

Managing Reports

Cisco Prime Infrastructure reporting is necessary to monitor the system and network health as well as troubleshoot problems. A number of reports can be generated to run on an immediate or a scheduled basis. Each report type has a number of user-defined criteria to aid in defining the reports. The reports can be formatted as a summary, tabular, or combined (tabular and graphical) layout. After they have been defined, the reports can be saved for future diagnostic use or scheduled to run on a regular basis.

Reports are saved in either CSV or PDF format and are either saved to a file on Prime Infrastructure for later download or emailed to a specific email address.

Reports include:

- Current—Provides a snapshot of data that is not time-dependent.
- Historical—Retrieves data from the device periodically and stores it in the Prime Infrastructure database.
- Trend—Generates a report using aggregated data. Data can be periodically collected from devices and a schedule can be established for report generation.

With Prime Infrastructure, you also have the ability to export any report that you can view, sort reports into logical groups, and archive for long-term storage.

The Reports menu provides access to all Prime Infrastructure reports as well as currently saved and scheduled reports. It includes:

- Report Launch Pad—The hub for all Prime Infrastructure reports. From this page, you can access specific types of reports and create new reports (see Managing Reports, page 22-2).
- Scheduled Run Results—Allows you to access and manage all currently scheduled runs in Prime Infrastructure, and to access and manage on-demand exports as well as emailed reports (see Managing Scheduled Run Results, page 22-3).
- Saved Report Templates—Allows you to access and manage all currently saved report templates in Prime Infrastructure (see Managing Saved Report Templates, page 22-4).

For information about the report field descriptions, see the *Cisco Prime Infrastructure 2.0 Reference Guide*.

Managing Reports

The Report Launch Pad provides access to all Prime Infrastructure reports from a single page. From this page, you can create and save new reports, view current reports, open specific types of reports, schedule a report to run later, and customize the results of a report.



To see more report details, rest your cursor over the tool tip next to the report type.

Creating, Scheduling, and Running a New Report

To create, schedule, and run a new report:

- Step 1 Choose Report > Report Launch Pad.
- **Step 2** Choose a category from the left sidebar menu to see the report types for each report category, check the check box for the appropriate report in the main area of the Report Launch Pad, then click **New**.
- Step 3 In the Report Details page, complete the fields as described in the Report Launch Pad > Report Type
 > New section in the *Cisco Prime Infrastructure 2.0 Reference Guide*. Parameters shown in the Report Details will vary with the report type. With some reports, you will need to customize the report results. See Customizing Report Results, page 22-3.
- **Step 4** If you plan to run this report later or as a recurring report, enter Schedule parameters as described in the **Report Launch Pad > Report Type > New** section in the *Cisco Prime Infrastructure 2.0 Reference Guide*.
- **Step 5** To run the report, choose one of the following options:
 - Run—Click to run the report without saving the report setup.
 - Save—Click to save this report setup without immediately running the report. If you have entered Schedule parameters, the report runs automatically at the scheduled date and time.
 - Run and Save—Click to save this report setup and run the report immediately.
 - Save and Export—Click to save the report, run it, and export the results to a file. You will be prompted to:
 - Select the exported report's file format (CSV or PDF).
 - Choose whether to send an email when the report has been generated. If you choose this option, you must enter the destination email address and the email subject line content, and choose whether you want the exported file included as an attachment to the email.

When you are finished, click OK.

- Save and Email—Click to save the report, run it, export the results as a file, and email the file. You will be prompted to:
 - Select the exported report file format
 - Enter the destination email address and the email subject line content

When you are finished, click OK.

• Cancel-Click to return to the previous page without running or saving this report.

If a report has been saved for a specific report type, you can access the current reports from the Report Launch Pad.

Note

You cannot change or update generated reports for all subdomains at the same time. You can open and change the reports individually through their respective subdomains. To update all reports, delete the reports created on subdomains and regenerate virtual domain reports with the changes.

Customizing Report Results

Many reports allow you to customize their results, so that you can include exclude different types of information. If the report you are creating permits this, it will display a **Customize** button. You can click this button to access the Create Custom Report page and customize the report results.

Customizing report results is sometimes required. For example, adding Flexible NetFlow (FNF) Extension parameters to the Traffic Analysis, Application, or Voice Video Data monitoring template makes those parameters part of your Prime Infrastructure monitoring setup. However, this does not mean that the collected FNF extension monitoring data will automatically appear in the corresponding Conversations reports for Core, Application Response Time (ART), and RTP performance. To ensure that FNF data is included in Conversations reports, you must add the FNF parameters to the "Data fields to include" column using the Create Custom Report page (see **Report Launch Pad > Report Type > New > Customize** section in *Cisco Prime Infrastructure 2.0 Reference Guide*).

To customize report results:

- **Step 1** Choose **Report > Report Launch Pad**.
- **Step 2** Click the Report Title link for the appropriate report.
- **Step 3** In the Report Details page, click **Customize**.
- **Step 4** On the Create Custom Report page, complete the required information, then click **Apply** to confirm the changes.



The changes made in the Create Custom Report page are not saved until you click **Save** in the Report Details page.

Managing Scheduled Run Results

To view all scheduled runs in Prime Infrastructure, choose **Report > Scheduled Run Results**.



The scheduled report tasks are not visible outside the Virtual Domain they run in. The results of the scheduled report tasks are visible in the Scheduled Run Results page of the respective domains.

The list of scheduled runs can be sorted by report category, report type, time frame, and report generation method. For information about the fields on this page, see the Scheduled Run Results section in the *Cisco Prime Infrastructure 2.0 Reference Guide*.

Managing Saved Report Templates

Saved report templates are available at Report > Saved Report Templates. From the Saved Report Templates page, you can create report templates and manage saved report templates. You can also enable, disable, delete, or run saved reports, and you can filter and sort report templates by category, type, and status. For information about the fields on the Saved Report Templates page, and about filtering saved report templates, see the *Cisco Prime Infrastructure 2.0 Reference Guide*.

The Saved Report Templates page displays the following information:

• Report Title—Identifies the user-assigned report name.



e Click the report title to view the details for this report.

- Report Type—Identifies the specific report type.
- Scheduled—Indicates whether this report is enabled or disabled.
- Virtual Domain—Identifies the name of the virtual domain under which this report is scheduled.
- Run Now—Click the Run icon to immediately run the current report.



When you run any domain based report for a sub virtual domain, the report displays all of the device attributes that are mapped to the virtual domain where you are currently logged-in.

Prime Infrastructure Reports

Autonomous AP Reports

The following table describes the various Autonomous AP reports that you can generate in Prime Infrastructure.

Table 22-1 Autonomous AP Reports

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Autonomous AP Memory and CPU Utilization	This report displays the memory and CPU utilization trends of autonomous access points based on the filtering criteria specified during report generation. It could help in identifying unexpected behavior or issues with network performance.	No	No	Graphical	No
Autonomous AP Summary	This report displays the Autonomous AP summary.	Yes	No	Tabular	No

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Autonomous AP Tx Power and Channel	This report displays the channel plan assignment and transmits power level trends of devices based on the filtering criteria used when the report was generated. It can help identify unexpected behavior or issues with network performance.	No	Yes	Graphical	No
Autonomous AP Uptime	This report displays the Autonomous AP uptime.	Yes	No	Tabular	No
Autonomous AP Utilization	This report displays the utilization trends of Autonomous AP radios based on the filtering criteria used when the report was generated. It can help identify current network performance and capacity planning for future scalability needs.	No	No	Graphical	No
Busiest Autonomous APs	This report displays the Autonomous APs with the highest total usage (the sum of transmitting, receiving, and channel usage) on your wireless network.	Yes	No	Tabular	No

Table 22-1 Autonomous AP Reports (continued)

CleanAir Reports

The following table describes the various CleanAir reports that you can generate in Prime Infrastructure.

Table 22-2	CleanAir	Reports
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Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Air Quality vs Time	This report displays the air quality index distributions over a period of time for access points on your wireless networks.	Yes	No	Tabular	No
Security Risk Interferers	This report displays the security risk interferers on your wireless network.	Yes	No	Tabular	No
Worst Air Quality APs	This report displays the access points with the lowest air quality index.	Yes	No	Tabular	No
Worst Interferers	This report displays the worst interferers on your wireless network.	Yes	No	Tabular	No

Client Reports

Note

• When you create a virtual domain, the statistics collection for the virtual domain starts after its creation. Therefore, you do not get the hourly statistics for the previous hours (prior to the creation of the virtual domain) as you get the statistics for the ROOT-DOMAIN.

The following table describes the various Client reports that you can generate in Prime Infrastructure.

Table 22-3 Client Reports

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Busiest Clients	This report displays the busiest and least busy clients on the wireless network by throughput, utilization, and other statistics. You can sort this report by location, by band, or by other parameters.	Yes	No	Tabular	No
	Note Busiest Clients reports do <i>not</i> include autonomous clients.				
CCX Client Statistics	This report displays the 802.11 and security statistics for Cisco Compatible Extensions v5 clients or Cisco Compatible Extensions v6 clients depending upon the options you choose to run the report.	No	No	Tabular	No
	Note The CCX Client Statistics report does not contain client information from Cisco 5700 Series Wireless Controller and Cisco Catalyst 3850 Series Switches.				

Report	Descr	iption	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Client Count	This to active	rending report displays the total number of clients on your wireless network.	No	No	Graphical	No
	The C numbe throug geogra multip	lient Count report displays data on the ers of clients that connected to the network gh a specific device, in a specific aphical area, or through a specific or ole SSIDs.				
	Note	Client Count reports include clients connected to autonomous Cisco IOS access points.				
	Note	When you run the client count report for two different virtual subdomains under the root domain, the data reported might be the same even if the controllers assigned to the two virtual subdomains are different. This is because the report returns data for all of the controllers in the system. If you want to get a separate report for a virtual domain, run the report as a particular virtual domain user other than a root domain user.				
Client Session	This r period sessio clients given	eport provides client sessions for a given l of time. It displays the history of client ns, statistics, and the duration for which s are connected to an access point at any period of time.	Yes	No	Tabular	No

Table 22-3 Client Reports (continued)

Table 22-3	Client Reports (continued)
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Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Client Summary	The Client Summary is a detailed report that displays various client statistics.	Yes	Yes	Various	Yes
	When Prime Infrastructure does not receive client traps, it relies on client status polling to discover client associations (the task runs every 5 minutes by default). However, Prime Infrastructure cannot accurately determine when the client was actually associated. Prime Infrastructure assumes the association started at the polling time, which might be later than the actual association time. Therefore, the calculation of the average client throughput can give inaccurate results, especially for short client sessions.				
	Note Prime Infrastructure counts only authenticated sessions. If a user fails on DHCP or authentication, Prime Infrastructure might not have a session for it. Also, Prime Infrastructure considers every detected AP association as a session. For instance, if a client roams from one access point to another, Prime Infrastructure can have two association sessions.				
Client Traffic	This report displays the traffic by the wireless clients on your network.	No	No	Graphical	No
Client Traffic Stream Metrics	 This report displays Traffic Stream Metrics for clients. You can select from the following: All clients of a given set of SSIDs All clients One specific client 	Yes	No	Tabular ¹	No
	Note The traffic stream metrics and radio performance background tasks must be running prior to generating this report.				
Dormant Clients	This report displays the details of the clients that are disassociated for a specified duration.	No	No	Tabular	No
Mobility Client Summary	This trending report displays the total number of active clients in your wireless network.	No	No	Graphical	No
Posture Status Count	This trending report displays the failed or succeeded client posture status count on your network.	No	No	Graphical	No

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Throughput	This report displays the ongoing bandwidth used by the wireless clients on your network.	No	No	Tabular	No
	Note The Throughput report does not include wired clients or clients connected to autonomous Cisco IOS access points.				
Unique Client Summary	This is a detailed report that displays the summary of all unique client statistics. The report can be filtered by client user, traffic, protocol, and vendor.	Yes	Yes	Tabular	No
Unique Clients	This report displays all unique clients by the time, protocol, and controller filters that you select. A unique client is determined by the MAC address of the client device. These clients are sorted by controller in this report.	Yes	No	Tabular	No
	Note The Unique Client report covers any client that started or ended a connection during the time period that you specified when you scheduled the report.				

Table 22-3Client Reports (continued)

1. The Subreport Client Summary view is tabular only. Other subreports, such as Client Summary by Protocol, support tabular, and graphical report views are customizable to show either or both.

Compliance Reports

The Configuration Audit report displays the differences between Prime Infrastructure and its controllers. The PCI DSS Compliance report summarizes your Wireless LAN Security components with reference to the Payment Card Industry (PCI) Data Security Standard (DSS) requirements. PCI DSS compliance is required for all merchants and service providers that store, process, or transmit cardholder data. You can find PCI DSS standards at the PCI Security Standards Council website.

The following table describes the various Compliance reports that you can generate in Prime Infrastructure.

Table 22-4Compliance Reports

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Change Audit Report	This report displays the change audit data such as the inventory and configuration changes of a device.	No	No	Tabular	No

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Network Discrepancy	This report displays discrepancies such as inconsistencies, anomalies, or misconfigurations in your network.	Yes	No	Tabular	No
	Note The network discrepancies are computed using database queries. So, if there is any increase in the device count, the performance of this report is impacted. Always use scheduled option to run this report.				
PCI DSS Detailed	This report displays, in detail, the PCI Data Security Standard (DSS) Version 2.0 requirements that are relevant to your wireless network security.	Yes	No	Tabular	No
PCI DSS Summary	This report displays the summarized PCI DSS Version 2.0 requirements that are relevant to your wireless network security.	No	No	Graphical	No
Wireless Configuration Audit	This report displays the configuration differences between Prime Infrastructure and its controllers. You must configure audit mode in the Administration > Settings page. In audit mode, you can perform an audit based on templates or the stored configuration. The report shows the last time an audit was performed using the Configuration Sync background task.	Yes	No	Tabular	No
PSIRT Detailed ¹	This report is generated for devices in the network to check the Cisco Security Advisory Compliance against the customer network.	No	No	Tabular	No
PSIRT Summary ¹	This reports displays a summary of Software versions in the network affected by the posted Cisco Product Security Notices.	No	No	Tabular	No

Table 22-4 Compliance Reports (continued)

1. You must enable the compliance service, restart the server, and synchronize inventory to view and generate the PSIRT reports. For more information about enabling the compliance service, see the *Configuring Server Settings* section in the *Cisco Prime Infrastructure 2.0 Administrator Guide*.

Device Reports

The following table describes the various device reports that you can generate in Prime Infrastructure.

Table 22-5Device Reports

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
AP Ethernet Port Utilization	This report displays the Tx and Rx utilization of AP Ethernet ports.	No	No	Tabular	No
AP Image Pre-download	This report displays scheduled download software task status.	Yes	Yes	Tabular	Yes
AP Profile Status	This report displays access point load, noise, interference, and coverage profile status.	Yes	No	Tabular	No
AP Radio Downtime Summary	This report shows the time since the radio was down for all of the APs that are managed by Prime Infrastructure.	No	No	Tabular	No
AP Summary	This report displays a list of access points that are broadcasting SSID(s). This report allows you to filter devices by RF group name, mobility group name, access point group name, SSID, location, and other statistics.	Yes	Yes	Tabular	Yes
	Note This report, by default, displays a list of access points that are broadcasting one or more SSIDs; the All SSIDs filter is chosen by default. Access points that are not broadcasting an SSID are not displayed.				
	Note The AP Summary report does not include Autonomous access points. For Autonomous access points, you need to run an Autonomous AP Summary report.				
Busiest APs	This report displays the access points with the highest total usage (transmitting, receiving, and channel utilization) on your wireless network.	Yes	No	Tabular	No
CPU Utilization	This report displays CPU utilization switch usage on your network.	No	No	Graphical	No
Classmap QOS Statistics	This report displays the Quality of Service (QoS) statistics for the classmap in your network.	Yes	No	Tabular	Yes
Detailed Hardware	This report displays detailed information about the hardware in your network.	No	Yes	Tabular	Yes
Detailed Software	This report displays detailed information about the software in your network.	No	Yes	Tabular	Yes
Device Credential Verification	This report displays the credential status of the devices in your network.	Yes	No	Tabular	Yes
Device Health	This report displays composite details of device health in your network.	Yes	Yes	Tabular	Yes

Report	Descrip	tion	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Dmvpn Reports	This re in your	port displays Dmvpn data for the devices network.	Yes	No	Tabular	Yes
GET VPN Network Status	This re devices	port displays the VPN status of the in your network.	Yes	No	Tabular	Yes
Identity Capability	This report displays the identity capability N summary for the switches in your network.		No	No	Various	No
Interface Availability	This re or lowe	port displays the interfaces with highest st availability of devices in your network.	Yes	Yes	Tabular	Yes
	Note	You must create and deploy an Interface Health template to see this report. See Example: Creating Health Monitoring Templates, page 8-13 for more information.				
Interface Capacity	This re utilizat	port displays the percentage of interface ion by the devices in your network.	No	No	Tabular	No
Interface Utilization	This re or lowe your ne	port displays the interfaces with highest st Rx/Tx utilization by the devices in twork.	Yes	Yes	Tabular	Yes
Inventory	This re invento access Infrastr hardwa distribu statistic	port allows you to generate ry-related information for controllers, points, and MSEs managed by Prime ucture. This information includes re type and distribution, software tition, CDP information, and other cs.	Yes	Yes	Various ¹	Yes
	Note	Disassociated access points with values of null or " (double quote) for model and serial number are filtered out of AP Inventory reports.				
Memory Utilization	This re summa	port displays the memory utilization ry for the switches in your network.	No	No	Graphical	No
Non-Primary Controller APs	This rep connec	port displays the access points that are not ted to the configured primary controller.	Yes	No	Tabular	Yes
Top AP by Client Count	This re authent for accor report i ascendi	port displays associated and icated client count over selected duration ess points in your wireless network. This s sorted by associated client count in ng order.	Yes	No	Tabular	Yes
VLAN	This re switche	port displays the VLAN information for es in your network.	Yes	No	Tabular	Yes
Wired Detailed Device Inventory	This rep the wir	port displays inventory information about ed devices in your network.	Yes	Yes	Tabular	No

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Wired Device Availability	This report displays the wired devices with the highest availability in your network.	Yes	Yes	Tabular	Yes
Wired Module Detail	This report displays the detailed module information for wired devices in your network.	Yes	No	Tabular	Yes
Wired Port Attribute	This report displays port attribute information such as admin status, operational status, MAC address, and so on.	Yes	No	Tabular	Yes
Wired Up Time	This report displays the access point uptime, the LWAPP uptime, and the LWAPP join time.	Yes	No	Tabular	No
Wired Utilization	This report displays the controller, AP, and MSE usage on your wireless network. These statistics (such as CPU usage, memory usage, link utilization, and radio utilization) can help identify current network performance and help with capacity planning for future scalability needs.	No	No	Graphical	No
EOX Hardware Detailed ²	This report displays the End of Life/Support announcement dates for devices in the network.	No	No	Tabular	No
EOX Module Detailed ²	This report gives the End of Life/Support announcement dates for each module in the network.	No	No	Tabular	No
EOX Software Detailed ²	This report displays the End of Life/Support announcement dates for device software versions in the network.	No	No	Tabular	No
EOX Summary Report ²	This report displays a summary of the hardware, software, and module types that have End of Life/Support announcement dates and the number of such devices in the network.	No	Yes	Tabular	No
License by Device Type	This report displays the license information of the features configured on the devices in your network.	Yes	No	Tabular	Yes
License by License Type	This report displays the license count for each license type.	Yes	No	Tabular	Yes

Table 22-5Device Reports (continued)

1. The Combined inventory report now contains APs, Controllers, MSEs, Autonomous APs, and Switches. Reports that are filtered by model or version support both tabular and graphical views. These views are customizable with setting such as Count of Controllers by Model. Other reports, such as Controller Inventory, are tabular only.

2. You must enable the compliance service, restart the server, and synchronize inventory to view and generate the EOX reports. For more information about enabling the compliance service, see the *Configuring Server Settings* section in the *Cisco Prime Infrastructure 2.0 Administrator Guide*.

Guest Reports

The following table describes the various Guest reports that you can generate in Prime Infrastructure.

Table 22-6Guest Reports

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Guest Accounts Status	This report displays guest account status changes in chronological order. The report filters guest accounts by the guest user who created them. One example of a status change is Scheduled to Active to Expired.	Yes	No	Tabular	No
Guest Association	This report displays the day and time that a guest client associated to and disassociated from a guest profile or SSID over a customizable period of time.	Yes	No	Tabular	No
Guest Count	This report displays the number of guest clients logged into the network per guest profile or SSID over a customizable period of time.	No	No	Tabular	No
Guest User Sessions	This report displays historical session data for a guest user. Data such as amount of data passed, login and logout times, guest IP address, and guest MAC address is available for one month by default. The data retention period can be configured from the Administration > Background Tasks page. This report can be generated for guest users who are associated to controllers running software Version 5.2 or later.	Yes	No	Tabular	No
NCS Guest Operations	This report displays all activities performed by one or all guests, such as creating, deleting, or updating guest user accounts. If a guest user is deleted from Prime Infrastructure, the report still shows an activity performed by the deleted guest user for up to one week after the activity occurred.	Yes	No	Tabular	No

MSE Analytics Reports

The following table describes the various Mobility Services Engine (MSE) Analytics reports that you can generate in Prime Infrastructure.

Table 22-7MSE Analytics Reports

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Client Location	This report displays location history of a wireless client detected by an MSE.	Yes	No	Tabular	No

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Client Location Density	This report displays a list of wireless clients and their locations detected by MSEs. If multiple MSEs are selected, this list is grouped by MSE in the selected sorting order.	Yes	No	Tabular	Yes
Guest Location Density	This report displays guest clients and their locations detected by the MSEs, based on your filtering criteria.	Yes	No	Tabular	No
Location Notifications by Zone	This report displays the location notifications generated by MSEs.	Yes	No	Tabular	No
Mobile MAC Statistics	Click Mobile MAC Statistics from the Report Launch Pad to open the Mobile MAC Statistics Reports page.	No	Yes	Tabular	No
Rogue AP Location Density	This report displays rogue access points and their locations detected by the MSEs, based on your filtering criteria.	Yes	No	Tabular	No
Rogue Client Location Density	This report displays rogue client access points and their locations detected by the MSEs, based on your filtering criteria.	Yes	No	Tabular	No
Service URI Statistics	Click Service URI Statistics from the Report Launch Pad to open the Service URI Statistics Reports page.	No	Yes	Tabular	No
Tag Location	This report displays location history of a tag detected by the MSEs, based on your filtering criteria.	Yes	No	Tabular	No
Tag Location Density	This report displays tags and their locations detected by the MSEs, based on your filtering criteria.	Yes	No	Tabular	No
Device Count by Zone	This report provides the number of devices detected by an MSE in the selected zone.	Yes	No	Tabular	Yes
Device Dwell Time by Zone	This report provides the dwell time for a device detected by an MSE.	Yes	No	Tabular	Yes

Table 22-7 MSE Analytics Reports (continued)

Mesh Reports

The following table describes the various Mesh reports that you can generate in Prime Infrastructure.

Table 22-8Mesh Reports

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Alternate Parent	This report displays the number of alternate parents with the same configured mesh group for each mesh access point. This report can be used to determine an access point's capability to handle failures in the mesh path.	Yes	No	Tabular	No
Link Stats	This report displays mesh link and node statistics such as parent access point, link SNR, packet error rate, parent changes, node hops, total transmit packets, mesh path, connected access points, mesh group, data rate, and channel. The mesh link and mesh node statistics can be run individually or combined.	Yes	No	Tabular	No
Nodes	This report displays mesh tree information for each mesh access point such as hop count, number of directly connected children, number of connected access points, and mesh path.	Yes	No	Tabular	No
Packet Stats	This report displays the total number of packets transmitted, packets transmitted per minute, packet queue average, packet dropped count, packets dropped per minute, and errors for packets transmitted by neighbor access points. A report type can be chosen for each data type.	No	No	Graphical	No
Stranded APs	This report displays access points that appear to be stranded. These access points might have joined a controller at one time and are no longer joined to a controller managed by Prime Infrastructure, or they might have never joined a controller managed by Prime Infrastructure.	No	No	Tabular	No
Worst Node Hops	This report displays the worst node hops or backhaul SNR links for the specified reporting period. The information is displayed in both table and graph form. Report types include worst node hops, worst SNR links for all neighbors, and worst SNR links for parent and children only.	Yes	Yes	Various	No

Network Summary Reports

The following table describes the various Network Summary reports that you can generate in Prime Infrastructure.

Table 22-9Network Summary Reports

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
802.11n Summary	This report displays a summary of 802.11n clients and client bandwidth usage at a specified period of time.	No	Yes	Graphical	No
Preferred Calls	This report displays the access points with preferred calls made on the wireless network.	No	No	Graphical	No
Wireless Network Executive Summary	This report displays a quick view of your wireless network.	No	Yes	Various	No

Performance Reports

The following table describes the various Performance reports that you can generate in Prime Infrastructure.

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
802.11 Counters	This report displays counters for access points at the MAC layer. Statistics such as error frames, fragment counts, RTS/CTS frame count, and retried frames are generated based on the filtering criteria and can help interpret performance (and problems, if any) at the MAC layer.	Yes	No	Both	Yes
AP RF Quality	This report displays the RF statistics for each radio over a period of time on your wireless network.	Yes	Yes	Tabular	Yes
AP RF Quality History	This report provides details of client count against RSSI and SNR for each radio over a period of time. You can use this report to analyze RF environment.	Yes	Yes	Tabular	Yes
Coverage Hole	This report identifies the location of potential coverage holes in your network and whether they occur more frequently at a given spot. This report can help you modify RRM settings or determine if additional access points are needed to provide coverage in sparsely deployed areas. It runs on the alarm table and shows both the alarm generation time, the cleared time (if cleared), and the state of the alarm (active or cleared).	Yes	No	Tabular	No

Table 22-10 Performance Reports

Table 22-10 Performance Reports (continue	ble 22-10 P	erformance	Reports	(continued
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Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Environmental Temperature	This report displays the environmental temperature data for devices in your network.	Yes	Yes	Tabular	Yes
Interface Errors and Discards	This report displays devices with errors and discards in your network.	Yes	No	Tabular	Yes
Threshold Violation	This report displays the threshold violation event data for your network.	Yes	No	Tabular	Yes
Video Statistics	This report helps you to analyze wireless network usage from a video perspective by providing details such as percentage of bandwidth used by video clients, video calls, roaming video calls, and rejected calls (per video) on your network. To gather useful data for this report, video clients must support Call Admission Control (CAC).	No	No	Graphical	No
VoIP Calls Graph	This report helps you to analyze wireless network usage from a voice perspective by providing details such as the number and duration of VoIP calls (per radio) on the network over time. To gather useful data from this report, VoIP snooping must be enabled on the WLAN. This report displays information in a graph.	No	No	Graphical	No
VoIP Calls Table	This report helps you to analyze wireless network usage from a voice perspective by providing details such as the number and duration of VoIP calls (per radio) on the network over time. To be able to gather useful data from this report, VoIP snooping must be enabled on the WLAN. This report displays information in a table.	No	No	Tabular	No
Voice Statistics	This report helps you to analyze wireless network usage from a voice perspective by providing details such as percentage of bandwidth used by voice clients, voice calls, roaming calls, and rejected calls (per radio) on the network. To gather useful data for this report, voice clients must support CAC.	No	No	Graphical	No
	Note Voice Statistics reports only apply to clients that support Call Admission Control (CAC) and have CAC enabled.				

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Wireless Network Utilization	 This report shows the overall network utilization based on the aggregated port utilization of all controllers in your network. These statistics can help identify current network performance and help with capacity planning for future scalability needs. Note Average utilization (%) is the percentage of utilization where utilization is calculated as ((Tx+Rx)/bandwidth). 	Yes	Yes	Both	Yes
Wireless Traffic Stream Metrics	This report can be useful in determining the current and historical QoS for given clients at the radio level. It also displays uplink and downlink statistics such as packet loss rate, average queuing delay, distribution of delayed packets, and roaming delays.	Yes	Yes	Both	Yes
Wireless Tx Power and Channel	This report displays the channel plan assignment and transmit power-level trends of devices based on the filtering criteria used when the report was generated. It helps to identify unexpected behavior or issues with network performance.	No	No	Graphical	No
Worst RF APs	This report displays the APs with the lowest average RSSI value in your wireless network over a period of time.	Yes	Yes	Tabular	Yes
Application Summary	This report displays the details of the application configuration.	No	Yes	Tabular	Yes
Conversations	This report displays conversation details.	Yes	Yes	Tabular	Yes
End User Summary	This report displays the average RTP packet loss per client.	No	Yes	Tabular	Yes
Site Summary	This report displays the top N clients, worst N clients, top N VLANS, and top N applications by site.	No	Yes	Both	Yes
Voice Video Summary	This report displays the voice call statistics summary.	Yes	Yes	Tabular	Yes
WAN Performance Analysis	This report displays the WAN application traffic volume trend.	No	Yes	Graphical	No
WAN Traffic Analysis Summary	This report displays the WAN application traffic details.	No	Yes	Tabular	Yes

Table 22-10 Performance Reports (continued)

Raw NetFlow Reports

The following table describes the various Raw NetFlow reports that you can generate in Prime Infrastructure.

Table 22-11Raw NetFlow Reports

Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
AVC Troubleshooting	This report displays the AVC traffic details.	Yes	No	Tabular	Yes
Netflow V1	This report displays the data for Netflow V1.	No	No	Graphical	No
Netflow V5	This report displays the data for Netflow V5.	No	No	Graphical	No
Netflow V7	This report displays the data for Netflow V7.	No	No	Graphical	No

Security Reports

The following table describes the various Security reports that you can generate in Prime Infrastructure.

Table 22-12	Security Reports
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Report	Description	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
Adaptive wIPS Alarm	This report displays wIPS alarms by selected MSEs, controllers, and access points for each alarm type.	Yes	No	Tabular	No
Adaptive wIPS Alarm Summary	This report displays a summary of all adaptive wIPS alarms on your network.	Yes	No	Both	No
Adaptive wIPS Top 10 APs	This report displays the top ten access points with the highest number of generated adaptive wIPS alarms.	Yes	No	Tabular	No
Adhoc Rogue Count Summary	This report displays a summarized count of all ad hoc rogue access points.	No	No	Both	No
Adhoc Rogues	This report displays details for all ad hoc rogue devices detected by your network access points, based on the time they were last seen.	Yes	No	Tabular	No
	Prime Infrastructure receives updates about ad hoc rogues from controllers by using traps or by polling. Last Seen Time is updated any time a trap for the ad hoc rogue is received or the ad hoc rogue is seen during the Prime Infrastructure polling cycle.				
	Note This report includes rogue access point alarms with clear severity.				
New Rogue AP Count Summary	This report displays a summarized count of all new rogue access points.	No	No	Both	No

Report	Descri	ption	Customizable?	Multiple Subreports?	Report Views	Data Field Sorting?
New Rogue APs	This report displays all rogues detected for the first time on your network within the selected time frame for this report. The value in the Created Time column indicates the time at which the rogue was first detected.		No	No	Graphical	No
	Note	This report includes rogue access point alarms with clear severity.				
Rogue AP Count Summary	This report displays a summarized count of all rogue access points on your network.		No	No	Both	No
Rogue AP Events	This report displays all rogue access point events received by Prime Infrastructure, based on event time. Any rogue-related trap received by Prime Infrastructure is logged as a rogue event in Prime Infrastructure. A new rogue access point event is created by Prime Infrastructure based on polled data when there is a newly detected rogue access point. In addition, an event is created by Prime Infrastructure when the user changes the state and classification of the rogue access point through the Prime Infrastructure user interface. Note One rogue can have multiple events. This report is based on the time stamp of		Yes	No	Tabular	Yes
Rogue APs	Prime Trom Cu from Cu The La for the the last This re access Seen T selecte access seen. Note	the event. Infrastructure gets updates about rogues ontrollers by using traps or by polling. Ist Seen Time is updated any time a trap rogue is received or rogue is seen during the Prime Infrastructure polling cycles. Is port displays all rogues detected by the points in your network based on the Last time of the rogue access points and the d filtering criteria. The report lists rogue points based on the time they were last The report includes rogue access point alarms with clear severity	Yes	No	Tabular	No
Security Alarm Trending Summary	This re trends	port displays a summary of security alarm over a period of time.	No	No	Graphical	No

Table 22-12Security Reports (continued)

