current Status: Active

Total Devices for : 1

Figure 45: Device Status Tracking report

## Asset Tracking Reports

Asset Tracking reports show which devices are being used, and by which users or departments. They can also help you find missing devices. To access Asset Tracking reports, click **Asset Tracking Reports** in the navigation bar.



**Note:** The Asset Tracking reports should only be used if your Vocera license does not include Device Management and you have integrated the Asset Tracking reports into internal applications and spreadsheets. Otherwise, use the Device reports instead.

## Badge Last Used Report

The Badge Last Used report, available from the Asset Tracking page, shows who last used the device and what access point or area they were last associated with.

The Badge Last Used report can help you find devices that have been placed into service with the Vocera server but are now lost or unaccounted for. In certain workplaces (for example, where groups of people work in shifts), devices are not assigned to specific individuals. Instead, they are stored with battery chargers, used by workers on a shift, and then returned when the shift is over.

If a device hasn't been used for more than five days, it is highlighted in red in the Days Since Last Used column.

The following figure shows a page from a Badge Last Used report:

vocera

Date Range:  
12/1/2010 - 12/12/2010

Badge Last Used Report

Site: Global

PICU

Cost Center: -

| Badge MAC    | Serial Number | User              | Date Badge Last Used | Days Since Last Used | Last Location        |
|--------------|---------------|-------------------|----------------------|----------------------|----------------------|
| 0009ef0741a2 | B2KA100741A2  | Friedman, Deborah | 12/10/2010 4:34:10PM | 2                    | 001e7a276ab6 Dietary |
| 0023a2b0690b |               | Ghaly, Maged      | 12/10/2010 4:15:06AM | 2                    | 0023045986e0         |

Total Badges Used by Department: 2

Pathology

Cost Center: -

| Badge MAC    | Serial Number   | User             | Date Badge Last Used  | Days Since Last Used | Last Location              |
|--------------|-----------------|------------------|-----------------------|----------------------|----------------------------|
| 0009ef0215c3 | A00983FA0703566 | Anday, Mindy     | 12/10/2010 4:51:25PM  | 2                    | 001da174b805 P A C U       |
| 0009ef0341f2 | A00983KE0800258 | Mustacchio, Mark | 12/9/2010 9:47:12PM   | 3                    | 001e4abe4f76 Cancer Center |
| 0009ef05d57d | C3DB1005D57D    | Anday, Mindy     | 12/10/2010 4:03:22PM  | 2                    | 001da17587c5 I C U         |
| 0009ef063eba | C3EB10063EBA    | Bouquet, Abby    | 12/10/2010 12:12:00PM | 2                    | 001e13860905 I C U         |

Total Badges Used by Department: 4

Figure 46: Badge Last Used report

## Badge Usage Report

The Badge Usage report shows daily device usage. Information is sorted by device MAC address. Some groups like to have devices returned after each shift. The Badge Usage report available from the Asset Tracking page can help you determine if that is truly occurring.

The following figure shows a page from a Badge Usage report. In this example, devices are being shared.

Date Range:  
9/1/2011 - 9/10/2011

**vocera**

**Badge Usage Report**

**Site: Global**

|                              |                  |                      |                            |
|------------------------------|------------------|----------------------|----------------------------|
| MAC: 0009ef05d9bc            | SN: X3FC0905D9BC |                      |                            |
| <b>Date / Time Last Used</b> | <b>User</b>      | <b>Department</b>    | <b>Last Location</b>       |
| 9/8/2011 4:11:40PM           | Velez, Ray       | Emergency Department | 001e7a276ab6 Dietary       |
| 9/3/2011 4:57:42PM           | Bernard, Shenma  | Emergency Department | 001e7a276ab6 Dietary       |
| MAC: 0009ef05e457            | SN: X3FC0905E457 |                      |                            |
| <b>Date / Time Last Used</b> | <b>User</b>      | <b>Department</b>    | <b>Last Location</b>       |
| 9/4/2011 4:55:56PM           | Dedios, Gina     | Emergency Department | 001da174b805 P A C U       |
| 9/3/2011 6:30:05PM           | Galvan, Rossy    | Emergency Department | 001e4abe3d16 Cancer Center |
| MAC: 0009ef060922            | SN: B3FM08060922 |                      |                            |
| <b>Date / Time Last Used</b> | <b>User</b>      | <b>Department</b>    | <b>Last Location</b>       |
| 9/2/2011 12:59:28PM          | McEnrue, Jim     | Emergency Department | 001e7a276ab6 Emergency     |
| 9/9/2011 6:51:54PM           | Bernard, Shenma  | Emergency Department | 001e7a276ab6 Emergency     |
| MAC: 0009ef06ae3b            | SN: B3EE0906AE3B |                      |                            |
| <b>Date / Time Last Used</b> | <b>User</b>      | <b>Department</b>    | <b>Last Location</b>       |
| 9/6/2011 4:46:41PM           | Green, Quianna   | Emergency Department | 001da1759905 I C U         |
| MAC: 0009ef06bc72            | SN: B3HH0906BC72 |                      |                            |
| <b>Date / Time Last Used</b> | <b>User</b>      | <b>Department</b>    | <b>Last Location</b>       |
| 9/9/2011 6:30:01PM           | Go, Becky        | Emergency Department | 001da1749225 W O D C       |
| 9/10/2011 1:05:24PM          | Hasan, Nataliya  | Emergency Department | 001da17516a5 B I C U       |
| MAC: 0009ef0705c6            | SN: B2JK090705C6 |                      |                            |
| <b>Date / Time Last Used</b> | <b>User</b>      | <b>Department</b>    | <b>Last Location</b>       |
| 9/6/2011 5:14:19PM           | Bamhardt, Rory   | Emergency Department | 001e4abe4f76 Cancer Center |
| 9/5/2011 5:14:19PM           | Velez, Ray       | Emergency Department | 001e4abe4f76 Cancer Center |
| MAC: 0009ef0716e6            | SN: B2JM090716E6 |                      |                            |
| <b>Date / Time Last Used</b> | <b>User</b>      | <b>Department</b>    | <b>Last Location</b>       |
| 9/2/2011 9:23:35AM           | Velez, Ray       | Emergency Department | 001e4abe3d16 Cancer Center |

Figure 47: Badge Usage report

## Department Inventory - Summary and Detailed Reports

The Department Inventory - Summary report summarizes which devices each department is using. Information is grouped by department, and within each department, by device MAC address. The report gives information on the date the device was first used and the date the device was used last within the specified date range. To see who in that department is using the device, use the detailed version of the report.

The following figure shows the first page of the Department Inventory - Summary report.

Date Range:  
12/1/2010 - 12/10/2010

**vocera**

**Department Inventory Report - Summary**

**Site: Global**

**L and D+Unit Management**

| Badge Mac Address | Badge Serial Number | Days Used | Date First Used | Date Last Used |
|-------------------|---------------------|-----------|-----------------|----------------|
| 0009ef063eba      | C3EB10063EBA        | 1         | 12/9/2010       | 12/9/2010      |
| 0009ef065dec      | B0EB09065DEC        | 1         | 12/2/2010       | 12/2/2010      |
| 0009ef076921      |                     | 1         | 12/10/2010      | 12/10/2010     |

**Badges Used by Department: 3**

**N I C U**

| Badge Mac Address | Badge Serial Number | Days Used | Date First Used | Date Last Used |
|-------------------|---------------------|-----------|-----------------|----------------|
| 0009ef0246bc      |                     | 1         | 12/2/2010       | 12/2/2010      |
| 0009ef0507b9      | A1DK070507B9        | 1         | 12/6/2010       | 12/6/2010      |
| 0009ef050a17      |                     | 1         | 12/5/2010       | 12/5/2010      |
| 0009ef055bb8      | A2CD08055BB8        | 1         | 12/10/2010      | 12/10/2010     |
| 0009ef058286      | A2DF08058286        | 1         | 12/8/2010       | 12/8/2010      |
| 0009ef059b6e      | C3DB10059B6E        | 1         | 12/6/2010       | 12/6/2010      |
| 0009ef05e457      | X3FC0905E457        | 1         | 12/8/2010       | 12/8/2010      |
| 0009ef063eba      | C3EB10063EBA        | 1         | 12/7/2010       | 12/7/2010      |
| 0009ef0641f3      | B2EA090641F3        | 1         | 12/7/2010       | 12/7/2010      |
| 0009ef074301      | B2KA10074301        | 1         | 12/3/2010       | 12/3/2010      |
| 0009ef078801      | B2KC10078801        | 1         | 12/2/2010       | 12/2/2010      |
| 001570d36c10      |                     | 1         | 12/6/2010       | 12/6/2010      |
| 002180515768      |                     | 1         | 12/2/2010       | 12/2/2010      |
| 0023a2b068ba      |                     | 1         | 12/3/2010       | 12/3/2010      |
| 0023a2b06982      |                     | 1         | 12/8/2010       | 12/8/2010      |

**Badges Used by Department: 15**

Figure 48: Department Inventory - Summary report

The Department Inventory - Detail report shows details about which devices each user in each department is using. Information is grouped by department, and within each department, by device MAC address. This report may take time to generate if there are large numbers of records.

The following figure shows the a page from the Department Inventory - Detail report.

|  |                   |                                   |                             |                        |
|--|-------------------|-----------------------------------|-----------------------------|------------------------|
| v o c e r a                            |                   |                                   |                             | Date Range:            |
|  |                   |                                   |                             | 12/1/2010 - 12/10/2010 |
| Department Inventory Report - Detailed |                   |                                   |                             |                        |
| Site: Global                           |                   |                                   |                             |                        |
| L and D                                |                   |                                   |                             |                        |
| Badge Mac Address: 0009ef053321        |                   | Badge Serial Number: A2AA08053321 |                             | Days Used: 1           |
| Date                                   | User              | Cost Centers                      | Last Location               |                        |
| 12/3/2010                              | Martinez, Alan    |                                   | 001e7a276a45 Pharmacy       |                        |
| Badge Mac Address: 0009ef054289        |                   | Badge Serial Number: A2BB08054289 |                             | Days Used: 1           |
| Date                                   | User              | Cost Centers                      | Last Location               |                        |
| 12/6/2010                              | Agard, Jill       |                                   | 001e4abe4f76 Cancer Center  |                        |
| Badge Mac Address: 0009ef05459f        |                   | Badge Serial Number:              |                             | Days Used: 1           |
| Date                                   | User              | Cost Centers                      | Last Location               |                        |
| 12/8/2010                              | DeFilippis, Karen |                                   | 001e13860805 I C U          |                        |
| Badge Mac Address: 0009ef0546fc        |                   | Badge Serial Number:              |                             | Days Used: 1           |
| Date                                   | User              | Cost Centers                      | Last Location               |                        |
| 12/3/2010                              | Elias, Elnic      |                                   | 001d46fc5d36 Communications |                        |
| Badge Mac Address: 0009ef0641f3        |                   | Badge Serial Number: B2EA090641f3 |                             | Days Used: 1           |
| Date                                   | User              | Cost Centers                      | Last Location               |                        |
| 12/9/2010                              | Agard, Jill       |                                   | 001a30c3cef5 Classroom A    |                        |
| Badge Mac Address: 0009ef066005        |                   | Badge Serial Number: B0EB09066005 |                             | Days Used: 1           |
| Date                                   | User              | Cost Centers                      | Last Location               |                        |
| 12/6/2010                              | OBrian, Sarah     |                                   | 001e7a276b26 Emergency      |                        |

Figure 49: Department Inventory - Detail report

## Exporting Data Reports

The Export Data reports allow you to export Vocera Report Server data to a comma-separated values (CSV) file. To access Export Data reports, click **Export Data Reports** in the navigation bar. After you export report data to a comma-separated values (CSV) file, you can load the exported data into a spreadsheet, database manager, or other application for further processing.

To export data to a CSV file:

1. Click **Export Data Reports** to display the **Export Data** page.
2. Choose a report to export.
3. Click **Generate**.
4. Specify report parameters. See "Using Reports to Answer Questions" in the [Vocera Report Server Guide](#).
5. Click **Export Data**.
6. Specify whether you want to open the generated file immediately or save it to disk.

If the downloaded report is not shown by the Windows Explorer download manager, type CTRL J on the keyboard to reveal the downloaded report.

- If you choose to open the generated file immediately, it will be opened using the default application for CSV files, as defined for your computer.
- If you choose to save the file to disk, specify a destination for the file.

## Data - Outgoing Calls by Badge Users Report

The Data - Outgoing Calls by Badge Users report exports a CSV file containing records for calls placed by Vocera users. The following table describes the report columns.

Table 7: Data - Outgoing calls by Badge Users report

| Column          | Description  |
|-----------------|--|
| TxDateTime      | Date and time of the event, accurate to the second.  |
| CallerLastName  | The caller's last name.  |
| CallerFirstName | The caller's first name.   |
| CallerDepts     | The caller's department(s).  |
| CallerSite      | The caller's home site.  |
| CallerCostCtr   | The caller's cost center.  |
| Called          | User ID, group name, or phone number of the called party.                                  |
| CalledSite      | Site of the called party.  |
| Accepted        | Whether the call was accepted (Yes or No).   |
| AcceptedBy      | If the call was accepted, the user ID or phone number of the person who accepted the call. |
| AcceptedBySite  | Site of the person who accepted the call.  |
| DurationSecs    | Duration of the call in seconds.   |

### Data - Incoming Phone Calls Report

The Data - Incoming Phone Calls report exports a CSV file containing records for incoming phone calls. The following table describes the report columns.

Table 8: Data - Incoming Phone Calls Report

| Column         | Description  |
|----------------|--|
| DateTime       | Date and time of the event, accurate to the second.  |
| PhoneNo        | Outside phone number that placed the call.   |
| Called         | User ID, group name, or phone number of the called party.                                  |
| CalledType     | Type of called party. Example values: User, Group, Phone.                                  |
| CalledSite     | Site of the called party.  |
| Accepted       | Whether the call was accepted (Yes or No).   |
| AcceptedBy     | If the call was accepted, the user ID or phone number of the person who accepted the call. |
| AcceptedBySite | Site of the person who accepted the call.  |
| DurationSecs   | Duration of the call in seconds.   |

### Data - Recognition Results Report

The Data - Recognition Results report exports a CSV file containing records for recognition results for users. The following table describes the report columns.

Table 9: Data - Recognition Results report

| Column    | Description   |
|-----------|---|
| DateTime  | Date and time of the event, accurate to the second. |
| UserID    | Vocera user ID.                                     |
| FirstName | The user's first name.                              |

| Column       | Description  |
|--------------|--|
| LastName     | The user's last name.  |
| DeptName     | The user's department(s). If none, the value is "No Department Assigned".  |
| CostCenters  | The user's cost centers.   |
| SiteName     | The user's home site.  |
| BadgeMACAddr | MAC address of the user's device.  |
| APMACAddr    | MAC address of the access point.   |
| RecStatus    | Recognition status. Possible values are: Recognized, Rejected, NoSpeech, or SpeechTooEarly.  |
| Score        | Confidence score for the utterance. Values range from 0 to 100. The confidence score gives an indication of the reliability that the system attaches to its interpretation of the utterance. By default, any confidence score below 40 causes the speech to be rejected by the system, thus changing the score to 0. |
| Recognized   | The speech that was recognized by the Vocera system. Example values: WhereIs Randy Floren, Call Chris Long, Yes, and LogOut.   |

### Data - Inventory Report

The Data - Inventory report exports a CSV file containing device location records for use with inventory. It includes location information for a device even if no user is logged into the device when it pings the server. For such devices, the UserID for that moment is "\_\_NLI\_\_" and the LastName is "Not Logged In". The following table describes the report columns.

Table 10: Data - Inventory report

| Column       | Description  |
|--------------|--|
| DateTime     | Date and time of the event, accurate to the second.  |
| UserID       | Vocera user ID. If a user is not logged into a device when it pings the server, the UserID is "__NLI__" (for "Not Logged In"). |
| FirstName    | The user's first name.   |
| LastName     | The user's last name. If a user is not logged into a device when it pings the server, the LastName is "Not Logged In".         |
| DeptNames    | The user's department(s). If none, the value is "No Department Assigned".  |
| CostCenters  | The user's cost centers.   |
| SiteName     | The user's home site.  |
| BadgeMACAddr | MAC address of the user's device.  |
| APMACAddr    | MAC address of the access point.   |
| SerialNo     | Device serial number.  |
| LocationName | Location name associated with the access point.  |
| UIState      | Whether a device is in use (for example, on a call). Example values: Active, Standby.  |

### Data - Broadcasts Report

The Data - Broadcasts report exports a CSV file containing broadcast records. The following table describes the report columns.

Table 11: Data - Broadcasts report

| Column            | Description   |
|-------------------|---|
| DateTime          | Date and time of the event, accurate to the second.   |
| UserID            | The caller's Vocera user ID.  |
| FirstName         | The caller's first name.  |
| LastName          | The caller's last name.   |
| CallerDepartments | The caller's department(s). If none, the value is "No Department Assigned".   |
| CallerCostCenters | The caller's cost centers.  |
| CallerSite        | The caller's home site.   |
| GroupName         | Vocera group to which the broadcast was sent.   |
| GroupSite         | Vocera site associated with the group to which the broadcast was sent. In a single-site installation, this value is null. |
| Duration          | Duration of the broadcast in seconds.   |

### Data - Badge Last Used Report

The Data - Badge Last Used report exports a CSV file containing information about when devices were last used. It can help you find devices that have been placed into service with the Vocera server but are now lost or unaccounted for. The following table describes the report columns.

Table 12: Data - Badge Last Used report

| Column        | Description  |
|---------------|--|
| SiteName      | Vocera site where the device is located.   |
| Department    | Department of the user who last used the device.   |
| BadgeMACAddr  | MAC address of the device.   |
| SerialNo      | Device serial number.  |
| UserName      | User who last used the device.   |
| MaxDateTime   | Date and time the device was last used, accurate to the second.  |
| DaysSinceUsed | Number of days since the device was last used.   |
| LastLocation  | Location where the device was last used. Includes the MAC address of the access point and the name—if available—of the location. |
| CostCenters   | Cost centers of the user who last used the device.   |

### Data - Device Migration Report

The Data - Device Migration report exports a CSV file containing device information for the specified date range and site. The output conforms to the Vocera devices import template (although it has an additional field, User). The report allows you to migrate your device information into the Device Management solution provided by Version 4.4. After you create the report, fill in any empty fields (such as Label, Status, Owning Group, and Tracking Date), and then use the Administration Console to update the system data. For more information about importing and updating Vocera data, see the [Vocera Administration Guide](#) and the [Vocera Data-Loading Reference](#).

The following table describes the report columns:

Table 13: Data - Device Migration report

| Column       | Description  |
|--------------|--|
| BadgeMACAddr | Media Access Control address (MAC address) is a hardware address that acts like a unique name for the device. The MAC address is 12 characters long. Most Vocera device MAC addresses have the following prefix: 0009ef.<br>For B3000 and B2000 devices, this field is optional because the MAC address can be derived from the serial number; the last 6 characters of the MAC address and the serial number are identical.<br>For B1000A devices, this field is required; the MAC address and serial number are unrelated for B1000A badges. |
| SerialNo     | Serial number of the device. This field is required. You cannot add a device without the serial number.<br>For B3000 and B2000 badges, the serial number is 12 characters. For B1000A badges, the serial number is 15 characters.  |
| Label        | A label that identifies the device. The label must be unique; it cannot be used by another device.   |
| Status       | The device status. The value must match one of the existing device status values.  |
| TrackingDate | The date used to track the device, for example, the date it was sent for repair or RMA'ed. The date string uses the following format:<br><br>United States and Canada: mm/dd/yyyy<br>Other locales: dd/mm/yyyy   |
| OwningGroup  | The group that owns the device. To qualify a group by specifying its site, use a colon to separate the value from the site name (GroupName:SiteName). If you do not specify a site, the Global site is assumed by default.   |
| Notes        | Provide further information about the device status, for example, "Badge stopped working after accidentally being immersed in water" or "Badge sent to IT to repair the battery latch."  |
| UserSiteName | The site of the user who last used the device.   |
| Shared       | Specify TRUE if the device is shared between multiple users. Otherwise, specify FALSE.   |
| UserName     | User who last used the device.   |

### Data - Device Last User Access Report

The Data - Device Last User Access report exports a CSV file containing device information for the last user to log in to a device. It can be configured to show all devices that have accessed the Vocera system, devices where users have not logged in for several days (lost devices), and devices that users have logged in for the first time ever (unregistered devices) or for the first time in a long time (lost devices that have been found). The following table describes the report columns.

Table 14: Data - Device Last User Access report

| Column      | Description  |
|-------------|--|
| SiteName    | Vocera site where the device is located.   |
| Owner       | The group that owns the device.  |
| Label       | A label that identifies the device. The label must be unique; it cannot be used by another device.   |
| MAC Address | Media Access Control address (MAC address) is a hardware address that acts like a unique name for the device. The MAC address is 12 characters long. Most Vocera device MAC addresses have the following prefix: 0009ef. |



| Column                | Description  |
|-----------------------|--|
| Device Status         | The device status. The value must match one of the existing device status values.  |
| Days Since Last Used  | The number of days since the device was last used.   |
| Date Device Last Used | The date on which the device was last used.  |
| Location              | Location where the device was last used. Includes the MAC address of the access point and the name—if available—of the location. |
| User                  | User who last used the device.   |
| Department            | The user's departments. If a user belongs to multiple departments, they are separated by a plus sign (+).                        |

### Data - Device Last Network Access Report

The Data - Device Last Network Access report exports a CSV file containing device information for the specified date range, site, device type, owning entity, and device status. The report helps you find devices that have been placed into service with the Vocera server but are now lost or unaccounted for. It is similar to the Badge Last Used report, but it allows you to filter on more fields. The following table describes the report columns.

Table 15: Data - Device Last Network Access report

| Column                | Description   |
|-----------------------|---|
| Site                  | Vocera site where the device is located.  |
| Label                 | A label that identifies the device. The label must be unique; it cannot be used by another device.  |
| MAC Address           | Media Access Control address (MAC address) is a hardware address that acts like a unique name for the device. The MAC address is 12 characters long. Most Vocera device MAC addresses have the following prefix: 0009ef.            |
| Serial Number         | Serial number of the device. This field is required. You cannot add a device without the serial number.<br>For B3000 and B2000 devices, the serial number is 12 characters. For B1000A devices, the serial number is 15 characters. |
| Device Status         | The device status. The value must match one of the existing device status values.   |
| Owning                | The group that owns the device.   |
| User                  | User who last used the device.  |
| Departments           | The user's departments. If a user belongs to multiple departments, they are separated by a plus sign (+).   |
| Date Device Last Used | The date on which the device was last used.   |
| Days Since Last Used  | The number of days since the device was last used.  |
| Location Last Used    | Location where the device was last used. Includes the MAC address of the access point and the name—if available—of the location.  |
| Notes                 | Note providing further information about the device status, for example, "Badge stopped working after accidentally being immersed in water" or "Badge sent to IT to repair the battery latch."                                      |
| Cost Center           | Cost centers of the user who last used the device.  |

### Scheduler Diagnostics Reports

Scheduler Diagnostics Reports help administrators determine why a scheduled system task failed to run. To access Scheduler Diagnostics reports, click **Scheduler Diagnostics** in the navigation bar.



### **Task Scheduler Diagnostics - Standard Report**

The Task Scheduler Diagnostics - Standard report shows the list of exceptions that occurred during the Task Scheduler execution process. Exceptions are listed in reverse chronological order.

### **Task Scheduler Diagnostics - Filter Report**

The report Task Scheduler Diagnostics - Filter Report shows the list of exceptions that occurred during the Task Scheduler execution process. You can filter the report by date range and exception category. Exceptions are listed in reverse chronological order.

## Custom Reports

---

You can customize Vocera Report Server by designing your own reports using Crystal Reports, and then add them to the Report Console. To access custom reports, click **Custom Reports** in the navigation bar. For more information on how to create custom reports, see the [Vocera Report Server Database Schema](#).

---

### Sample Custom Report- Badge Firmware

This report shows data related to the Vocera firmware and client device.

The available data shows the following for the total number of badges, the total number of badges for each site, and the total number of badges by department and includes the following:

- Firmware Version
- Badge Mac Address
- Serial Number
- User
- Date the badge was last used
- Days since the badge was last used
- Location where the badge was last used



Last Used Date Range:  
3/27/2015 - 10/26/2016

## Badge Firmware Version

Site: Vocera

Order Admin

Firmware Version: 1032

| Badge MAC    | Serial Number | User               | Date Badge Last Used | Days Since Last Used | Last Location             |
|--------------|---------------|--------------------|----------------------|----------------------|---------------------------|
| 0009ef110b69 | F5BJ11110B69  | James, Antoine     | 9/1/2016 4:25PM      | 55                   | 40f4ec61ed34 Services     |
| 0009ef120324 | E4EE12120324  | Montiel, Josephine | 8/24/2016 9:32PM     | 63                   | b4148982bb45 Area 51 East |
| 0009ef13385f | G4BD1313385F  | Montiel, Josephine | 7/26/2016 7:22PM     | 92                   | 54781a657684 Staffing     |

Firmware Version: 1035

| Badge MAC    | Serial Number | User              | Date Badge Last Used | Days Since Last Used | Last Location              |
|--------------|---------------|-------------------|----------------------|----------------------|----------------------------|
| 0009ef1422e2 | G4EK131422E2  | Nicholson, Dennis | 4/14/2016 4:02PM     | 561                  | 64d98946aa7d IT Department |
| 0009ef1559a2 | G4EE141559A2  | Gomes, Carole     | 3/27/2015 10:50AM    | 579                  | 64d98946aa7d IT Department |

Firmware Version: 1055

| Badge MAC    | Serial Number | User              | Date Badge Last Used | Days Since Last Used | Last Location              |
|--------------|---------------|-------------------|----------------------|----------------------|----------------------------|
| 0009ef3008d4 | H5ZH143008D4  | Nicholson, Dennis | 9/1/2016 2:02PM      | 55                   | 6c504db8b52a Area 51 South |

Firmware Version: 1056

| Badge MAC    | Serial Number | User           | Date Badge Last Used | Days Since Last Used | Last Location             |
|--------------|---------------|----------------|----------------------|----------------------|---------------------------|
| 0009ef300743 | H5ZH14300743  | James, Antoine | 9/14/2016 4:16AM     | 42                   | b4148982bb4a Area 51 East |
| 0009ef300c53 | H4ZM14300C53  | Gomes, Carole  | 9/13/2016 5:06PM     | 43                   | 54781a65932a Order Admin  |

Firmware Version: 1079

| Badge MAC    | Serial Number | User            | Date Badge Last Used | Days Since Last Used | Last Location              |
|--------------|---------------|-----------------|----------------------|----------------------|----------------------------|
| 0009ef300841 | H5ZH14300841  | Soliman, Rosita | 7/26/2016 11:03AM    | 92                   | 6c504db8b52b Area 51 South |

10/26/2016

Vocera Communications Server  
Vocera Report Console 5.2 [Build 101]

Page 62 of 83

Figure 50: Sample Custom Report- Badge Firmware