

# Vocera Report Gallery Guide

Version 5.2.0



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# **Contents**

Report Gallery	5
Report Categories	5
Summary Reports	5
Simultaneous User Login Report	5
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	18
PBX Call Volume Trend Report	19
Unassigned APs Report	20
Call Reports	21
User Activity Report	21
Incoming Calls Reports	22
Outgoing Calls by User Reports (Summary and Detail)	24
Outgoing Calls Summary Report	26
Broadcasts Report	26
Speech Reports	27
Speech Recognition Results by User Detail Report	28
Speech Recognition Results by User Report	29
Speech Recognition Results by Access Point Report	30
Speech Recognition Results by Department Report	31
Speech Recognition Results by Device Report	31
Speech Recognition Distribution Chart	32
Speech Recognition Trend Report	33
Integration Reports	34
Integration Messages Group Activity, Ordered By Transaction ID	35
Integration Messages Group Activity, Ordered By ID	35
Integration Messages Group Activity, Ordered By Time	36
Integration Messages User Activity, Ordered By ID	37

Integration Messages User Activity, Ordered By Time	37
Device Reports	38
Device Last User Access Report	38
Device Last Network Access Report	39
Device Inventory - Summary Report	40
Device Inventory - Detail Report	40
Device Usage Report	41
Device Status Tracking Report	41
Asset Tracking Reports	42
Badge Last Used Report	42
Badge Usage Report	42
Department Inventory - Summary and Detailed Reports	43
Exporting Data Reports	44
Data - Outgoing Calls by Badge Users Report	44
Data - Incoming Phone Calls Report	45
Data - Recognition Results Report	45
Data - Inventory Report	46
Data - Broadcasts Report	46
Data - Badge Last Used Report	47
Data - Device Migration Report	47
Data - Device Last User Access Report	48
Data - Device Last Network Access Report	48
Scheduler Diagnostics Reports	49
Task Scheduler Diagnostics - Standard Report	49
Task Scheduler Diagnostics - Filter Report	49
Custom Reports	50



# **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
Summary Reports on page 5	Snapshots of system call volume and speech recognition rates.
Call Reports on page 21	Information about calls made and received by users, groups, and so on.
Speech Reports on page 27	Pinpoint equipment or users experiencing speech recognition problems.
Integration Reports on page 34	Information about external systems that send messages to Vocera devices.
Device Reports on page 38	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.
Asset Tracking Reports on page 42	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.
Exporting Data Reports on page 44	Export selected data to a comma-separated values (CSV) file.
Scheduler Diagnostics Reports on page 49	Assist administrators determine why a scheduled report package or a system task did not run successfully.
Custom Reports on page 50	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.



## Simultaneous User Login Report

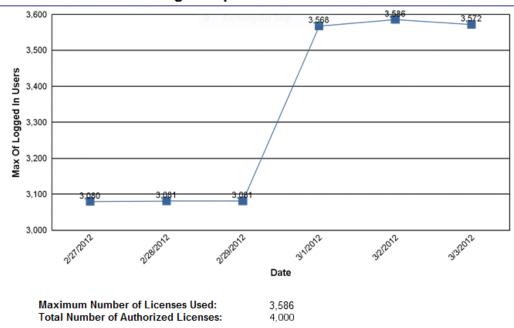


Figure 1: Simultaneous User Login report

#### **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**

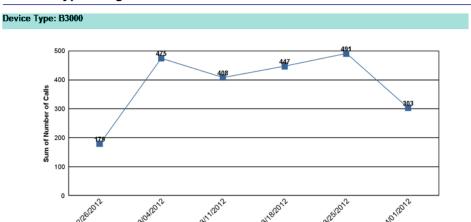


Figure 2: Device Type Usage report



**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.

Date Range: 11/29/2010 - 12/2/2010

# Users not using the Vocera Communications System

Site: Global			
C C U+I C U+Nursi	ng Administration		
UserID	First Name	Last Name	
LGrimes	Lauren	Grimes	
Total Inactive Users for De	epartment: 1		
C C U+Nursing Ad	ministration		
UserID	First Name	Last Name	
CCampos	Candice	Campos	
Ihargraves	Lizzie	Hargraves	
Total Inactive Users for De	epartment: 2		
CTICU			
UserID	First Name	Last Name	
memberton	Melisa	Emberton	
Total Inactive Users for De	epartment: 1		
C T I C U+Nursing	Administration		
UserID	First Name	Last Name	
MBurkhard	Marives	Burkhard	
IDalisay-Macavinta	Irene	Dalisay-Macavinta	

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.

Date Range: 9/1/2010 - 12/10/2010

## **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

OBGYN 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.

Date Range: 9/1/2010 - 12/10/2010

## Address Book Entries Not Called - By Site

Site: Global		
Address Book Entry	<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.

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

## **Group Usage Counts**

## Site: Global

# Department: PACU

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

# Department: PICU

	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.

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

# **Address Book Entry Usage Counts**

## Site: Global

	Times Used
CARDIAC SERVICES	5
CHILDRENS CANCER CENTER	4
ICU	4
A C T MAIN	3
CASE MANAGER OFFICE	3
CELLULAR THERAPY	3
ITN 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**

## System Usage By Hour

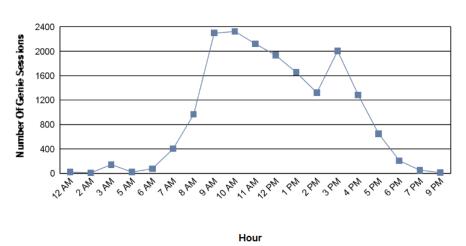


Figure 8: Hourly Usage Summary report

## **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

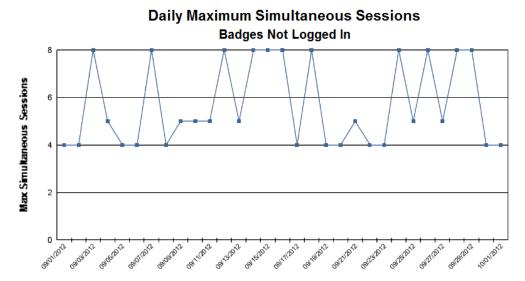


Figure 9: Genie Session Summary report

#### **Average Call Duration Statistics Report**

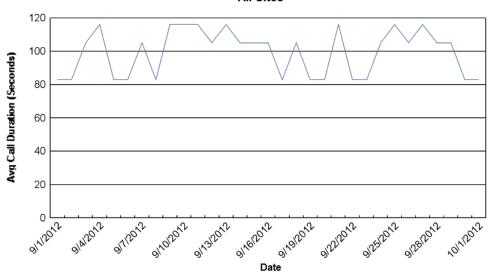
The Average Call Duration Statistics report summarizes the average duration of completed calls for the system in the selected time frame. The report also represents the information in a graph per site and for the overall system. The following figure shows a page from an Average Call Duration Statistics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

Average Call Duration Statistics report



# **Average Call Duration Statistics**

# Average Completed Call Duration All Sites



## **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

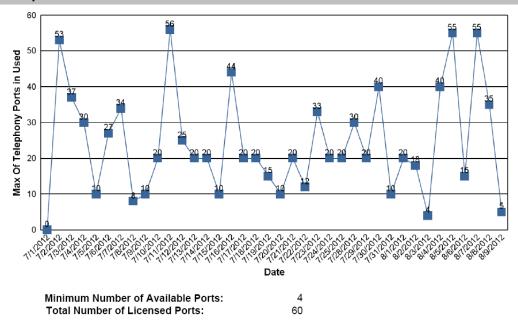


Figure 10: Telephony Usage Trend Report

## **Tiered Administration Audit Report**

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

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



# **Admin Console Audit Report**

Site: Gl	obal			
Emerge	ncy Department			
11/12/2010 Time 9:04:10AM	Modified By David Candelaria	Operation Update	Modified Entity Type User	Modified Entity Candelaria, David
	Modified By Jim McEnrue Jim McEnrue	Operation Login User Console Update	Modified Entity Type User User	Modified Entity McEnrue, Jim McEnrue, Jim
11:09:02AM	Modified By Shenma Bernard Shenma Bernard Shenma Bernard	Operation Login Admin Console Delete Update	Modified Entity Type User Location Location	Modified Entity Bernard, Shenma 4BaseTech Mike Kim - Home
	Modified By Lizabeth Defillippis Lizabeth Defillippis	Operation Login User Console Update	Modified Entity Type User User	Modified Entity Defillippis, Lizabeth Defillippis, Lizabeth
11/21/2010 Time 9:50:08AM 9:50:43AM 10:21:40AM	Ray Velez	Operation Update Update Send Text Message	Modified Entity Type User User User	Modified Entity Velez, Ray Velez, Ray 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.
Operation	The Operation column specifies the operation that changed the Vocera database. Here are some possible values:
	<ul> <li>Auto Restore—The Vocera system automatically restored data from the database.</li> <li>Backup—The database was backed up.</li> <li>Create—An entity was created.</li> <li>Delete—An entity was deleted.</li> <li>Login Admin Console—Someone logged in using the default administrator user name and password.</li> <li>Login Tiered Admin Console—Someone logged in using a user name and password that has administration rights.</li> <li>Login User Console—Someone logged into the Vocera User Console.</li> <li>Login VAI—Someone logged into a Vocera Administration Interface (VAI) client.</li> <li>Send Text Message—Someone sent a text message to another user's device.</li> <li>Update—One or more of an entity's property values changed.</li> <li>Update Conference Group—The list of members of a conference group was changed.</li> <li>Update System—One or more system property values changed.</li> </ul>

Column	Description
Modified Entity Type	The ModifiedEntityType column specifies the type of the entity that was changed. If no entity was changed, this value is empty. Possible values:
	<ul><li>AddrBook (address book entry)</li><li>Group</li><li>User</li></ul>
Modified Entity	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 N/A.

## **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.



Date Range: 11/1/2010 - 12/10/2010

## **Command Usage Summary**

Site: Global				
Case Management				
Command	Number of Ti	mes Used	Percentage of Total Commands	
Call		178	67.42	
PlayVMessages		27	10.23	
LogOut		15	5.68	
SendMessage		9	3.41	
Wherels		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	
WhereAml		1	0.38	
WhatTimeIsIt		1	0.38	
DeleteTMessages		1	0.38	
	Total:	264		
Total Commands for Site Globa	ıl:	264		
Total Commands:		264		

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

# Call Volume

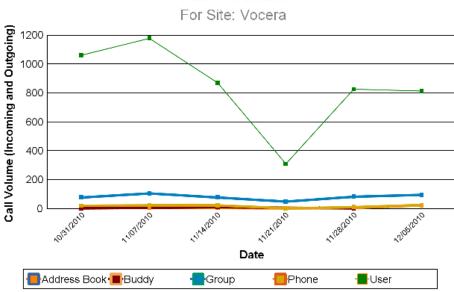


Figure 13: System Call Volume Trend report

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

#### **PBX Call Volume**

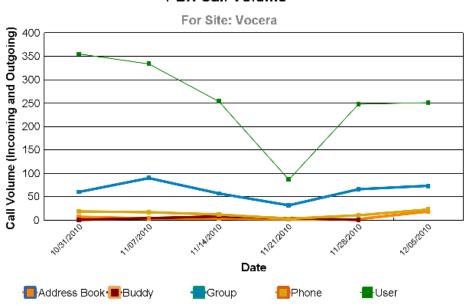


Figure 14: PBX Call Volume Trend report

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 18.

#### **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.

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.



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

#### User Activity Report 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 Called Mary Brady; Incomplete due to not online 00:00:00 09:39:35 AM 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 Called Erin Carroll; Accepted by Erin Carroll 09:42:26 AM 00:00:13 Missed call from Erin Carroll due to not answered/rejected 10:49:45 AM 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 00:00:00 answered/rejected 01:59:30 PM Left message for Rachel Holmes 00:00:10 02:09:22 PM Called Esperanza Sandell: Accepted by Esperanza 00:01:29 02:17:19 PM Accepted call from 4134 00:02:02 Called Erin Carroll; Incomplete due to not 02:45:02 PM 00:00:00 answered/rejected 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

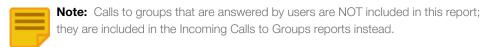
Figure 16: User Activity report

#### **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.



- 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.

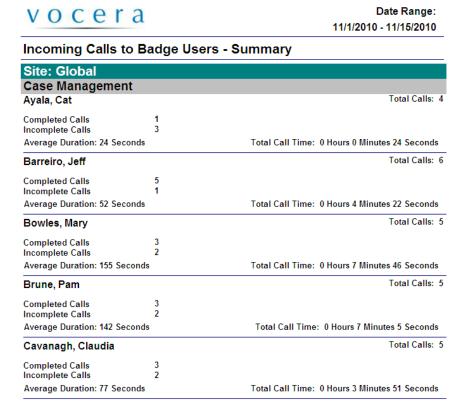


Figure 17: Incoming Calls to Users summary report

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.

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

#### Incoming Calls to Badge Users - Detailed

Site: Global			
Case Manageme	ent		
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 S	econds	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 11/9/2010 8:32:30AM	Genevieve Sakyi	Not online Not logged in	
Average Duration: 155	Betty Ditillo	•••	Hours 7 Minutes 46 Seconds
	Seconds	Total Call Time: 0	
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		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:

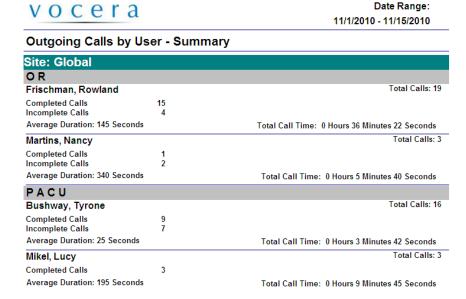


Figure 19: Outgoing Calls by User summary report

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

voce	Date Range: 1/1/2010 - 11/15/2010		
Outgoing Calls	by Users - Detai	led	
Site: Global			
Emergency Dep	artment		
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 S	econds	Total Call Time: 0 Hours	s 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 Hour	s 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.

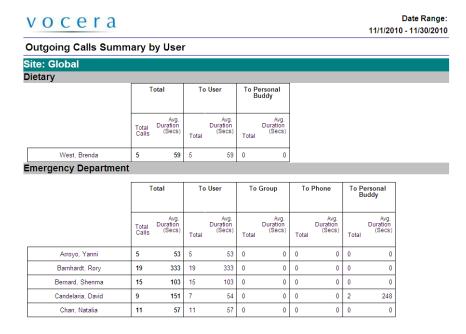


Figure 21: Outgoing Calls Summary Report

#### **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:

Date Range: 10/1/2010 - 10/31/2010

#### **Broadcasts to Groups** Site: Global Department: NICU NIC U Charge Nurse Duration (Secs) 10/13/2010 1:04:47PM 10/13/2010 2:02:48PM Ross, Kristine 10 33 Blake, Eliza Total Broadcasts: 2 Average Duration: 22 Seconds Department Total: 2 Department: O R O R 9 Scrub Nurse Date / Time Cost Centers Duration (Secs) 10/3/2010 10:43:38AM 10/3/2010 10:45:00AM 10/3/2010 12:18:47PM Diaz, Mia Garcia, Cesar Bandayrel, Julia Total Broadcasts: 3 Average Duration: 4 Seconds O R Nurse Manager Cost Centers 10/31/2010 10:16:10AM Anderson, Jackie Total Broadcasts: 1 Average Duration: 5 Seconds O R Operations Nurse Manager Date / Time Cost Centers Duration (Secs) 10/16/2010 10:43:38AM 10/16/2010 10:45:00AM 10/16/2010 12:18:47PM Blair, Danny Zellars, Naomi Hassan, Amanda 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
AP MAC Addr	This report field indicates the MAC address of the AP, for reports that show results by AP.
Department Name	The name of the department, for reports that show results by department.
No. of Total Users	The total number of devices users in the department, for reports that show results by department.
Active Users	The number of active users in the department, based on the report date range, for reports that show results by department.
User Name	The name of the user.
Speech - Recognized	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.
Speech - Rejected	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.
Speech - Others	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.
Speech - Attempts	The amount of communication attempts by the user on the indicated device. This total value includes:  Speech - Recognized Speech - Rejected Speech - Others
No Speech - Occurrences	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.
Total Attempts	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.

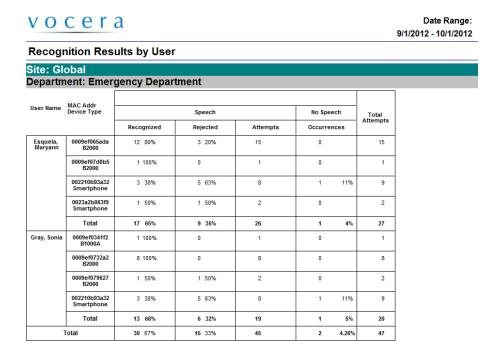


Figure 23: Speech Recognition Results by User Detail Report

#### 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.

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

#### Recognition Results by User

Site: Global Department: PICU

User Name	Speech			No Speech	Total
	Recognized	Rejected	Attempts	Occurrences	Attempts
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.

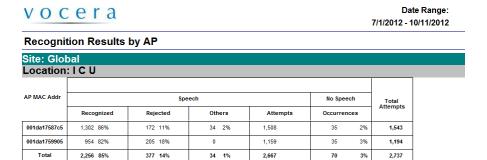


Figure 25: Speech Recognition Results by AP Report

#### **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.

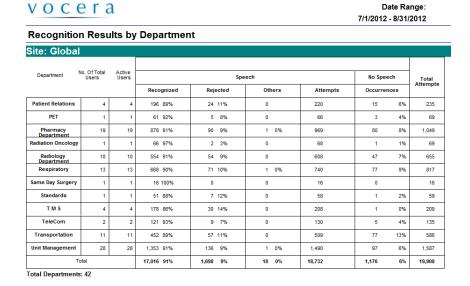


Figure 26: Speech Recognition Results by Department report

#### **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:

V O C	era	Date Range: 9/1/2012 - 10/1/2012							
Recognition Results by Device									
Site: Glob	al ergency Depa	rtmont							
Owner. Lin	lergency Depa	il dilicit			Τ				
MAC Addr Device Type		Speech No Sp							
Device Type	Recognized	Rejected	Attempts	Occurrences	Attempts				
0009ef0013f1 B1000A	8 100%	0	8	0	8				
0009ef0136dd B1000A	12 100%	0	12	0	12				
0009ef0246bc B1000A	153 100%	0	153	0	153				
0009ef034481 B1000A	16 46%	19 54%	35	0	35				
0009ef055bb8 B2000	322 95%	16 5%	338	0	338				
0009ef05c91d B2000	38 100%	0	38	0	38				
0009ef06b876 B2000	123 82%	27 18%	150	8 5%	158				
0009ef0732a2 B2000	64 100%	0	64	0	64				
001641f8116c B2000	132 71%	55 29%	187	0	187				
002210b939c6 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:

Date Range: 7/1/2012 - 10/10/2012

#### **Speech Recognition Distribution Chart**

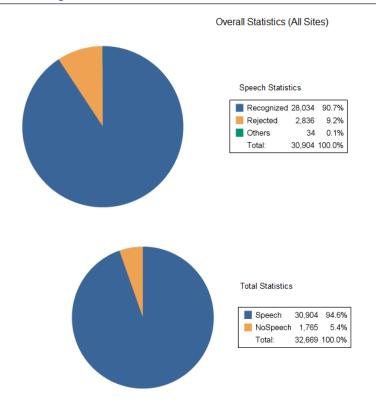


Figure 28: Speech Recognition Distribution chart

#### **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:

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

#### **Speech Recognition Trend**

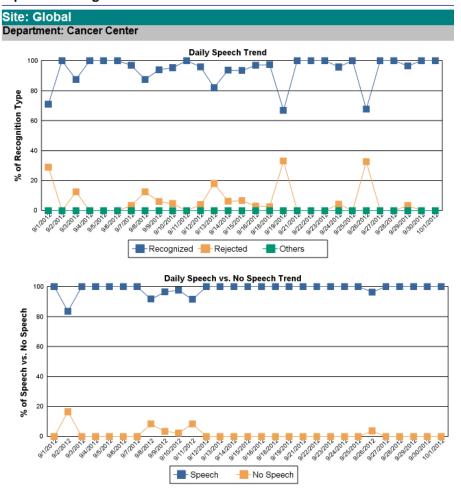


Figure 29: Speech Recognition Trend Report

## **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 included 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?* 

#### 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:

VOC	Date Range: 3/18/2013 - 3/18/2013				
ntegrati	on Messa	ge Activity, O	rdered By Trans	saction ID	
ite: Glob					
	nt: 4 West				
	VOCERAB	2B-366B-4F25-892	8-A50D63AE76483		
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	<u>Detail</u>
	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	
	00:00:40	3/18/2013 9:21:46AM	Cathy Jenkins	CallEnded	
5378	Urgent	3/18/2013 9:21:36AM	Room 4101 Assistant	Room 4101 Nurse Call	
	Elapsed Time	Date / Time	Mes sage Responder	<u>Status</u>	<u>Detail</u>
	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	
	00:00:35	3/18/2013 9:21:41AM	Brent James	Read/Enunciated	
N/A	00:00:31	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.

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



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

Integrati	on Messa	ges Group Act	ivity, Ordered E	By ID	
Site: Glob	oal				
Departme	ent: BICU				
Group: Roo	om 1206				
Client: Nurs	se Call				
Message ID	<u>Priority</u>	Date / Time	Message Destination	<u>Message</u>	
508124	Normal	5/8/2012 8:47:27AM	Room 1206	Room 1206 pillow	
	Elapsed Time	Date / Time	Message Responder	Status	Detail
	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	
	Elapsed Time	<u>Date / Time</u>	Message Responder	Status	<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	•
	Elapsed Time	Date / Time	Message Responder	<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	
	Elapsed Time	Date / Time	Message Responder	Status	<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.

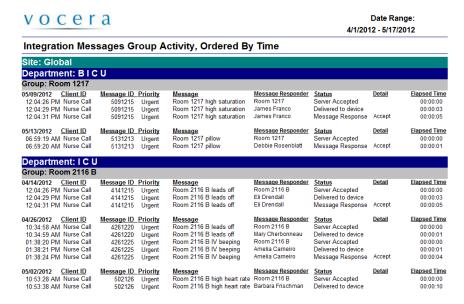


Figure 32: Integration Messages Group Activity, Ordered By Time report

## 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

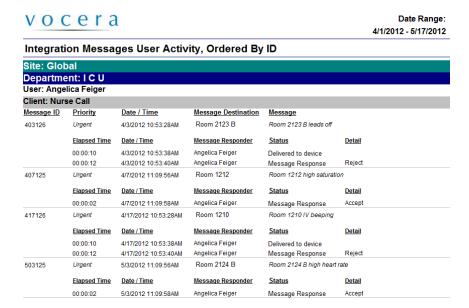


Figure 33: Integration Messages User Activity, Ordered By ID report

## **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: Glo	bal						
Departme	ent: BIC	U					
	ia Carneiro	_					
04/01/2012	Client ID	Message ID Priority	Message	Message Destination	Statue	Detail	Elapsed Time
10:53:38 AM		401126 Urgent	Room 2124 A IV beeping	Room 2124 A	Delivered to device	<del>DCtun</del>	00:00:10
10:53:40 AM		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 Destination	Status	Detail	Elapsed Time
08:47:29 AM		406124 Normal	Room 1211 bathroom assist	Room 1211	Delivered to device		00:00:02
08:47:30 AM		406124 Normal	Room 1211 bathroom assist	Room 1211	Read/Enunciated		00:00:03
08:47:32 AM		406124 Normal	Room 1211 bathroom assist	Room 1211	Message Response	Accept	00:00:05
01:38:21 PM		4061225 Urgent	Room 1211 IV beeping	Room 1211	Delivered to device		00:00:01
01:38:24 PM		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				<u>Detail</u>	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

## **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 5: 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:

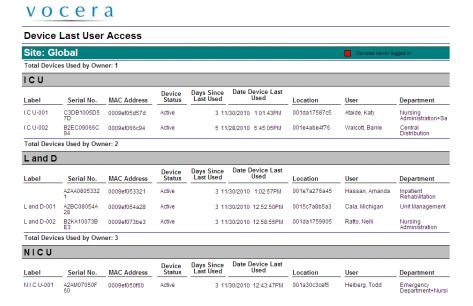


Figure 35: Device Last User Access report

#### **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.

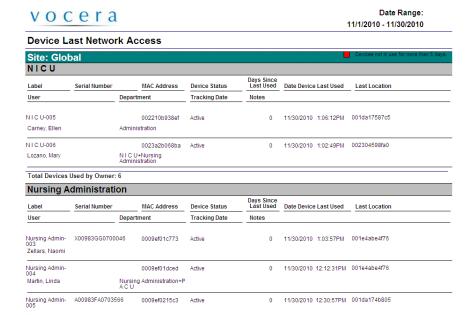


Figure 36: Device Last Network Access report

## **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.

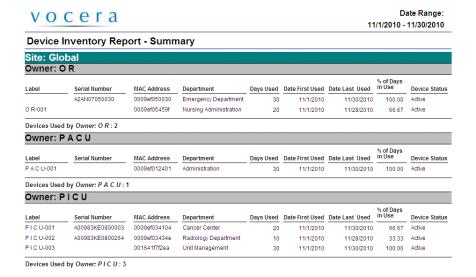


Figure 37: Device Inventory - Summary report

## **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.



Figure 38: 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:

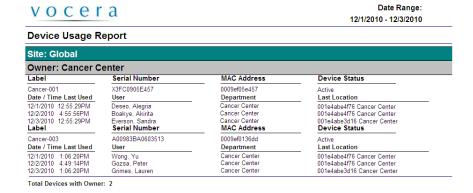


Figure 39: Device Usage report

#### **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.

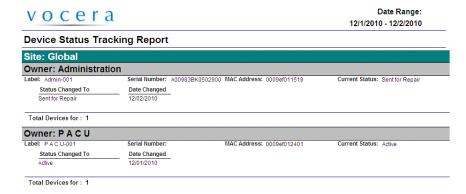


Figure 40: Device Status Tracking report

## **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:



Figure 41: 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.

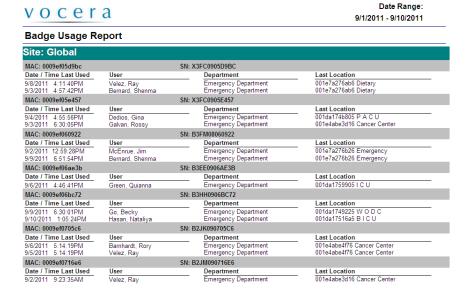


Figure 42: Badge Usage report

#### **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.

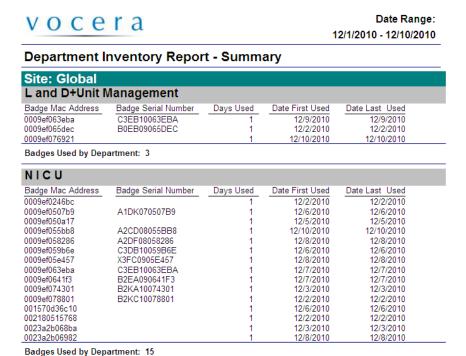


Figure 43: Department Inventory - Summary report

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.

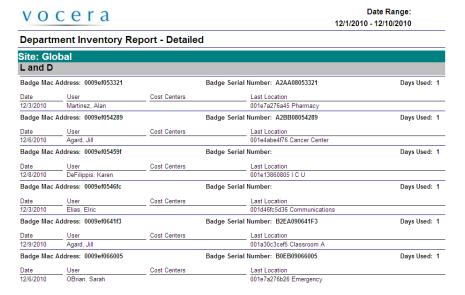


Figure 44: Department Inventory - Detail report

## **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.
- 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 CRTL 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 6: Data - Outgoing calls by Badge Users report

Column	Description
TxDateTime	Date and time of the event, accurate to the second.

Column	Description
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 7: 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 8: 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.
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.

Column	Description
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: Wherels 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 9: 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 10: 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.

Column	Description
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 11: 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 12: 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.  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.  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.  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.

Column	Description
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:
	United States and Canada: mm/dd/yyyy 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 ( <i>GroupName:SiteName</i> ). 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 13: 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.
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 14: 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.  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*.