**USER GUIDE** 



# Entuity<sup>®</sup> 16.5 Entuity Reports Reference Manual

Entuity includes an extensive suite of reports aimed at different user groups, who have different requirements when managing the network. This reference manual provides a listing and description of reports shipped with Entuity, including configuration options.

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# **1** Reports Reference

Welcome to the Reports Reference Manual which details every report shipped with Entuity. Reports provide technical and business users with modern looking reports that are easy to configure, schedule, use and understand. You can interpret and leverage technical data that is captured and processed by Entuity.

The section on each report includes:

- An example report.
- A brief overview of the report's purpose.
- Report configuration options.
- Report content.

The Reports User Guide explains how use the reports, for example how to run reports, configure new ones, set schedules, save to different formats.

# Access the Reports Repository

To access reports:

1) From the menu bar click **Reports**.

8 er	ntuity										User: admin@entlonppvr Page Updated: 09:58:45,	n01 <u>[Loqout]</u> .GMT
Dashboards	InSight Center	Explorer	Events	Maps	Charts	Flows	Reports	Tools	Administration	Help		P
Repor	ts											
Report Ca	ategory	Desc	ription									
Activity Re	ports	Activ	ity Reports									
Administra	tive Reports	Repo	orts used fo	r adminis	trative pur	poses						
Availability	Reports	Repo	orts concerr	ing reacl	nability and	uptime						
Branch Off	ice Perspective	Bran	ch Office Pe	rspective	and relate	ed reports						
CIO Persp	ective	CIO	Perspective	and relat	ted reports	;						
Configurat	ion Reports	Repo	Reports covering device configuration									
Connectivi	ty and Routing	Repo	Reports concerning connectivity, topology and routing									
Dashboard	l Panels	Repo	orts intende	d for use	within cus	tom dashl	ooards					
Green Rep	orts	Repo	orts to aid G	ireen IT i	nitiatives							
Inventory	Reports	Repo	orts concerr	ing inver	tory and c	onnectivit	/					
Planning R	eports	Repo	orts to assis	t in plann	ing operat	ions						
Services R	eports	Servi	Services Reports									
User Defin	ed Reports	This	This folder is meant for user defined reports.									
Virtualizati	on Reports	Repo	orts concerr	ing virtua	alized infra	structure						
Flex Report	<u>ts</u>	View	saved Flex	Reports,	and acces	s the Flex	Builder					
Repor	t Builder So	cheduled Rej	ports									

Figure 1 Reports Home Page

# 2 Activity Reports

These reports allow you to monitor device and port activity, and port error rates.

# **Running Activity Reports**

You can run Activity reports from the web interface:

- 1) Click **Reports**. Entuity displays the Reports home page.
- 2) Click Activity Reports. Entuity displays the list of activity reports.

8) en	tuity										User: admin@entlonppvm01 [ Page Updated: 12:11:38, BST
Dashboards	InSight Center	Explorer	Events	Maps	Charts	Flows	Reports	Tools	Administration	Help	
Report	s										
reports > Act	tivity										
Report		Schedule	History	Descrip	tion						
Autonomous	s AP Summary	11	<u></u>	Summar	y of Autor	iomous W	ireless Acces	s Points			
<u>CPU Utilizati</u>	on Details	11	<u></u>	CPU utili	zation det	ails over n	nultiple time	rames			
CPU Utilizati	on Trend	11	<u> </u>	Regress	ion based	trend pre	diction for C	'U utilizati	on		
Device Healt	<u>th</u>	11	<u></u>	Ranking	of devices	based or	event histo	у			
Device Later	ncy	11	<u> </u>	Analysis	of ICMP ro	ound trip l	atency of ma	naged de	vices		
Event Detail	<u>ls</u>	11	<u></u>	Detailed	event his	tory for or	e device				
Event Histor	Υ	11	<u> </u>	Chronolo	ogically or	lered listir	ıg of individu	al events			
Event Summ	nary	11	<u></u>	Summar	y of real-t	ime event	s raised				
Flow Analysi	is Report	11	<u> </u>	Flow Ana	alysis Repo	ort based	on IFA API.				
IP SLA Detai	ils	11	<u></u>	Display o	of IP SLA o	peration i	esults				
IP SLA Echo		11	1	TopN IP	SLA Echo	measurer	nents by ma	RTT			
Managed Ho	ost Summary	11	<u></u>	Summar	y of serve	rs (manaç	ed hosts)				
Memory Util	ization Details	11	1	Memory	utilization	details ov	er multiple t	meframes			
Memory Util	ization Trend	11	<u> </u>	Regress	ion based	trend pre	diction for m	emory util	ization		
Port Discard Trend		1	Regression based trend prediction for port discards								
Port Discard	ls Details	11	<u> </u>	Port disc	ards deta	ils over m	ultiple timefr	ames			

Figure 2 Activity Reports

# **Event Classes in Activity Reports**

The Device Health and Event Details reports both group event types into event classes to provide a summary of the type of events raised against a managed object. For the:

- Device Health report you can filter and sort report content by Event Class.
- Event Details report you can filter report content by Event Class.

Event Class	Event Name
Port status	Port Link Down
	Port Link Up
	Port Unavailable to SNMP Poll
	Port Available to SNMP Poll
Port quality	Port Inbound Fault High (Packet Corruption)
	Port Inbound Fault High Cleared (No Packet Corruption)
	Port Outbound Fault High (Transmit Errors)
	Port Outbound Fault High Cleared (No Transmit Errors)
	Port Inbound Discards High (Device Congestion)
	Port Inbound Discards High Cleared (No Device Congestion)
	Port Outbound Discards High (Port Congestion)
	Port Outbound Discards High Cleared (No Port Congestion)
	Port Utilization High
	Port Utilization High Cleared
	Port Utilization Low
	Port Utilization Low Cleared
	Port Utilization Increased
	Port Utilization Decreased
Module status	Module Status OK
	Module Status 'Unknown'
	Module Minor Fault
	Module Major Fault
	Module Down
SNMP polling	SNMP Agent Not Responding
	SNMP Agent Responding
Reboot	Device Cold Reboot
	Device Warm Reboot
	Device Reboot Detected
Chassis/PSU	Chassis Fan OK
	Chassis Fan Status Unknown
	Chassis Fan Minor Fault
	Chassis Fan Major Fault
	Chassis Minor Alarm
	Chassis Minor Alarm Cleared

Table 1 Event Classes in Activity Reports

Event Class	Event Name
	Chassis Major Alarm
	Chassis Major Alarm Cleared
	Chassis Temperature Alarm
	Chassis Temperature Alarm Cleared
	Chassis Temperature Critical Alarm
Power Supply OK	Power Supply Minor Fault
	Power Supply Major Fault
	Power Supply Unknown Fault
Resources	High Processor Utilization
	High Processor Utilization Cleared
	Routing Low Processor Total Memory
	Routing Low Processor Total Memory Cleared
	Routing Low Processor Contiguous Memory
	Routing Low Processor Contiguous Memory Cleared
	Routing Low I/O Total Memory
	Routing Low I/O Total Memory Cleared
	Routing Low I/O Contiguous Memory
	Routing Low I/O Contiguous Memory Cleared
	Routing ICMP High TTL Exceeds
	Routing ICMP High TTL Exceeds Cleared
	Routing High No Routes To IP Destination
	Routing High No Routes To IP Destination Cleared
	Routing ICMP High Redirects
	Routing ICMP High Redirects Cleared
	Backplane System Bus High Utilization
	Backplane System Bus High Utilization Cleared
	Backplane Bus A High Utilization
	Backplane Bus A High Utilization Cleared
	Backplane Bus B High Utilization
	Backplane Bus B High Utilization Cleared
	Backplane Bus C High Utilization
	Backplane Bus C High Utilization Cleared
Outage	Network Outage
	Network Outage Cleared
Route peering	BGP Peer Not Established

Table 1 Event Classes in Activity Reports

Event Class	Event Name
	BGP Peer Established
	BGP Peer Disappeared
	BGP Peer Newly Discovered
	BGP Peer Briefly Not Established
	BGP Peer Briefly Established
	EIGRP Peer Disappeared
	EIGRP Peer Newly Discovered
	EIGRP Peer Briefly Not Established
	OSPF Peer Not Established
	OSPF Peer Established
	OSPF Peer Disappeared
	OSPF Peer Newly Discovered
	OSPF Peer Briefly Not Established

Table 1 Event Classes in Activity Reports

# Autonomous AP Summary Report



Figure 3 Autonomous AP Summary Report

### Autonomous AP Summary Report Overview

Entuity Wireless Autonomous Access Point Summary is useful for monitoring the activity of wireless access points, charting the utilization of your network and identifying where your current resource distribution should be amended to meet the current demands placed upon your infrastructure.

## Autonomous AP Summary Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description		
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.		
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.		
Please select a device	From the drop down list you can select one device, or <b>All Devices</b> , to run the report against.		
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>		
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.		

Table 2Autonomous AP Summary Report Options

## Autonomous AP Summary Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Routing Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Devices	The number of devices included to the report.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 3 Autonomous AP Summary Report Header

#### Autonomous AP Summary Report Details

This report includes a:

- Table listing the number of each AP model.
- Chart graphing total number of wireless connected hosts for each Entuity poll during the reporting period.

- Chart graphing wireless connected host density as measured by mean average and peak number of AP hosts during the reporting period.
- Table detailing each Autonomous AP.

Name	Description
sysName	Device system name or where not available the IP address.
Location	Location, or where not available it is left blank.
Manufacturer	Device manufacturer.
Serial Number	Device serial number.
Polling status	Status of Entuity SNMP polling of the device, i.e. Polling, Non-Polling.
System descr	System description, which for a Cisco device is a parsed sysDescr with model, version and serial number.
Mean AP Host Count	Mean average number of AP hosts during the reporting period.
Maximum Antenna Host Count	Maximum number of antenna hosts during the reporting period.
Maximum AP Host Count	Maximum number of AP hosts during the reporting period.
Anrenna Count	Number of antennas on the AP.

Table 4 Autonomous AP Summary

# **CPU Utilization Details**

#### Entuity Report CPU Utilization Details

View: My Network (admin)

Device: stack3750

Description: CPU utilization percentage details over multiple timeframes

8 entuity

Printed on: 25 Sep 2015 12:40:25 BST

Recent 8 hours @ 5min samples 100 50 0 06:00 07:00 10:00 12:00 05:00 08:00 09:00 11:00 — CPU utilization % Recent day @ 5min samples 100 50 0 14:00 16:00 18:00 20:00 22:00 00:00 02:00 04:00 06:00 08:00 10:00 12:00 — CPU utilization % Recent week @ hourly samples 100 50 0 19-Sep 20-Sep 21-Sep 22-Sep 23-Sep 24-Sep 25-Sep — CPU utilization % Recent month @ hourly samples 100 50 0 28-Aug 4-Sep 11-Sep 18-Sep 25-Sep — CPU utilization % Recent year @ daily samples 100 75 50 25 0 Nov-2014 Jan-2015 Mar-2015 May-2015 Jul-2015 Sep-2015 CPU utilization %



## **CPU Utilization Details Report Overview**

This report provides five charts showing CPU utilization for the specified device.

## **CPU Utilization Details Report Options**

Completing the Report Options allows you to select the device against which you want to run the CPU Utilization Details report.

Name	Description
Used saved values	Select from saved report configurations.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.

Table 5 CPU Utilization Details Report Options

#### **CPU Utilization Details Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. CPU Utilization Chart.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	View against which the report is run.
Device	Device against which the report is run.

Table 6 CPU Utilization Details Report Header

#### **CPU Utilization Report Details**

This report provides charts showing CPU utilization for the specified device over five different reporting periods. These report periods start from when the report is run, and are specifically over the previous:

- eight hours, charting the polled five minute data samples
- twenty-four hours, charting the polled five minute data samples
- seven days, charting hourly rolled up data samples
- thirty days, charting hourly rolled up data samples
- year, charting daily rolled up data samples.

# **CPU Utilization Trend Report**



Figure 5 CPU Utilization Trend Report

#### **CPU Utilization Trend Report Overview**

This report graphs predictions for the next six months of CPU utilization. Predictions are derived from applying regression analysis to the device's historical CPU utilization data, by default for the last eight weeks, although you can configure it.

This report can be called:

- By clicking Reports > Activity Reports and then clicking CPU Utilization Details report. You must then complete the report options to set the device against which you want to run the report.
- From the Device CPU Capacity Planning Trend report by clicking on a device in that report. Entuity runs the CPU Utilization Details report using that device and the trend report Report Options.

# **CPU Utilization Trend Report Options**

Completing the Report Options allows you to select the device against which you want to run the CPU Utilization Trend report.

Name	Description
Used saved values	Select from saved report configurations.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.
Report Period	Period of historical utilization data Entuity uses to generate the utilization trends. When you select:
	Recent, you specify time period in relation to the time the report is run, e.g. previous eight weeks.
	<b>Range</b> , you can enter start and end dates and times.
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

 Table 7
 CPU Utilization Trend Report Options

# **CPU Utilization Chart Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. CPU Utilization Trend.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	The the period over which the sample data was collected by Entuity. This sample data is used to calculate the trend in CPU utilization for the next six months.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
Device Name	Device against which the report was run.

 Table 8
 CPU Utilization Trend Report Header

# **CPU Utilization Report Details**

Name	Description
Device Name	Identifier of the device, e.g. host name or IP address.
Device Serial Number	Serial number of the device.
6 month prediction	Predicted utilization of the CPU, in six months time, as a percentage of the referenced total CPU resource.
12 month prediction	Predicted utilization of the CPU, in twelve months time, as a percentage of the referenced total CPU resource.
CPU utilization trend %	Graphs predicted utilization of the CPU, over the next six months, as a percentage of the referenced total CPU resource.
CPU utilization %	Recorded CPU utilization of the device.

Table 9 CPU Utilization Trend Details

# **Device Health Report**

Entuity Report

6 entuity

Device Health Summary		
Printed on:	5 May 2011 22:18:45 BST	
Description:	Devices ranked by logged events	
View:	Regional	
TopN:	40 (55 devices had included events and/or reachability outages)	
Sort by:	Total events	
Over the period 22:18 on Wed May 04 2011 - 22:18 on Thu May 05 2011		

Device name	Total event count	Reachability %	Port status	Port quality	Module status	SNMP polling	Reboot	Chassis & PSU	Resources	Outages	Route peering
10.66.13.22	2732	100		<u>2049</u>	•	•	•	<u>406</u>	•	•	•
10.66.13.25	2582	100		<u>1130</u>		•	•	<u>1175</u>		•	•
10.66.13.27	2507	100		<u>1061</u>		•		<u>1169</u>		•	
10.66.100.19	<u>871</u>	100		<u>853</u>		•		•	·	•	•
trapeze.entuity.lab	<u>867</u>	100		•	•	2		•	<u>64</u>		
r1603	<u>531</u>	100		•	•	442	•	•	<u>49</u>		•
ciscomcs7845h.vendor.entuity.lab	478	100		•		<u>478</u>			•		
lonsw03.entuity.local	<u>450</u>	100		<u>14</u>		<u>436</u>					
lonsw01.entuity.local	<u>450</u>	100		Z		<u>443</u>			•		
bgp.bvt.entuity.lab	<u>385</u>	100		<u>384</u>		•					
bottom3550	<u>298</u>	100		•					•		
eigrp.bvt.entuity.lab	232	100		<u>97</u>					52		<u>5</u>
nokia-fw.bvt.entuity.lab	<u>162</u>	100		<u>47</u>		4			110		•
bottom2960.entuity.local	<u>158</u>	100		•		<u>158</u>			•		
aruba2400.entuity.lab	<u>146</u>	100		140		<u>6</u>					
c1000.nexus.entuity.lab	<u>133</u>	100		<u>12</u>		<u>12</u>			109		
lonsw02.entuity.local	<u>103</u>	100		1		102			•		
c3845.vendor.entuity.lab	<u>90</u>	100		20					<u>70</u>		
eyepoller.bvt.entuity.lab	<u>89</u>	100		<u>84</u>		<u>4</u>			•		
lonsw05.entuity.local	<u>87</u>	100									
172.16.1.7	<u>70</u>	7.24								<u>62</u>	
c2900.entuity.local	<u>68</u>	100		<u>10</u>		<u>58</u>				•	
sky	<u>56</u>	100		<u>14</u>		•					
eye2009-lin	<u>56</u>	96.38		•		<u>44</u>	1		<u>8</u>	2	
c7000.nexus.entuity.lab	<u>56</u>	100		<u>52</u>		4			•		
c5000.nexus.entuity.lab	<u>52</u>	100		<u>4</u>		4			44		
bmc2010-lin	<u>46</u>	96.38				<u>38</u>	1	•	<u>4</u>	2	
10.66.100.16	<u>45</u>	100		<u>40</u>		4					
ospf.bvt.entuity.lab	44	100		<u>32</u>		<u>12</u>					
sydney-router.testnet	<u>43</u>	100									
eye2010-lin	<u>38</u>	96.38				<u>32</u>	1	•	2	2	
lonsw04.entuity.local	<u>33</u>	100									

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#### Figure 6 Device Health Report

#### **Device Health Report Overview**

This report allows for the analysis of device health against a configurable set of event types. For each device this report lists the number of each event type, each number provides a link to and provides the context for the Event Details report.

## **Device Health Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Sort by	Select the event class on which to sort devices:         Device Name         Total events         Port Status         Port Quality         All Port Events         Module Status         SNMP Polling         Reboot         Chassis and PSU         Resources         Outage         Route Peering.         For details on event classes see Event Classes in Activity Reports.
Maximum displayed devices	Number of devices included to the report.

Table 10 Device Health Report Options

Name	Description
Include	<ul> <li>Select the event class the report details when reporting device health:</li> <li>port status events</li> <li>port quality events</li> <li>module status events</li> <li>SNMP polling events</li> <li>device reboot events</li> <li>chassis and PSU events</li> <li>device resource events</li> <li>outage events</li> <li>route peering change events.</li> </ul>
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. twenty-four hours before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 10 Device Health Report Options

#### **Device Health Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Device Health.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
ТорN	Set number of maximum devices and within brackets the number of devices within the report.
Sort by	Attribute on which the report content is sorted.
Over the period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 11 Device Health Report Header

# **Device Health Report Details**

Name	Description
Device name	Identifier of the device, e.g. host name or IP address.
Total Event count	Total number of events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's events.
Reachability	Indicates the amount of time the device's management IP address was reachable by ICMP ping as a percentage of the reporting period.
Port status	Number of port status events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's port status events.
Port quality	Number of port quality events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's port status events.
Module status	Number of port status events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's port quality events.
SNMP polling	Number of SNMP polling events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's SNMP polling events.
Reboot	Number of reboot events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's reboot events.
Chassis & PSU	Number of chassis and PSU events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's chassis and PSU events.
Resources	Number of resource events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's resource events.
Outages	Number of outage events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's outages events.
Route peering	Number of route peering events raised against the device in the reporting period. This total is also a hyperlink, which opens the Event Details report and displays all of the device's route peering events.

Table 12 Device Health Details

# **Device Latency Report**

#### Entuity Report

Device Latency

Printed on: 21 Nov 2009 12:27:02 GMT

Description: ICMP round trip latency between the E ntuity server and managed devices sorted by highest mean Regional Over the period 12:00 on Fri Nov 20 2009 - 12:00 on Sat Nov 21 2009

No prime time is set for this report

Device name and IP address	Location	Latency mean/max (ms)	Latency threshold exceeds mean %	Latency threshold exceeds max %
10.44.1.9		602 / 860	0.0	0.0
nysw4003 (192.168.3.33)	Comms Rm., Wiring Closet, 8 West 38th St. New York, NY 10018	325/1154	0.0	0.0
192.168.3.70		307 / 1143	0.0	0.0
nysw01 (192.168.3.34)		306 / 1109	0.0	0.0
condor (192.168.3.67)	"System administrators office"	303 / 1103	0.0	0.0
sunshower (10.44.1.71)	Renato's Desk	152 / 408	0.0	0.0
s1912 (10.44.1.43)	The fridge (brrrr)	123/415	0.0	0.0
c2821 (10.44.1.58)		122 / 400	0.0	0.0
support (10.44.2.102)		122 / 435	0.0	0.0
mpb13419 (10.44.1.254)		121/423	0.0	0.0
10.44.1.9		495 / 659	0.0	0.0
DELL31F6C2 (172.16.1.140)		105 / 216	0.0	0.0
c2503 (192.168.242.123)	Entuity Test Room	25 / 261	0.0	0.0
s1912 (10.44.1.43)	The fridge (brrrr)	6/171	0.0	0.0
r801 (192.168.244.1)	Entuity Test Room	6/238	0.0	0.0
lonsw01 (10.44.1.5)		5 / 76	0.0	0.0
lonsw02 (10.44.1.6)	Development cabinet	5 / 70	0.0	0.0
c2821 (10.44.1.58)		5 / 78	0.0	0.0
lonsw03 (10.44.1.7)		5/77	0.0	0.0
sunshower (10.44.1.71)	Renato's Desk	4/102	0.0	0.0

Figure 7 **Device Latency Report** 

#### **Device Latency Report Overview**

This report allows for the analysis of ICMP round trip latency of managed devices. It includes a summary table of the selected devices, sorted by the hourly mean latency value.

#### **Device Latency Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
ТорN	Number of devices included to the report.

Table 13 Device Latency Report Options

# View:

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Name	Description
Report Period	Period over which the report applies. When you select:
	<ul> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
	- mange, you ban ontor start and one dates and times.
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 13 Device Latency Report Options

## **Device Latency Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Device Latency.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 14 Device Latency Report Header

#### **Device Latency Report Details**

Name	Description
Device name and IP address	Identifier of the device, e.g. host name or IP address and the device IP address Entuity uses to manage the device.
Location	a text description of the physical location of the device that is contained on the device, e.g. Development Cabinet.
Latency mean/max (ms)	Hourly mean average and maximum of device latency as measured by Availability Monitor using ICMP Ping requests.
Latency threshold exceeds mean %	Daily mean average of hourly device latency percentage exceeds as measured by Availability Monitor using ICMP Ping requests.
Latency threshold exceeds max %	Daily maximum of hourly device latency percentage exceeds as measured by Availability Monitor using ICMP Ping requests.

Table 15 Device Latency Details

# **Event Details Report**

Entuity Report

#### **Event Details**

Printed on:	23 May 2013 20:26:32 BST	
Description:	Chronologically ordered listing of individual events	
View:	My Network	
Device:	top2960	
Event class:	all	
TopN:	1000 (19 events matched filters)	
Over the period 17:00 on Thu May 23 2013 - 20:00 on Thu May 23 2013		

Sev	Event type	Source	Time	Incidents	Details
4	Port Inbound Fault High (Packet Corruption)	top2960 [Fa0/12] FastEthernet0/12	23/05/13 17:06		inFault=2.04% thresh=1% (align 0% crc 100% abort 0%) inFault=1/49 packets in 299 sec
0	Port Inbound Fault High Cleared (No Packet Corruption)	top2960 [Fa0/12] FastEthernet0/12	23/05/13 17:11	-	inFault=0.93% thresh=1% (align 0% crc 100% abort 0%) inFault=1/108 packets in 300 sec
4	Port Inbound Fault High (Packet Corruption)	top2960 [ Fa0/3 ] chrome	23/05/13 17:21	1	inFault=1.46% thresh=1% (align 0% crc 100% abort 0%) inFault=9/616 packets in 301 sec
4	Port Inbound Fault High (Packet Corruption)	top2960 [Fa0/12] FastEthernet0/12	23/05/13 17:21		inFault=1.33% thresh=1% (align 0% crc 100% abort 0%) inFault=1/75 packets in 301 sec
0	Port Inbound Fault High Cleared (No Packet Corruption)	top2960 [Fa0/12] FastEthernet0/12	23/05/13 17:26		inFault=0.00% thresh=1% (no component breakdown) inFault=0/75 packets in 299 sec
0	Port Inbound Fault High Cleared (No Packet Corruption)	top2960 [Fa0/3] chrome	23/05/13 17:26	1	inFault=0.00% thresh=1% (no component breakdown) inFault=0/469 packets in 299 sec
4	Port Inbound Fault High (Packet Corruption)	top2960 [Fa0/12] FastEthernet0/12	23/05/13 17:36		inFault=1.30% thresh=1% (align 0% crc 100% abort 0%) inFault=1/77 packets in 301 sec
0	Port Inbound Fault High Cleared (No Packet Corruption)	top2960 [Fa0/12] FastEthernet0/12	23/05/13 17:41		inFault=0.00% thresh=1% (no component breakdown) inFault=0/67 packets in 299 sec
4	Port Inbound Fault High (Packet Corruption)	top2960 [Fa0/3] chrome	23/05/13 17:56	1	inFault=10.02% thresh=1% (align 0% crc 100% abort 0%) inFault=94/938 packets in 301 sec
Ø	Port Inbound Fault High (Packet Corruption)	top2960 [Fa0/12] FastEthernet0/12	23/05/13 18:01	-	inFault=1.79% thresh=1% (align 0% crc 100% abort 0%) inFault=3/168 packets in 299 sec
0	Port Inbound Fault High Cleared (No Packet Corruption)	top2960 [Fa0/12] FastEthernet0/12	23/05/13 18:16		inFault=0.00% thresh=1% (no component breakdown) inFault=0/86 packets in 299 sec

Figure 8 Event Details Report

#### **Event Details Report Overview**

This report lists the events raised for the device within the reporting period, ordered by the date and time they were first raised.

#### **Event Details Report Options**

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one or <b>All Devices</b> device to run the report against.

Table 16 Event Details Report Header

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Name	Description	
Minimum severity	All events with a severity level greater than this setting are included to the report. By default all events are included.	
Show events that are in no open incidents	When selected events that are associated with closed, aged out or expired incidents are included to the report.	
Show events on sub- components	When selected events raised on sub-components of the device, for example its ports, are included to the report.	
Maximum displayed events	Maximum number of events included to the report, by default 1000.	
Event class	<ul> <li>Select All events or the event class the report details when reporting device health:</li> <li>Port status</li> <li>Port quality</li> <li>Module status</li> <li>SNMP polling</li> <li>Reboot</li> <li>Chassis and PSU</li> <li>Resources</li> <li>Outage</li> <li>Route peering change.</li> <li>For details on event classes see <i>Event Classes in Activity Reports</i>.</li> </ul>	
Report period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>	

Table 16 Event Details Report Header

# **Event Details Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Event Details.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.

Table 17 Event Details Report Header

# **Event Details Report Details**

Name	Description
Severity	Severity level of the event, represented by number and color coding.
Event Type	Name of the event.
Source	Originator of the event, e.g. device, port identifier. It is also a hyperlink to the object's summary page in the Entuity web UI.
Time	Time the event was raised against the object. The report is ordered on this attribute.
Incidents	Associated incident raised by the event.
Details	Details of the event.

Table 18 Event Details

# **Event History Report**

Entuity Report

#### Event Audit Log

Printed on: 28 Oct 2014 10:37:50 GMT

Description: Chronologically ordered listing of individual events

View: My Network

Over the period 23:00 on Sat Oct 25 2014 - 10:00 on Tue Oct 28 2014

Sev	Event type	Source	Time	Incidents
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ VI371 ] VIan371	27/10/14 19:45	1
Ø	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ VI371 ] Vlan371	27/10/14 19:50	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/38 ] [IR-OFF] Client Port PC & Avaya Phone	27/10/14 22:30	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/38 ] [IR-OFF] Client Port PC & Avaya Phone	27/10/14 22:35	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ VI2072 ] VIan2072	27/10/14 23:40	1
Ø	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ VI2072 ] VIan2072	27/10/14 23:43	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/12 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 00:01	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/12 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 00:09	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/38 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 00:25	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/38 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 00:30	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/39 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 01:21	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/39 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 01:29	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/11 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 02:15	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/24 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 02:19	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/11 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 02:19	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [Gi1/0/24] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 02:25	1
٩	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ VI2072 ] VIan2072	28/10/14 02:59	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ VI2072 ] VIan2072	28/10/14 03:05	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/38 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:05	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/39 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:10	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/38 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:10	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/39 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:15	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/11 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:31	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/11 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:40	1
0	Port Outbound Fault High Cleared (No Transmit Errors)	10.66.100.190 [ Gi1/0/43 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:51	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ Gi1/0/11 ] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:51	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [Gi1/0/11] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:59	1
4	Port Outbound Fault High (Transmit Errors)	10.66.100.190 [Gi1/0/43] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 03:59	1
0	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [ VI2072 ] VIan2072	28/10/14 04:11	1
4	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ VI2072 ] VIan2072	28/10/14 04:19	1
Ŷ	Port Inbound Discards High Cleared (No Device Congestion)	10.66.100.190 [Gi1/0/38] [IR-OFF] Client Port PC & Avaya Phone	28/10/14 04:30	1



#### **Event History Report Overview**

This report lists events by chronological order. The report is highly configurable, allowing you for example to run a report against a specific devices and only include events that meet the set criteria, e.g. severity level, acknowledged.

# **Event History Report Options**

Name	Description		
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.		
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.		
Please select a device	vice From the drop down list you can select one or <b>All Devices</b> device to run the report against.		
Minimum severity	All events with a severity level greater than this setting are included to the report. By default all events are included.		
Show events that are in no open incidents	When selected events that are associated with closed, aged out or expired incidents are included to the report.		
Show events on sub- components	When selected events raised on sub-components of the device, for example its ports, are included to the report.		
Maximum displayed events	Maximum number of events included to the report, by default 1000.		
Report period       Period over which the report applies. When you select:         Recent, you specify time period in relation to the time the run, e.g. one hour before the report time.         Range, you can enter start and end dates and times.			

Table 19 Event History Report Header

#### **Event History Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Event History.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run. Configurable through Report Options.
Over the period	Start and end dates and times over which the report is run.

Table 20 Event History Report Header

# **Event History Report Details**

Name	Description
Severity	Severity level of the event, represented by number and color coding.
Event Type	Name of the event.
Source	Originator of the event, e.g. device, port identifier.
Time	Time the event was raised.
Status	Status of the event, e.g. Open, Closed.
Ack User	User name of the user who acknowledged the event.
Ack Time	Time the user acknowledged the event.
Ack details	Description the user entered in the acknowledgement.

Table 21 Event History Details
# **Event Summary Report**

Entuity Report

### **Event Summary**

 Printed on:
 28 Oct 2014 10:32:01 GMT

 Description:
 Summary of real-time events raised

View: My Network

Over the period 09:32 on Tue Oct 28 2014 - 10:32 on Tue Oct 28 2014

2	Frankford	Courses.	First time	0	la state sta
ő	Event type	Source -	Last time	Count	Incidents
4	Port Inbound Discards High (Device Congestion)	10.66.100.189 [ vlan 1 ] 802.1Q VLAN	28/10/14 09:34	1	1
<u>×</u>	3 (		28/10/14 09:34	-	
0	SNMP Agent Not Responding	entlonpcmc01	28/10/14 09:35	8	1
÷			28/10/14 10:35		
•2	SNMP Agent Not Responding	radium	28/10/14 10:30	12	
*			28/10/14 09:35	_	
••	SNMP Agent Not Responding	lonswdsk1	28/10/14 10:30	7	1
			28/10/14 09:42		
v	SNMP Agent Responding	entionpcmc01	28/10/14 10:23	6	1
			28/10/14 09:49		
v	SNMP Agent Responding	IONSWOSK1	28/10/14 10:23	4	1
~	De di la bassa di Essilit I lia bi (De alsot Comunica)	to - 20000 / E - 0/4 ] E+E/h+0/4	28/10/14 09:49		
Y	Port Indound Fault High (Packet Corruption)	top2960 [Fau/1]FastEthemetu/1	28/10/14 09:49		
	De et la bassa di Essetti Libets (De altrati Comunitiana)	t	28/10/14 09:49	4	
Y	Port Inbound Fault High (Packet Corruption)	top2960 [ Fa0/24 ] FastEthernet0/24	28/10/14 09:49	1	
	Port Inbound Discards High Cleared (No Device	10.66.100.190 [ Gi1/0/37 ] [IR-OFF] Client Port PC &	28/10/14 09:52	2	
v	Congestion)	Avaya Phone	28/10/14 09:52	2	
	Port Inbound Fault High Cleared (No Packet	tap2060 [ Ec0/24 ] EastEtherpat0/24	28/10/14 09:55	4	
v	Corruption)	top2900 [ Fa0/24 ] FastEthemeto/24	28/10/14 09:55		
	Port Inbound Fault High Cleared (No Packet	top2060 [Ec0/1] EcotEthermot0/1	28/10/14 09:55	4	
v	Corruption)	top2900 [Fa0/1]FastEthemeto/1	28/10/14 09:55	1	
	Port Inbound Fault High (Packet Corruption)	longwdgk2 [ o8 ] Ethomot Interface	28/10/14 09:55	2	
Y	Fort Inboding Fadit Flight (Facket Colluption)	Ionswuskz [eo]Einemerinienace	28/10/14 10:14	2	
Δ	Port Inbound Fault High Cleared (No Packet	lonswidsk2 [ e8 ] Ethernet Interface	28/10/14 10:00	2	
v	Corruption)	Ionswuskz [eo]Einemermenace	28/10/14 10:00	2	
	Port Inhound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/37 ] [IR-OFF] Client Port PC &	28/10/14 10:00	1	
V	Tort inbound Discalds High (Device Congestion)	Avaya Phone	28/10/14 10:00		
А.	Port Inbound Discards High Cleared (No Device	10.66.100.190 [ Gi1/0/36 ] [IR-OFF] Client Port PC &	28/10/14 10:00	1	1
<u>v</u>	Congestion)	Avaya Phone	28/10/14 10:00		-
4	Port Inbound Discards High Cleared (No Device	10.66.100.190 [ Gi1/0/41 ] [IR-OFF] Client Port PC &	28/10/14 10:05	2	
<u>×</u>	Congestion)	Avaya Phone	28/10/14 10:05		
4	Port Inbound Discards High Cleared (No Device	10.66.100.190 [Gi1/0/50] link to LON-AU-DIST-	28/10/14 10:05	1	1
<u>×</u>	Congestion)	SW04	28/10/14 10:05		
•	Port Inbound Discards High (Device Congestion)	10.66.100.190 [ GI1/0/36 ] [IR-OFF] Client Port PC &	28/10/14 10:05	1	1
<u> </u>		Avaya Phone	28/10/14 10:05		
0	Processor Utilization High	Host Resources Processor on 10.44.1.49	28/10/14 10:07	1	
- <u>-</u> -		10.66.100.100. [ Ci1/0/E0 ] link to LON ALL DIST	28/10/14 10:07		
•	Port Inbound Discards High (Device Congestion)	10.00.100.190 [ GI1/0/50 ] IIIR to LON-AO-DIST-	28/10/14 10:10	1	1
-		10.66.100.100.1.01/0/41.1.0.0.000	28/10/14 10:10		
•	Port Inbound Discards High (Device Congestion)	10.00.100.190 [ GI1/0/41 ] [IR-OFF] Cilent For FC &	28/10/14 10:10	1	
-	Port Inbound Discords High Cleared (No Dovice	10.66.100.100 [ Gi1/0/0 ] [IR OEE] Client Port PC &	28/10/14 10:10		
Ð	Congestion)	Avava Phone	28/10/14 10:10	1	1
*		, waya r nono	28/10/14 10:15		
•	Unknown Trap	10.44.1.1	28/10/14 10:26	3	1
	Port Inbound Discards High Cleared (No Device		28/10/14 10:16		
v	Congestion)	10.66.100.190 [Nu0] Null0	28/10/14 10:16	1	1
		10.66.100.190 [ Gi1/0/9 ] [IR-OFF] Client Port PC &	28/10/14 10:16		
Y.	Port Inbound Discards High (Device Congestion)	Avava Phone	28/10/14 10:16	1	1
•	Port Inbound Discards High Cleared (No Device	10.66.100.190 [ Gi1/0/43 ] [IR-OFF] Client Port PC &	28/10/14 10:16	•	
v	Congestion)	Avaya Phone	28/10/14 10:16	2	1
	Device Average ODU Utilization Use	40.44.4.40	28/10/14 10:20	4	
Y	Device Average CPU Utilization High	10.44.1.49	28/10/14 10:20		
	Port Inbound Discards High Cleared (No Device	10.66.100.190 [Gi1/0/49] link to LON-AU-DIST-	28/10/14 10:21	1	1
V	Congestion)	SW03	28/10/14 10:21	1	1
	Bart Inhound Discords High (Paviso Competition)	10 66 100 100 [ Nu0 ] Null0	28/10/14 10:21	1	1
V	For modulu Discards high (Device Congestion)	10.00.100.190 [1000]10010	28/10/14 10:21	1	
	Port Inbound Discards High Cleared (No Device	10.66.100.190 [ Gi1/0/40 ] [IR-OFF] Client Port PC &	28/10/14 10:21	1	1
V	Congestion)	Avaya Phone	28/10/14 10:21		1
	Port Inhound Discards High (Device Congestion)	10.66.100.190 [ Gi1/0/43 ] [IR-OFF] Client Port PC &	28/10/14 10:21	2	1
V	i on moona piscalas riigii (pevice congestion)	Avaya Phone	28/10/14 10:21	2	



### **Event Summary Report Overview**

Lists the events raised in the view within the reporting period, ordered by the date and time they were first raised.

### **Event Summary Report Options**

Name	Description	
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.	
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.	
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.	
Please select a device	From the drop down list you can select one or <b>All Devices</b> device to run the report against.	
Minimum severity	All events with a severity level greater than this setting are included to the report. By default all events are included.	
Show events that are in no open incidents	When selected events that are associated with closed, aged out or expired incidents are included to the report.	
Show events on sub- components	When selected events raised on sub-components of the device, for example its ports, are included to the report.	
Report period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>	

Table 22 Event Summary Report Header

### **Event Summary Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Event Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.

Table 23 Event Summary Report Header

## **Event Summary Report Details**

Name	Description
Severity	Severity level of the event, represented by number and color coding.
Event Type	Name of the event.
Source	Originator of the event, e.g. device, port identifier.
First Time	First time the event was raised against the object. The report is ordered on this attribute.
Last Time	Last time the event was raised against the object.
Count	Number of times the event was raised.
Incidents	Number of open incidents associated to the event.

Table 24 Event Summary Details

# Flow Analysis Report





#### Flow Analysis Report Overview

This report is for use with flow data collected using IFA and IFA Premium. It allows you to monitor flow performance for the selected device's interface over the set reporting period. The report is highly configurable, for example you can filter on application, protocols, interfaces.

You can launch this report from both the Reports Browser page, and also directly from the Flow Analysis page. In the latter case, the report options (e.g. timeframe, breakdown, filtering) are automatically populated based on the current state of the Flow Analysis page.

### **Flow Analysis Report Options**

Name	Description
Output Format	Available output formats for the report, i.e. HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.

Table 25 Flow Analysis Report Header

Name	Description
Interval	You can select the time interval over which traffic rate is calculated and Entuity uses the most appropriate sample rate: 1 minute sample (IFA Premium only) Last 30 minutes 5 minute samples Last 1 hour Last 2 hours Last 2 hours Last 4 hours Last 4 hours Last 24 hours Last 24 hours Last 22 Days
	6 hour samples Last 4 Days Last Week 1 Days samples All.
Chart Style	There are four chart styles, i.e. Stacked Area, Line, Bar Chart, Pie Chart.
Top-N	There are three predefined Top-N numbers, 5, 10 and 20 that set the maximum number of records that can appear on a chart. For the clearest presentation of data you should set stacked area and line charts to 5, pie charts to a maximum of 10 and bar charts can be used with 20 entries.
Devices	Device name. When the device sends flows to more than one collector Entuity displays the collector name in brackets. Select a specific device.
Breakdown	A category breakdown of flow data: Interface, Application, Ports, Hosts (In, Out), Listeners, Talkers, Protocols, Quality of Service (QoS) Class DSCP classes, IP Precedence classes. IFA Premium includes a breakdown by conversation.
Interfaces	Device interface with flow enabled.
Applications	Select from the drop down list the application on which to run the report.
Host (type, IP Address)	There are three categories of Host Flow Analysis charts: inbound host traffic, flows with the same destination IP address outbound host traffic, flows with the same source IP address combined inbound and outbound host traffic.
TOS (Kind, Class)	Select TOS kind from DSCP and IP Precedence, DSCP and IP Precedence and select a class from the drop down list.
Protocol	Select from the drop down list of protocols.
Port	Enter the primary UDP/TCP port.

Table 25	Flow Analysis Report Header
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### Flow Analysis Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Flow Analysis.
Printed on	Date and time the report was generated.
Description	Description of the report.
Filter	Description of the filter.

Table 26 Flow Analysis Report Header

### **Flow Analysis Report Details**

The details vary according to the configured report, the reporting period is set by *Interval* and the data by *Breakdown*.

## **IP SLA Details Report**



min RTT: 1 ms, mean RTT: 1.1 ms, max RTT: 4 ms, success: 100% (2592/2592), threshold = disabled Operational state - click to drill down



Figure 12 IP SLA Details Report

#### **IP SLA Details Report Overview**

This report allows you to monitor the performance of IP SLA operators, providing key statistics and clear graphs. For example the operational state color coded timeline allows for quick apprehension of fluctuations in service delivery, and its drill down functionality allows you to zoom in on the areas of interest.

All Entuity supported IP SLA operators are available through the report. You can call the report from the:

Report repository, where you select the report options, e.g. server, view, operations.

- Branch office perspectives and report, where the calling context, e.g. which operator's icon was selected, determines the content of the report.
- IP SLA Details report itself, drill down allows you to focus on one selected operator.

### **IP SLA Details Report Options**

Name	Description
Please select a server	Available when the server acts as a central server in a multiple Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select an operation	Entuity operation against which the report is to be run. From the drop down list you can select one IP SLA operation, or <b>All Operations</b> to run the report against.
Report period	<ul> <li>Period over which the report applies, by default twenty-four hours. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 27 IP SLA Details Report Header

### **IP SLA Details Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Details.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 28 IP SLA Details Report Header

#### **IP SLA Details Report Details**

The details vary according to the configured Cisco IOS IP SLA operation, e.g. Jitter, HTTP, Echo. When you click on the color coded operational state timeline, Entuity drills down on the operation.

Name	Description
Name	IP SLA operation name.
Min RTT	Minimum successful round trip completion time.
Max RTT	Maximum successful round trip completion time.
Mean RTT	Mean average of successful round trip completion times.
Success	Displays the success of the operation, both as a percentage value of total operations over the reporting period with the successful and total number of operations given in brackets.
Threshold	Enabled indicates the threshold event is enabled for the operation, disable indicates the event is disabled.
Echo Operator Chart	
Operator timeline	Operator timeline shows the state of the operator over the reporting period, i.e. Unknown, Failed, Over threshold and Success. It allows drill down to the next sample level.
Min RTT	Minimum successful round trip completion time.
Max RTT	Maximum successful round trip completion time.
Mean RTT	Mean average of successful round trip completion times.
Success	Operator success as a percentage of total created operators. For a new operator, its first instance always fails.
Threshold	Indicates the event threshold level, or whether it is disabled, DNS translation time, TCP connect time and HTTP download time.
Chart	Chart displays threshold level, ping success and average round trip time.
HTTP Operator Chart	
Operator timeline	Operator timeline shows the state of the operator over the reporting period, i.e. Unknown, Failed, Over threshold and Success. It allows drill down to the next sample level.
Min RTT	Minimum successful round trip completion time.
Max RTT	Maximum successful round trip completion time.
Mean RTT	Mean average of successful round trip completion times.
Success	Operator success as a percentage of total created operators. For a new operator, its first instance always fails.
Threshold	Indicates the event threshold level, or whether it is disabled, DNS translation time, TCP connect time and HTTP download time.
Chart	Chart displays threshold level, total operation time.
UDP, TCP, DNS Operator Charts	These operators use the same style of chart.
Operator timeline	Operator timeline shows the state of the operator over the reporting period, i.e. Unknown, Failed, Over threshold and Success. It allows drill down to the next sample level.

Table 29 IP SLA Details

Name	Description
Chart	Chart displays threshold level and total operation time.
Jitter Operator Charts	Three charts, Loss, Delay and Jitter.
Operator timeline	Operator timeline shows the state of the operator over the reporting period, i.e. Unknown, Failed, Over threshold and Success. It allows drill down to the next sample level.
Loss chart	Loss chart displays Total loss, Loss from source to destination and Loss from destination to source.
Jitter chart	Jitter chart displays Average Jitter from source to destination and Average Jitter from destination to source.
Delays chart	Delays chart displays threshold, Round trip time, Delay from source to destination and Delay from destination to source.

Table 29 IP SLA Details

# IP SLA TopN Echo by RTT Report

E ntuity Report IP SLA TOPN Echo by Round Trip Time Report Printed on: 26 Nov 2009 14:40:29 GMT Description: TopN IP SLA Echo measurements by max RTT View: Regional TopN: 10 Over the period 00:00 on Mon Nov 02 2009 - 00:00 on Thu Nov 26 2009

No prime time is set for this report

IP SLA Name	Device name	тоѕ	Max round trip time (ms)	Mean round trip time (ms)
Ping	e2821.entuity.local	0	4	0.6
ping swell from e2821	e2821.entuity.local	0		
London IP SLA	top2960	0		

Figure 13 IP SLA TopN Echo by RTT Report

### IP SLA TopN Echo by RTT Report Overview

This report details the performance of IP SLA echo probes within the selected view. You can restrict the number of probes to the TopN with the maximum latency.

#### IP SLA TopN Echo by RTT Report Options

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
ΤορΝ	Enter a number when you want to restrict the number of reported probes to those with the maximum latency. The default setting 0 includes all probes within the view.
Report period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 30 IP SLA TopN Echo by RTT Report Header

Centuity

## IP SLA TopN Echo by RTT Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Echo.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
ТорN	Number of probes included to the report.
Over the period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 31 IP SLA TopN Echo by RTT Report Header

### IP SLA TopN Echo by RTT Report Details

Name	Description
Name	IP SLA operation name.
Device name	Identifier of the device running the IP SLA operation, e.g. host name or IP address.
TOS	Defines the IP Type of Service (TOS) byte for request packets. This attribute may also be used as a Differentiated Services Code Point (DSCP).
Max round trip time (ms)	Maximum completion time of RTT operations which complete successfully within the reporting period.
Mean round trip time (ms)	Mean average of successful round trip completion times within the reporting period.

Table 32 IP SLA TopN Echo by RTT

## Managed Host Summary Report



Figure 14 Managed Host Summary Report

#### Managed Host Summary Report Overview

This report details the performance of each managed host within the selected view during the reporting period.

#### Managed Host Summary Report Options

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.

Table 33 Managed Host Summary Report Options

Name	Description
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device, or <b>All Devices</b> , to run the report against. Entuity manages servers as devices.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 33 Managed Host Summary Report Options

#### Managed Host Summary Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Managed Host Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
Servers	The devices included to the report.
Over the period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 34 Managed Host Summary Report Header

### Managed Host Summary Report Details

Name	Description
sysName	System name or where not available the IP address of the managed host.
Location	SysLocation, or where not available it is left blank.
Management IP	IP address Entuity uses to manage the managed host.
Total Memory	Total memory installed to the device.
Last reboot	Last reboot of the managed host.
Polling status	Current polling status of the device.
System descr	System description, which for a Cisco device is a parsed sysDescr with model, version and serial number.
Uptime%	Percentage of time the host was up during the reporting period.

Table 35 Managed Host Summary

Name	Description
Unknown uptime	Amount of time state of the host was unknown.
Outages	Number of outages during the reporting period.
Round Trip Latency between Entuity and the device	Graph charts round trip latency between the Entuity server and the host, in milliseconds.
Average Reachability %	Graph charts the amount of time the device responds to ping as a percentage of the reporting period.
User and process counts	Graph charts number of users and processes during the reporting period.
CPU and memory	Graph charts router CPU utilization and memory usage over the reporting period.

Table 35 Managed Host Summary

# **Memory Utilization Details**

#### Entuity Report Memory Utilization Details

View: My Network (admin)

Description: Memory utilization percentage details over multiple timeframes

8 entuity

Printed on: 2 Oct 2015 11:42:39 BST

Device: c3560 Recent 8 hours @ 5min samples 100 50 0 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 — Memory utilization % Recent day @ 5min samples 100 50 0 12:00 14:00 16:00 18:00 20:00 22:00 00:00 02:00 04:00 06:00 08:00 10:00 12:00 Memory utilization % Recent week @ hourly samples 100 50 0 26-Sep 27-Sep 28-Sep 29-Sep 30-Sep 1-Oct 2-Oct — Memory utilization % Recent month @ hourly samples 100 50 0 4-Sep 11-Sep 18-Sep 25-Sep 2-Oct — Memory utilization % Recent year @ daily samples 100 75 50 25 0 Nov-2014 Jan-2015 Mar-2015 May-2015 Jul-2015 Sep-2015 — Memory utilization %



### Memory Utilization Details Report Overview

This report provides five charts showing memory utilization for the specified device. It can be called:

- By clicking Reports > Activity Reports and then clicking Memory Utilization Details report. You must then complete the report options to set the device against which you want to run the report.
- From the Device Memory Capacity Planning Trend report by clicking on Device name in that report. Entuity runs the Memory Utilization Details report using that device and the trend report Report Options.

#### **Memory Utilization Details Report Options**

Completing the Report Options allows you to select the device against which you want to run the Memory Utilization Details report.

Name	Description
Used saved values	Select from saved report configurations.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.

Table 36 Memory Utilization Details Report Options

### Memory Utilization Details Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Memory Utilization Chart.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	View against which the report is run.
Device	Device against which the report is run.

Table 37 Memory Utilization Details Report Header

#### Memory Utilization Report Details

This report provides charts showing Memory utilization for the specified device over five different reporting periods. These report periods start from when the report is run, and are specifically over the previous:

- eight hours, charting the polled five minute data samples
- twenty-four hours, charting the polled five minute data samples

- seven days, charting hourly rolled up data samples
- thirty days, charting hourly rolled up data samples
- vear, charting daily rolled up data samples.

# **Memory Utilization Trend Report**



Figure 16 Memory Utilization Trend Report

#### Memory Utilization Trend Report Overview

This report graphs predictions for the next six months of memory utilization. Predictions are derived from applying regression analysis to the device's historical memory utilization data, by default for the last eight weeks, although you can configure it.

#### **Memory Utilization Trend Report Options**

Completing the Report Options allows you to select the device against which you want to run the Memory Utilization Trend report.

Name	Description
Used saved values	Select from saved report configurations.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.

Table 38 Memory Utilization Trend Report Options

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.
Report Period	Period of historical utilization data Entuity uses to generate the utilization trends. When you select:
	Recent, you specify time period in relation to the time the report is run, e.g. previous eight weeks.
	<b>Range</b> , you can enter start and end dates and times.
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 38 Memory Utilization Trend Report Options

#### Memory Utilization Chart Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Memory Utilization Trend.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	The the period over which the sample data was collected by Entuity. This sample data is used to calculate the trend in Memory utilization for the next six months.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
Device Name	Device against which the report was run.

Table 39 Memory Utilization Trend Report Header

#### **Memory Utilization Report Details**

Name	Description
Device Serial Number	Serial number of the device.
6 month prediction	Predicted utilization of the device's memory, in six months time, as a percentage of the referenced total memory resource.

Table 40 Memory Utilization Trend Details

Name	Description
12 month prediction	Predicted utilization of the device's memory, in twelve months time, as a percentage of the referenced total memory resource.
Memory utilization trend %	Graphs predicted utilization of the memory, over the next six months, as a percentage of the referenced total Memory resource.
Memory utilization %	Graphed memory utilization of the device.

Table 40 Memory Utilization Trend Details

# Port Data Rate Chart

#### Entuity Report Port Data Rate Chart



Description: Chart of data rate of up to 8 ports with aggregated rates Over the period 11:00 on Tues Nov 20 2012 - 11:00 on Wed Nov 21 2012 No prime time is set for this report

Printed on: 21 Nov 2012 11:33:45 GMT

Sample period: 15 minutes

Device name	Port description	Speed (bits/sec)	Line color
10.44.1.254	[ 00002 ] ppp0	0	
10.44.1.80	[ 65539 ] Broadcom NetXtreme 5751 Gigabit Controller	100 M	





#### Port Data Rate Report Overview

This report charts port traffic data for up to 8 ports over the reporting period. A summary table identifies the ports and also their associated line colors used on the traffic charts. Three charts plot each port's inbound, outbound and aggregate data rates.

### Port Data Rate Report Options

Completing the Report Options allows you to select the ports against which you want to run the report.

Name	Description
Used saved values	Select from saved report configurations.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select view(s)	Entuity view against which the report is to be run. From the list you can select one or more views to run the report against.
Please select device(s)	From the list you can select <b>All Devices</b> , a number of devices or one device to run the report against.
Please select ports	From the list you can select up to 8 ports to run the report against.
Please select the sample period	From the list you can select the report sample period.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 41 Traffic Rate Report Options

### **Traffic Rate Chart Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Data Rate Chart.
Printed on	Date and time the report was generated.
Description	Description of the report.
Sample Period	The port utilization sample period.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 42 Traffic Rate Chart Report Header

## Traffic Rate Report Details

Name	Description
Device Name	Identifier of the device, e.g. host name or IP address.
Port Description	Description of the port.
Line Color	The line color used to graph the port's data rate values.
Inbound data rate (Kbits/sec)	Inbound data rate of the port in the reporting period.
Outbound data rate (Kbits/sec)	Outbound data rate of the port in the reporting period.
Aggregate data rate (Kbits/sec)	Chart displays an aggregate of all inbound data rate for port's in the report, and an aggregate of all outbound data rate for port's in the report, in the reporting period.

Table 43 Traffic Rate Chart Details

# Port Discard Trend Report



Figure 18 Port Discard Trend Report

#### Port Discard Trend Report Overview

This report graphs predictions for the next six months of port Discard. Predictions are derived from applying regression analysis to the device's historical port discard data, by default for the last eight weeks, although you can configure it.

### Port Discard Trend Report Options

Completing the Report Options allows you to select the device against which you want to run the Port Discard Trend report.

Name	Description
Used saved values	Select from saved report configurations.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against. When the device is hidden from you but its ports are available to you select <b>Hidden Devices (with visible ports)</b> .
Please select a port	From the drop down list you can select one port to run the report against.
Max chart scale (%)	Sets the upper value of scale used on the chart. For example where you have a discard rate below 20 you could improve the presentation of the graph by setting the upper range of the chart scale to 50.
Report Period	<ul> <li>Period of historical utilization data Entuity uses to generate the utilization trends. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. previous eight weeks.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 44 Port Discard Trend Report Options

### Port Discard Chart Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Discard Trend.
Printed on	Date and time the report was generated.
Description	Description of the report.

Table 45Port Discard Trend Report Header

Name	Description
View	Entuity view against which the report was run.
Over the period	The the period over which the sample data was collected by Entuity. This sample data is used to calculate the trend in Port Discard for the next six months.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
Device Name	Device against which the report was run.

 Table 45
 Port Discard Trend Report Header

### **Port Discard Report Details**

Name	Description
Device Name	Identifier of the device, e.g. host name or IP address.
Port Name	Description of the port.
Inbound Speed	Inbound port speed of the line.
Inbound 6 month prediction	Predicted inbound discards of the port, in six months time, as a percentage of the referenced port speed.
Inbound 12 month prediction	Predicted inbound discards of the port, in twelve months time, as a percentage of the referenced port speed.
Outbound Speed	Outbound port speed of the line.
Outbound 6 month prediction	Predicted outbound discards of the port, in twelve months time, as a percentage of the referenced port speed.
Outbound 12 month prediction	Predicted outbound discards of the port, in twelve months time, as a percentage of the referenced port speed.
Inbound discards trend %	Graphs predicted inbound discards of the port, over the next six months, as a percentage of the referenced inbound port speed.
Inbound discards %	Inbound discards of the port over the reporting period, as a percentage of the referenced port inbound speed.
Outbound discards trend %	Graphs predicted outbound discards of the port, over the next six months, as a percentage of the referenced outbound port speed.
Outbound discards %	Inbound discards of the port over the reporting period, as a percentage of the referenced port inbound speed.

Table 46 Port Utilization Chart Details

# **Port Discards Details**

#### Entuity Report Port Discards Details

Centuity

 Description:
 Port discards percentage details over multiple timeframes

 View: My Network (admin)
 Printed on: 2 Oct 2015 12:26:34 BST

Port: [gig2/0]gig2/0 on aruba6000.bvt.entuity.lab in-speed 1 Gbps out-speed 1 Gbps





#### Port Discards Details Report Overview

This report provides five charts showing port discards for the specified device. It can be called:

- By clicking **Reports > Activity Reports** and then clicking Port Discards Details report. You must then complete the report options to set the device against which you want to run the report.
- From the Device Memory Capacity Planning Trend report by clicking on a device in that report. Entuity runs the Port Discards Details report using that device and the trend report Report Options.

#### Port Discards Details Report Options

Completing the Report Options allows you to select the device against which you want to run the Port Discards Details report.

Name	Description
Used saved values	Select from saved report configurations.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against. When the device is hidden from you but its ports are available to you select <b>Hidden Devices (with visible ports)</b> to have them available to report on.
Please select a port	From the drop down list you can select one port to run the report against.

Table 47 Port Discards Details Report Options

### Port Discards Details Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Discards Chart.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	View against which the report is run.
Port	Identifies the device and port on which the report is run and the inbound and outbound line speed.

Table 48 Port Discards Details Report Header

### **Port Discards Report Details**

This report provides charts showing Port Discards for the specified port over five different reporting periods. These report periods start from when the report is run, and are specifically over the previous:

- eight hours, charting the polled five minute data samples
- twenty-four hours, charting the polled five minute data samples
- seven days, charting hourly rolled up data samples
- thirty days, charting hourly rolled up data samples
- year, charting daily rolled up data samples.

# Port Statistics Comparison

Entuity Report

#### Port Utilization, Volume, Discards and Faults Comparison

Pentuity

 Description:
 Comparison of mean utilization, volume, discard and faults percentage for up to 8 ports

 Over the period 14:00 on Fri Nov 30 2012 - 14:00 on Sat Dec 01 2012
 Printed on: 1

Printed on: 1 Dec 2012 14:11:15 GMT

Device name	Port description	Speed (bits/sec)	Color
lonsw01	[ 2/1 ] TRUNK to lonsw02	100 M	
lonsw01	[ 2/3 ] TRUNK to lonsw05	100 M	
lonsw02	[ 2/1 ] TRUNK to lonsw01	100 M	
lonsw03	[ 2/1 ] TRUNK to lonsw02	100 M	
lonsw03	[ 2/2 ] TRUNK to lonsw01	100 M	
lonsw03	[ 2/3 ] TRUNK to lonsw04	100 M	



Figure 20 Port Statistics Comparison Chart

#### Port Statistics Comparison Report Overview

This report compares mean utilization, volume, discard and faults percentage values for up to 8 ports. A summary table identifies the ports and also the line colors used with the pie charts.

The Inbound and outbound utilization and volume pie charts include call-outs of each port's value, the segments within the pie chart represents each port's metric as a proportion of the total value of that metrics for ports in the report over the reporting period. For example the inbound utilization chart represents port utilization as a percentage of the referenced port speed, expressed within the pie chart as a proportion of the total inbound utilization of ports within the report during the reporting period.

The inbound and outbound fault and discard pie charts include call-outs of each port's value, the segments within the pie chart represents each port's metric as a proportion of the total value of that metrics for ports in the report over the reporting period. For example the inbound faults charts represents aggregate values for the packets with faults displayed as a percentage of total inbound packets on the port, expressed within the pie chart as a proportion of the total inbound faults within the report during the reporting period.

#### Port Statistics Comparison Report Options

Completing the Report Options allows you to select the ports against which you want to run the report.

Name	Description
Used saved values	Select from saved report configurations.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select view(s)	Entuity view against which the report is to be run. From the list you can select one or more views to run the report against.
Please select device(s)	From the list you can select <b>All Devices</b> , a number of devices or one device to run the report against.
Please select ports	From the list you can select up to 8 ports to run the report against.
Please select the sample period	From the list you can select the report sample period.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 49Port Utilization Chart Report Options

## Port Statistics Comparison Report Details

Name	Description
Device Name	Identifier of the device, e.g. host name or IP address.
Port Description	Description of the port.
Speed (bits/sec)	The port's referenced interface speed, used for example, when Entuity calculates port utilization.
Line Color	The line color used to graph the port's values.
Inbound utilization %	Inbound utilization of the port as a percentage of the referenced port speed, identified by a call-out from the port's pie segment. The size of the segment within the pie chart is a proportion of the total inbound utilization of ports within the report during the reporting period.
Outbound utilization %	Outbound utilization of the port as a percentage of the referenced port speed, identified by a call-out from the port's pie segment. The size of the segment within the pie chart is a proportion of the total outbound utilization of ports within the report during the reporting period.
Inbound Volume	Inbound traffic for each port identified by a call-out from the port's pie segment. The size of the segment within the pie chart is a proportion of the total inbound traffic volume of ports within the report during the reporting period.
Outbound Volume	Outbound traffic for each port identified by a call-out from the port's pie segment. The size of the segment within the pie chart is a proportion of the total outbound traffic volume of ports within the report during the reporting period.
Inbound Fault as a % of Packets	Inbound packets with faults displayed as a percentage of total inbound packets on the port, expressed within the pie chart as a proportion of the total inbound faults within the report during the reporting period.
Outbound Fault as a % of Packets	Outbound packets with faults displayed as a percentage of total number of packets transmitted from the port, expressed within the pie chart as a proportion of the total outbound faults within the report during the reporting period.
Inbound Discards as a % of Packets	Discarded inbound packets displayed as a percentage of total inbound packets on the port, expressed within the pie chart as a proportion of the total inbound discards within the report during the reporting period.
Outbound Discards as a % of Packets	Discarded outbound packets displayed as a percentage of total outbound packets on the port, expressed within the pie chart as a proportion of the total outbound discards within the report during the reporting period.

Table 50 Port Statistics Comparison Chart

# Port Utilization, Discards and Faults Chart

#### Entuity Report Port Utilization, Discards and Faults Chart



Description: Chart of utilization, discard and faults percentage of up to 8 ports Over the period 15:25 on Wed Nov 14 2012 - 15:25 on Wed Nov 21 2012 No prime time is set for this report Sample period: 2 hours

Printed on: 21 Nov 2012 15:25:55 GMT

 Device name
 Port description
 Speed (bps)
 Color

 stress-54.ms.entuity.lab
 [AT4/0] ### 74-99849-66 ### STM-1 ###
 149.76 M
 149.76 M
 149.76 M

 stress-54.ms.entuity.lab
 [ATM4/0.0-aal5 layer] ### 74-99849-66 ### STM-1 ###
 149.76 M
 149.76 M
 149.76 M



Figure 21 Port Utilization, Discards and Faults Chart

#### Port Utilization, Discards and Faults Chart Report Overview

The report includes 6 charts, for inbound and outbound utilization, fault and discard data from up to 8 ports.

### Port Utilization, Discards and Faults Chart Report Options

Completing the Report Options allows you to select the ports against which you want to run the report.

Name	Description
Used saved values	Select from saved report configurations.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select view(s)	Entuity view against which the report is to be run. From the list you can select one or more views to run the report against.
Please select device(s)	From the list you can select <b>All Devices</b> , a number of devices or one device to run the report against.
Please select ports	From the list you can select up to 8 ports to run the report against.
Please select the sample period	From the list you can select the report sample period.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 51 Port Utilization Chart Report Options

### Port Utilization, Discards and Faults Chart Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Utilization Chart.
Printed on	Date and time the report was generated.
Description	Description of the report.
Sample Period	The port utilization sample period.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 52 Port Utilization Chart Report Header

Name	Description
Device Name	Identifier of the device, e.g. host name or IP address.
Port Description	Description of the port.
Speed (bits/sec)	The port's referenced interface speed, used for example, when Entuity calculates port utilization.
Color	The line color used to graph the port's values in the subsequent graphs.
Inbound utilization %	Inbound utilization of the port as a percentage of the referenced port speed.
Outbound utilization %	Outbound utilization of the port as a percentage of the referenced port speed.
Inbound Fault as % of Packets	Inbound faults over the reporting period as a percentage of the total number of packets received by the port.
Outbound Fault as % of Packets	Outbound faults over the reporting period as a percentage of the total number of packets transmitted by the port.
Inbound Discards as % of Packets	Inbound discards over the reporting period as a percentage of the total number of packets received by the port.
Outbound Discards as % of Packets	Outbound discards over the reporting period as a percentage of the total number of packets transmitted by the port.

### Port Utilization, Discards and Faults Report Details

Table 53 Port Utilization Chart Details
# **Port Utilization Chart**

#### Entuity Report Port Utilization Chart

Description: Chart of utilization percentage of up to 8 ports Over the period 15:36 on Wed Nov 14 2012 - 15:36 on Wed Nov 21 2012

No prime time is set for this report

Sample period: 2 hours

Printed on: 21 Nov 2012 15:36:49 GMT

Centuity



Figure 22 Port Utilization Chart

#### Port Data Rate Report Overview

The report includes 6 charts, for inbound and outbound utilization, fault and discard data from up to 8 ports.

### Port Utilization Chart Report Options

Completing the Report Options allows you to select the ports against which you want to run the report.

Name	Description
Used saved values	Select from saved report configurations.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select view(s)	Entuity view against which the report is to be run. From the list you can select one or more views to run the report against.
Please select device(s)	From the list you can select <b>All Devices</b> , a number of devices or one device to run the report against.
Please select ports	From the list you can select up to 8 ports to run the report against.
Please select the sample period	From the list you can select the report sample period.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 54 Port Utilization Chart Report Options

### Port Utilization Chart Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Utilization Chart.
Printed on	Date and time the report was generated.
Description	Description of the report.
Sample Period	The port utilization sample period.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 55 Port Utilization Chart Report Header

## Port Utilization Report Details

Name	Description
Device Name	Identifier of the device, e.g. host name or IP address.
Port Description	Description of the port.
Speed (bits/sec)	The port's referenced interface speed, used for example, when Entuity calculates port utilization.
Line Color	The line color used to graph the port's utilization values.
Inbound utilization %	Inbound utilization of the port as a percentage of the referenced port speed.
Outbound utilization %	Outbound utilization of the port as a percentage of the referenced port speed.

Table 56 Port Utilization Chart Details

# Port and CPU Utilization Chart

Device name: 10.66.60.9

#### Entuity Report Port and CPU Utilization Chart



Description: Chart of utilization of up to 8 ports with mean and individual processor CPUs Over the period 00:00 on Fri Nov 30 2012 - 00:00 on Sat Dec 01 2012 No prime time is set for this report Printed on: 1 Dec 2012 00:07:41 GMT

Sample period: 15 minutes



Figure 23 Port and CPU Utilization Chart

#### Port Data Rate Report Overview

The report includes 6 charts, for inbound and outbound utilization, fault and discard data from up to 8 ports. Chart of utilization of up to 8 ports with mean and individual processor CPUs

### Port and CPU Utilization Chart Report Options

Completing the Report Options allows you to select the ports against which you want to run the report.

Name	Description
Used saved values	Select from saved report configurations.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select view(s)	Entuity view against which the report is to be run. From the list you can select one or more views to run the report against.
Please select device(s)	From the list you can select <b>All Devices</b> , a number of devices or one device to run the report against.
Please select ports	From the list you can select up to 8 ports to run the report against.
Please select the sample period	From the list you can select the report sample period.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 57 Port Utilization Chart Report Options

### Port and CPU Utilization Chart Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Utilization Chart.
Printed on	Date and time the report was generated.
Description	Description of the report.
Sample Period	The port utilization sample period.
Over the period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
Device Name	Identifier of the device, e.g. host name or IP address.

 Table 58
 Port and CPU Utilization Chart Report Header

## Port and CPU Utilization Chart Report Details

Name	Description
Device Name	Identifier of the device, e.g. host name or IP address.
Port Description	Description of the port.
Speed (bits/sec)	The port's referenced interface speed, used for example, when Entuity calculates port utilization.
Color	The line color used to graph the port's values.
Inbound utilization %	Inbound utilization of the port as a percentage of the referenced port speed.
Outbound utilization %	Outbound utilization of the port as a percentage of the referenced port speed.
Per processor CPU utilization %	Graphs per processor CPU utilization over the reporting period.

Table 59 Port and CPU Utilization Chart

# **Port Fault Details**



Figure 24 Port Fault Details Report

#### Port Fault Details Report Overview

This report includes two charts showing for the select port a breakdown of faults, specifically:

- a breakdown of inbound faults on the port by fault type, each fault type is represented as a percentage of the total number of inbound packets for the polling sample
- a breakdown of outbound faults on the port by fault type, each fault type is represented as a percentage of the total number of outbound packets for the polling sample.

#### Port Fault Details Report Options

Completing the Report Options allows you to select the port against which you want to run the Port Fault Details report.

Name	Description
Used saved values	Select from saved report configurations.

Table 60 Port Fault Details Report Options

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.
Please select a port	From the drop down list you can select one port to run the report against.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 60 Port Fault Details Report Options

## Port Fault Details Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Fault Details.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
Port	Identifies the device and port against which the report is run. It also details the inbound and outbound speed of the port.

Table 61 Port Fault Details Report Header

## Port Fault Report Details

Fault Type	Description
Abort	Discarded frames indicate insufficient resources for their transmission.

Table 62 Port Inbound Fault Chart

Fault Type	Description
CRC	A cyclic redundancy check (CRC) indicates accidental changes to digital data caused by noise on the network.
Align	Alignment errors indicate a duplex mismatch or a physical problem on the network, for example cabling, a faulty port, hub connected. Alignment errors may also occur when a cable is first connected to the port.
Giant	Giant frames exceed the maximum IEEE 802.3 frame size of 1518 bytes for non-jumbo Ethernet and have a bad Frame Check Sequence (FCS). They may indicate a device with a bad NIC.
Unclassified	Port inbound fault errors outside of the designated categories.

Table 62 Port Inbound Fault Chart

Fault Type	Description
Aborts	Discarded frames indicate insufficient resources for their transmission.
Carrier Loss	Carrier loss indicates the traffic load for the port is excessive and causes the discarding of frames.
Excessive Collisions	An excessive collision occurs when a packet has a collision 16 times in a row. The packet is then dropped. Excessive collisions may indicate the load on the segment should be split across multiple segments, a duplex mismatch with the attached device.
Late Collisions	A late collision indicates two devices transmit at the same time, and neither side of the connection detects a collision as the time to propagate the signal from one end of the network to another is longer than the time to put the entire packet on the network. Late collisions may occur with incorrect cabling, a non-compliant number of hubs in the network or bad NICs.
SQE	A Signal Quality Error (SQE) fault confirms the detection of a collision.
Unclassified	Port outbound fault errors outside of the designated categories.

Table 63 Port Outbound Fault Chart

## **Port Utilization Details**

#### Entuity Report Port Utilization Details

Centuity

Printed on: 5 May 2011 16:51:50 EDT

Description: Ports utilization percentage details over multiple timeframes View: Regional Port: [Se0/1/0] Serial0/1/0 on 10.44.1.59 8 Mb/s

Recent 8 hours @ 5min samples 100 75 50 25 0 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 Recent day @ 5min samples 100 75 50 25 0 18:00 22:00 00:00 10:00 20:00 02:00 04:00 06:00 08:00 12:00 14:00 16:00 Recent week @ hourly samples 100 75 50 25 0 29-Apr 30-Apr 1-May 2-May 3-May 4-May 5-May Recent month @ hourly samples 100 75 50 25 0 7-Apr 14-Apr 21-Apr 28-Apr 5-May Recent year @ daily samples 100 75 50 25 MA 0 May-2010 Jul-2010 Sep-2010 Nov-2010 Jan-2011 Mar-2011 May-2011 Inbound utilization % --- Outbound utilization %



### Port Utilization Details Report Overview

This report provides five charts showing inbound and outbound utilization for the specified port. It can be called:

- By clicking Reports > Activity Reports and then clicking Port Utilization Details report. You must then complete the report options to set the port against which you want to run the report.
- From the Port Bandwidth Capacity Planning Trend report by clicking on Port Description in that report. Entuity runs the Port Utilization Details report using that port and the trend report Report Options.

### Port Utilization Details Report Options

Completing the Report Options allows you to select the port against which you want to run the Port Utilization Details report.

Name	Description
Used saved values	Select from saved report configurations.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.
Please select a port	From the drop down list you can select one port to run the report against.

Table 64 Port Utilization Details Report Options

### Port Utilization Details Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Utilization Chart.
Printed on	Date and time the report was generated.
Description	Description of the report.
Sample Period	The port utilization sample period.

Table 65 Port Utilization Details Report Header

### Port Utilization Report Details

This report provides charts showing inbound and outbound utilization for the specified port over five different reporting periods. These report periods start from when the report is run, and are specifically over the previous:

- eight hours, charting the polled five minute data samples
- twenty-four hours, charting the polled five minute data samples

- seven days, charting hourly rolled up data samples
- thirty days, charting hourly rolled up data samples
- year, charting daily rolled up data samples.

Name	Description
Port	Description of the port and identifier of its device, e.g. host name or IP address. The port's referenced interface speed, used when Entuity calculates port inbound and outbound utilization.
Inbound utilization %	Inbound utilization of the port as a percentage of the referenced port speed.
Outbound utilization %	Outbound utilization of the port as a percentage of the referenced port speed.

Table 66 Port Utilization Details

# Port Utilization Trend Report



Figure 26 Port Utilization Trend Report

### Port Utilization Trend Report Overview

This report graphs predictions for the next six months of port inbound and outbound utilization. Predictions are derived from applying regression analysis to the port's historical utilization data, by default for the last eight weeks, although you can configure it.

### Port Utilization Trend Report Options

Completing the Report Options allows you to select the port against which you want to run the Port Trend report.

Name	Description	
Used saved values	Select from saved report configurations.	
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.	
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.	
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.	
Please select a device	From the drop down list you can select one device to run the report against.	
Please select a port	From the drop down list you can select one port to run the report against.	
Report Period	Period of historical utilization data Entuity uses to generate the utilization trends. When you select:	
	Recent, you specify time period in relation to the time the report is run, e.g. previous eight weeks.	
	<b>Range</b> , you can enter start and end dates and times.	
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.	

Table 67 Port Utilization Report Options

## Port Utilization Chart Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Utilization Chart.
Printed on	Date and time the report was generated.
Description	Description of the report.
Sample Period	The port utilization sample period.
Reporting period	Start and end dates and times over which the report is run.

Table 68Port Utilization Chart Report Header

Name	Description
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 68 Port Utilization Chart Report Header

## Port Utilization Report Details

Name	Description
Device Name	Identifier of the device, e.g. host name or IP address.
Port Name	Description of the port.
Line Speed	Port speed of the line.
Inbound 6 month prediction	Predicted inbound utilization of the port, in six months time, as a percentage of the referenced port speed.
Inbound 12 month prediction	Predicted inbound utilization of the port, in twelve months time, as a percentage of the referenced port speed.
Outbound 6 month prediction	Predicted outbound utilization of the port, in twelve months time, as a percentage of the referenced port speed.
Outbound 12 month prediction	Predicted outbound utilization of the port, in twelve months time, as a percentage of the referenced port speed.
Inbound utilization trend %	Graphs predicted inbound utilization of the port, over the next six months, as a percentage of the referenced port speed.
Inbound utilization %	Inbound utilization of the port over the reporting period, as a percentage of the referenced port speed.
Outbound utilization trend %	Graphs predicted outbound utilization of the port, over the next six months, as a percentage of the referenced port speed.
Outbound utilization %	Outbound utilization of the port over the reporting period, as a percentage of the referenced port speed.

Table 69 Port Utilization Chart Details

# **QoS Utilization Report**

#### Entuity Report QoS Utilization

Printed on:	28 Jun 2011 21:26:41 BST
Description:	QOS Class Utilization
View:	Regional
Device:	10.44.1.236
Port:	[Fa0/0]FastEthernet0/0

Over the period 00:00 on Mon Jun 27 2011 - 00:00 on Tue Jun 28 2011

No prime time is set for this report

#### Pre Policy



Class Name / color	r Description	Min (%)	Max (%)	Average (%)
AutoQoS-Policy- UnTrust (Out) AutoQoS-VoIP-RTP- UnTrust	Match protocol rtp audio Match access-group name AutoQoS-VoIP-RTCP Queue - 70% (70 Mb/s)	0.00 27/06/11 00:00	0.00 27/06/11 00:00	0.00
AutoQoS-Policy- UnTrust (Out) AutoQoS-VoIP-Control- UnTrust	Match access-group name AutoQoS-VoIP-Control Queue - 5% (5 Mb/s)	0.00 27/06/11 00:00	0.00 27/06/11 00:00	0.00
AutoQoS-Policy- UnTrust (Out) AutoQoS-VoIP-Remark	Match ip dscp ef (46) Match ip dscp cs3 (24) Match ip dscp af31 (26) 100 MB/s	0.00 27/06/11 00:00	0.00 27/06/11 00:00	0.00
AutoQoS-Policy- UnTrust (Out) class-default	Match any Queue - fair weighted (100 Mb/s)	0.00 27/06/11 14:00	0.01 27/06/11 21:30	0.01

Figure 27 QoS Utilization Report

### **QoS Utilization Overview**

Delivers utilization graphs across policy map and its classes with pre-policy and post-policy utilization metrics.

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## **QoS Utilization Options**

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Device	Select the device on which you want to run the report.
Port	Port with QoS enabled on the device
Graph Units	Chart used to represent data Percent, KB/s, MB/s.
Report period	Period over which the report applies, by default seven days. When you select:
	Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.
	<b>Range</b> , you can enter start and end dates and times.
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 70 QoS Utilization Options

### **QoS Utilization Header**

Name	Description	
Company Identifiers	Company icon and name defined through the report format.	
Report title	Report title, e.g. IP SLA Echo.	
Printed on	Date and time the report was generated.	
Description	Description of the report.	
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.	
View	Entuity view against which the report was run.	

Table 71 QoS Utilization Header

### **QoS Utilization**

Report includes charts graphing

- pre-policy utilization by class
- post-policy utilization by class
- for each class its pre and post policy utilization.

## **Routing Summary Report**





#### **Routing Summary Report Overview**

Generates a report on all the routers for a view. It presents a summary of each router's performance during the reporting period, measuring performance by Reachability, CPU

utilization, free memory and IP packet throughput. A breakdown of the router's spare ports by LAN, WAN and others is also included.

### **Routing Summary Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description	
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.	
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.	
Please select a device	From the drop down list you can select one device, or <b>All Devices</b> , to run the report against.	
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>	
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.	

Table 72 Routing Summary Report Options

### **Routing Summary Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Routing Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Devices	The number of devices included to the report.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 73 Routing Summary Report Header

## **Routing Summary Report Details**

Name	Description
sysName	Device system name or where not available the IP address.
Location	(SysLocation), or where not available it is left blank.
Manufacturer	Router manufacturer.
Serial Number	Router serial number.
Model	Device model.
Version	Device version number.
Management IP	IP address Entuity uses to poll the device.
Last reboot	Time of the last device reboot.
Polling status	Status of Entuity SNMP polling of the device, i.e. Polling, Non-Polling.
System descr	System description, which for a Cisco device is a parsed sysDescr with model, version and serial number.
Uptime%	The amount of time the router is known to be up, as a percentage of the reporting period.
Unknown uptime	The amount of time Entuity estimates the device was up when Entuity could not poll for its true state.
Outages	Number of outages on the device during the reporting period.
Total Ports (excluding virtual ports)	Number of ports on the device, excluding virtual port.
Spare Ports (excluding virtual ports)	Number of spare ports on the device, excluding virtual port.
Round Trip Latency between Entuity and the device	Round trip latency between Entuity server and the host, in milliseconds.
Average Reachability %	The amount of time the device responds to ping as a percentage of the reporting period.
Aggregate physical port traffic rate	Aggregated physical inbound and outbound traffic on the port.
CPU and memory	Graph charts router CPU utilization and memory usage over the reporting period.
IP routing	IP routing (Packet/S) graph charts router IP packet thruput in packets per second over the report period. Three measures are used, inbound packets, forwarded packets and discarded packets.
Port Faults	Graph charts number of faults on infrastructure ports.

Table 74 Routing Summary Details

Name	Description
BGP local AS	Local AS of the device.

Table 75 Route Peering Details

Name	Description
BGP identifier	Each router running BGP must have a BGP identifier. This identifier is included in the BGP identifier field of open messages, which are sent between two BGP peers when establishing a BGP session
BGP peer count	Number of BGP peers.
OSPF router ID	The unique identifier for the router as defined by the ospf router-id command or the address of the loopback 0 interface.
OSPF admin status	The status of an OSPF interface defines whether routes and/or OSPF protocol packets are propagated over the interface. Status may be active, passive, or off.
OSPF AS border router	Identifies the router as an Autonomous System Border Router, which acts as a gateway between OSPF and external routes. It is these routers that propagate routes to external networks.
OSPF area border router	Identifies the router as one with interfaces in different areas but within the same autonomous system. By collecting mapping information from these area this router can calculate the shortest distances between points.
OSPF TOS support	Indicates whether the router supports TOS.
OSPF peer count	Number of OSPF peers.
BGP peer estab. state transitions	BGP peer has one of six states: Idle, Connect, Active, OpenSent, OpenConfirm, and Established. This attribute indicates the number of state transitions.
OSPF peer state changes	OSPF peer has one of eight states. This attribute indicates the number of state transitions.
EIGRP peer count	Number of EIGRP peers.

Table 75 Route Peering Details

## Switching Summary Report



Figure 29 Switching Summary Report

### Switching Summary Report Overview

Switching Summary reports detail information for one or more selected switches within a selected view.

## **Switching Summary Report Options**

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device, or <b>All Devices</b> , to run the report against.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 76Switching Summary Report Options

### Switching Summary Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Switching Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Devices	The devices included to the report.
Reporting period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 77 Switching Summary Report Header

## **Switching Summary Report Details**

Name	Description
sysName	Switch system name or where not available the IP address.
Location	(SysLocation), or where not available it is left blank.
Manufacturer	Device manufacturer.
Serial Number	Device serial number.
Model	Device model.
Version	Device version number.
Management IP	IP address Entuity uses to poll the device.
Last reboot	Time of the last device reboot.
Polling status	Status of Entuity SNMP polling of the device, i.e. Polling, Non-Polling.
System descr	System description, which for a Cisco device is a parsed sysDescr with model, version and serial number.
Uptime%	The amount of time the switch is known to be up, as a percentage of the reporting period.
Unknown uptime	The amount of time Entuity estimates the device was up when Entuity could not poll for its true state.
Outages	Number of outages on the device during the reporting period.
Total/Host Ports (excluding virtual ports)	Number of ports on the device, excluding virtual port.
Trunk/Uplink Ports (including virtual ports)	Number of infrastructure ports on the device, including virtual port.
Spare Ports (excluding virtual ports)	Number of spare ports on the device, excluding virtual port.
Round Trip Latency between Entuity and the device	Round trip latency between Entuity server and the host, in milliseconds.
Average Reachability %	The amount of time the device responds to ping as a percentage of the reporting period.
Aggregate host port traffic	Aggregated inbound and outbound traffic on the host port.
CPU and memory	Graph charts router CPU utilization and memory usage over the reporting period.
Host Port Faults	Number of faults on the host port.
Infrastructure Port Faults	Number of faults on infrastructure ports.

Table 78 Switching Summary Report Details

Name	Description
Туре	Infrastructure port type, i.e. trunk, uplink.
Speed	The port's referenced interface speed, used for example, when Entuity calculates port utilization. For use in Entuity your System Administrator can amend the port interface speed.
Description	Description of the device and its interface.

Table 79 Infrastructure Connection Details

# **Top-N Devices Reports**

Entuity Report

#### **Top-N Devices**

Printed on:	21 Nov 2012 11:46:13 GMT
Description:	Top 10 devices over the previous hour
View:	Regional

Server: jdiamondnj

#### Traffic Transfer Rate

	Device	Total Traffic (b/s)
10.66.23.77		395.52 Mb/s
10.66.23.61		209.86 Mb/s
lonsw03		26.96 Mb/s
lonsw01		14.06 Mb/s
lonsw02		13.12 Mb/s
bottom2960		2.75 Mb/s
subzero		2.6 Mb/s
lonsolfs02		1.21 Mb/s
lon-dev-tst06		1.14 Mb/s
bottom3550		834.39 Kb/s





### **Top-N Devices Report Overview**

This report identifies the top N, by default ten, devices against these metrics:

- Traffic Rate
- CPU Utilization
- Memory Utilization
- Backplane Utilization

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Buffer Utilization.

For each metric the Top N devices are included to a table, and if selected, their performance on the metric is graphed.

For each report you can specify:

- a server or All servers to run the report against.
- View to run the report against
- maximum number of devices to include to the report
- whether to graph the data.

#### **Top-N Devices Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
ТорN	Number of devices included to the report.
Show Charts	Select to include the graphs for each metric.

Table 80 Top-N Devices Report Options

#### **Top-N Devices Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Routing Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
ΤορΝ	Number of devices included to the report.

Table 81 Top-N Devices Report Header

### **Top-N Devices Report Details**

The Top-N Traffic Rate table displays the ten devices, by default, with the highest traffic throughput during the reporting period. Each row in the table identifies a device and its traffic transfer rate. The optional chart graphs the traffic transfer rate.

Name	Description
Device	Device name or where not available the IP address.
Total Traffic (b/s)	Total inbound and outbound traffic on the device over the reporting period.

Table 82 Top-N Traffic Rate

The CPU Utilization table displays the ten devices, by default, with the highest CPU utilization during the reporting period. Each row in the table details a device and its utilization. The optional chart graphs CPU utilization.

Name	Description
Device	Device name or where not available the IP address.
System Name	The device system name. Depending upon the name length and Entuity hostname configuration this may be the fully qualified domain name.
IP Address	IP address Entuity uses to manage the device.
Utilization % (Avg)	Mean average CPU utilization over the reporting period.
Utilization % (Peak)	Maximum CPU utilization polled over the reporting period.

Table 83 Top-N CPU Utilization

The Memory Utilization table displays the ten devices with the highest memory utilization during the reporting period. Each row in the table details a device and its utilization. The optional chart graphs Memory Utilization.

Name	Description
Device	Device name or where not available the IP address.
System Name	The device system name. Depending upon the name length and Entuity hostname configuration this may be the fully qualified domain name.
IP Address	IP address Entuity uses to manage the device.
Utilization % (Avg)	Mean average memory utilization over the reporting period.
Utilization % (Peak)	Maximum memory utilization polled over the reporting period.

Table 84 Top-N Memory Utilization

The Backplane Utilization table displays the ten devices with the highest backplane utilization during the reporting period. Each row in the table details a device and its utilization. The optional chart graphs Backplane Utilization.

Name	Description
Device	Device name or where not available the IP address.

Table 85 Top-N Backplane Utilization

Name	Description
System Name	The device system name. Depending upon the name length and Entuity hostname configuration this may be the fully qualified domain name.
IP Address	IP address Entuity uses to manage the device.
Utilization % (Avg)	Mean average backplane utilization over the reporting period.
Utilization % (Peak)	Maximum backplane utilization polled over the reporting period.

Table 85 Top-N Backplane Utilization

The Buffer Utilization table displays the ten devices with the highest buffer utilization during the reporting period. Each row in the table details a device and its utilization. The optional chart graphs Buffer Utilization.

Name	Description
Device	Device name or where not available the IP address.
System Name	The device system name. Depending upon the name length and Entuity hostname configuration this may be the fully qualified domain name.
IP Address	IP address Entuity uses to manage the device.
Utilization % (Avg)	Mean average buffer utilization over the reporting period.
Utilization % (Peak)	Maximum buffer utilization polled over the reporting period.

Table 86 Top-N Buffer Utilization

## **Top-N Port Error Rates**

Entuity Report

#### **Top-N Port Error Rates**

Printed on:	21 Nov 2012 11:49:22 GMT
Description:	Top 10 port error rates over previous hour
View:	Regional

Server: jdiamondnj

#### **Transmit Errors**

Device	Port	Outbound Fault
nysw01	[ Et0/1 ]	50.00%
10.66.23.77	[ Lp/4 Eth100/0 ]	49.49%
10.66.23.61	[ 00117 ]	44.05%
10.66.23.77	[AtmMpe/92]	43.73%
10.66.23.61	[ 00058 ]	43.32%
10.66.23.61	[ 00027 ]	39.17%
10.66.23.61	[ 00135 ]	39.06%
10.66.23.61	[ 00050 ]	38.78%
10.66.23.61	[ 00001 ]	37.91%
10.66.23.61	[ 00134 ]	37.76%





#### **Top-N Port Error Report Overview**

The report identifies the ports with the highest transmit errors and packet corruptions during the reporting period rate. You can specify:

- a server or All servers to run the report against.
- View to run the report against.
- number of ports to include against each metric.
- whether to graph the data.

### **Top-N Error Rates Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
ТорN	Number of devices included to the report.
Show Charts	Select to include the Error Rate graphs.

Table 87 Top-N Error Rates Report Options

### **Top-N Error Rates Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Top-N Error Rates.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Server	Entuity server on which the report is run.

Table 88 Top-N Port Error Rates Report Header

### **Top-N Port Error Rates Report Details**

Name	Description
Device	Resolved name or management IP address of the device.
Port	Port identifier.
Outbound Fault	The number of transmit errors as a percentage of the total number of outbound packets during the reporting period (by default the previous hour).

Table 89 Top-N Transmit Errors Report

Name	Description
Device	Resolved name or management IP address of the device.
Port	Port identifier.

Table 90 Top-N Packet Corruption Report

Name	Description
Inbound Fault	The number of inbound errors as a percentage of the total number of inbound packets during the reporting period (by default the previous hour).

Table 90 Top-N Packet Corruption Report

# **Top-N Ports Report**

Entuity Report

#### **Top-N Ports**

Printed on:	21 Nov 2012 11:51:24 GMT
Description:	Top 10 ports over previous hour
View:	Regional

Server: jdiamondnj

#### Inbound Utilization

Device	Port	Utilization (%)
10.66.23.77	[ La/40 ]	48.9%
10.66.23.77	[AtmMpe/91]	46.4%
10.66.23.77	[Lp/2 E1/1]	44.0%
10.66.23.77	[ Ppp/21 ]	42.8%
10.66.23.77	[ Lp/4 Eth100/1 ]	41.2%
10.66.23.61	[ 00212 ]	40.9%
10.66.23.77	[ Ppp/20 ]	39.8%
10.66.23.77	[ Lp/2 E1/1 Chan/0 ]	38.4%
10.66.23.77	[ Lp/3 Eth100/0 ]	37.3%
10.66.23.61	[ 00112 ]	34.5%





### **Top-N Ports Report Overview**

This report identifies the top N, by default ten, ports against these metrics:

- Inbound Utilization
- Outbound Utilization
- Top Talkers

entuity

Top Listeners.

For each report you can specify:

- a server or All servers to run the report against.
- View to run the report against.
- number of ports to include against each metric.
- whether to graph the data.

### **Top-N Ports Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
ТорN	Number of devices included to the report.
Show Charts	Select to include the Error Rate graph.

Table 91 Top-N Ports Report Options

### **Top-N Ports Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Top-N Ports.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Server	Name of the Entuity server collecting the Top-N data.

Table 92 Top-N Ports Report Header

#### **Top-N Ports Report Details**

The Inbound Utilization table displays the ten ports, by default, with the highest inbound utilization during the reporting period. Each row in the table details a port and its utilization. The optional chart graphs inbound utilization.

Name	Description
Device	Device name or where not available the IP address of the port.
Port	Port name.
Utilization % (Avg)	Mean average inbound utilization over the reporting period.
Utilization % (Peak)	Maximum inbound utilization polled over the reporting period.

Table 93 Top-N Inbound Utilization

The Outbound Utilization table displays the ten ports, by default, with the highest outbound utilization during the reporting period. Each row in the table details a port and its utilization. The optional chart graphs outbound utilization.

Name	Description
Device	Device name or where not available the IP address of the port.
Port	Port name.
Utilization % (Avg)	Mean average outbound utilization over the reporting period.
Utilization % (Peak)	Maximum outbound utilization polled over the reporting period.

#### Table 94 Top-N Outbound Utilization

The Top Talker table displays the ten ports, by default, with the highest outbound traffic during the reporting period. Each row in the table details a port and its volume of outbound traffic. The optional chart graphs outbound traffic.

Name	Description
Device	Device name or where not available the IP address of the port.
Port	Port name.
Transferred (b/s)	The total volume of traffic from the port, during the previous hour, by default.

#### Table 95 Top-N Top Talker

The Top Listeners table displays the ten ports, by default, with the highest inbound traffic during the reporting period. Each row in the table details a port and its volume of inbound traffic. The optional chart graphs inbound traffic.

Name	Description
Device	Device name or where not available the IP address of the port.
Port	Port name.
Transferred (b/s)	The total volume of traffic received by the port, during the previous hour, by default.

Table 96 Top-N Top Listeners

# Wireless Controller Summary Report

#### Entuity Report Wireless Controller Summary

Centuity

 Description:
 Summary of Wireless Controllers and their associated APs

 View:
 Regional

 Controllers:
 2

 Over the period
 11:00 on Tues Nov 20 2012 - 11:00 on Wed Nov 21 2012

 No prime time is set for this report

Printed on: 21 Nov 2012 11:59:16 GMT





Figure 33 Wireless Controller Summary Report

#### Wireless Controller Summary Report Overview

Entuity Wireless Controller Summary is useful for:

- cataloging for periodic reconciliation for hardware maintenance contract verification purposes
- Software version consistency checking
WLAN access permissions and restrictions per-antenna.

### Wireless Controller Summary Report Options

Name	Description					
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.					
Please select a view	tuity view against which the report is to be run. From the drop down list ou can select one view to run the report against.					
Please select a device	From the drop down list you can select one or <b>All Devices</b> device to run the report against.					
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>					
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.					

Table 97 Wireless Controller Summary Report Options

#### Wireless Controller Summary Report Header

Name	Description					
Company Identifiers	Company icon and name defined through the report format.					
Report title	Report title, e.g. Wireless Controller Summary.					
Printed on	ate and time the report was generated.					
Description	Description of the report.					
View	Entuity view against which the report was run.					
Controllers	Number of devices included to the report.					
Reporting period	Start and end dates and times over which the report is run.					
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.					

Table 98 Wireless Controller Summary Report Header

#### **Wireless Controller Summary Report Details**

This report includes a:

- table listing the number of each wireless controller models.
- table listing the number of each wireless access point models.
- chart graphing total number of wireless access points per wireless controller.
- chart graphing total wireless connected host count during the reporting period.

- a section for each wireless controller that includes:
  - wireless controller details
  - chart graphing number of APs with similar host counts as measured by mean average and peak number of AP hosts during the reporting period.
  - table where each row identifies an access point associated with the wireless controller.

Name	Description
Wireless Controller Model	Wireless controller model.
Manufacturer	Wireless controller manufacturer.
Count	Number of access points associated with the wireless controller. These APs are detailed in the subsequent table.

Table 99 Wireless Controller Summary

Name	Description				
Access point model	Access point name.				
Count	The number of hosts attached to an antenna associated with the AP.				

Table 100 Associated AP's per Wireless Controller

Name	Description						
Controller name	Access point name.						
Model	ireless controller model.						
Serial Number	Nireless controller serial number.						
IP	P address associated with the wireless controller.						
Location	Location of the wireless controller.						
Associated APs	Number of APs associated with the wireless controller						

Table 101 Wireless Controller Details

Table details wireless attached hosts, and the graph charts number of APs by similar host count.

Name	Description						
Access point name	Access point name.						
Serial Number	ireless controller serial number.						
Model	Wireless controller model.						
IP	IP address associated with the access point.						
Host Count Peak AP	The peak count over the reporting period of hosts attached to this AP.						
Host Count Mean AP	The mean average over the reporting period of hosts attached to this AP.						

Table 102 Wireless Attached Hosts

Name	Description
Host Count Peak Antenna	The peak number of hosts attached to an antenna associated with the AP.

Table 102 Wireless Attached Hosts

# 3 Administrative Reports

Administrative reports allow you to investigate Entuity performance, for example to identify devices not responding to Entuity polling, or when objects were first taken under Entuity management. You can also view the health of the server through a summary report, and polling diagnostics report.

## **Running Administrative Reports**

You can run Administrative reports from the web interface:

- 1) Click **Reports**. Entuity displays the Reports home page.
- 2) Click Administrative Reports. Entuity displays the list of available reports.

	0 er	tuity										User: admin@entk Page Updated:09:	onppvm01 58:45, GMT	(Loqout)
0	ashboards	InSight Center	Explorer	Events	Maps	Charts	Flows	Reports	Tools	Administration	Help			P
	Repor	ts												Î
	reports > Ac	Iministrative												- 1
	Report			Schedule	History	Descri	ption							
	Custom Th	eshold Settings		11	<u> </u>	Thresh	old setting	is that have	been mai	nually overridden				- 1
	Default Ser	ver Threshold Sett	ings	11	<u></u>	Thresh	old setting	is used as se	erver leve	l defaults and view	r level ove	errides		- 1
	Devices Fai	ing SNMP Polling		11	<u></u>	Devices	currently	failing to re	spond to !	SNMP polling				- 1
	Devices SN	MP Response Time		11	<u></u>	Analysis	s of device	s' SNMP res	ponse tim	e				- 1
	Entuity Ser	ver Health Summa	īγ	11	<u></u>	Summa health	iry of perfo status das	ormance cha hboards	iracteristi	cs of the Entuity s	erver and	d copies of the		
	Manageme	nt Start and Views		11	<u></u>	Manage custom	ed Devices view men	with the da	te they w	ere first managed	by Entui	ty and their		
	Polling Diag	nostics		11	<u></u>	Analysis	s of the sti	ream job tim	iings					- 1
	Process Dia	gnostics		11	<u> </u>	Analysis	s of proces	ss performar	nce statis	tics				- 1
	Reports He	aith		11	<u> (1</u>	Status	informatio	n on schedu	led Jaspe	r reports				- 1
	View Comp	arison		11	<u> </u>	Compa	re view co	ntents and i	dentify th	e differences				- 1
	View Hieran	chy		11	<u> (1</u>	View Hi	erarchy ac	cross one or	more Ent	uity servers				- 1
	View Permi	ssions and User Ac	cess Control	11	<u></u>	Provide access	s details o to each de	of user group evice	member	ship, view access	and lists a	all users that have		1
														-

Figure 34 Administrative Reports

## **Custom Thresholds Report**

Entuity Report					
Custom Thresholds					
Printed on:	18 May 2015 16:09:48 BST				
Description:	Threshold settings that have been changed from their default values				
View:	All Objects				
Device:	AllDevices				
Cisco-CIMC (ENTLONPPVM01)					
Cisco-CIMC: Hig	h Total Hits Rate	1.0			
Cisco-CIMC: Hig	h Cluster Current Users	5.0			
Cisco-CIMC: High Current Users 5.0					
Cisco-UCS6120 (ENTLONPP					
PowerSupply-2	Sensor-1": High Temperature	20.0			

Figure 35 Custom Thresholds Report

#### **Custom Thresholds Report Overview**

This report identifies devices with custom thresholds. Each device identified includes a hyperlink to the device Summary page.

#### **Custom Thresholds Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the views in which you are most interested.

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	View against which other view(s) in the report are compared.
Please select a device	The content of this view is compared against the content of First View.

Table 103 Custom Thresholds Report Options

#### **Custom Thresholds Report Header**

Name	Description			
Company Identifiers	Company icon and name defined through the report format.			
Report title	Report title, e.g. Differences between views.			
Printed on	Date and time the report was generated.			

Table 104 Custom Thresholds Report Header

Name	Description
First View	View against which other view(s) in the report are compared.
Second View	The content of this view is compared against the content of First View.
Third View	The content of this view is compared against the content of First View.

Table 104 Custom Thresholds Report Header

## **Custom Thresholds Report Details**

Name	Description
Title	The title of the table identifies the context of the list of devices, for example, Devices in Miami but not Madrid. Where a view does not contain devices that are not found in other views the report does not generate a comparison table.

Table 105 Custom Thresholds Report

## **Default Server Threshold Settings Report**

#### Entuity Report

#### Default Server Level Thresholds

8 entuity

Printed on: 18 May 2015 16:28:55 BST

Description: Threshold settings used as server level defaults and view level overrides

ENTLONPPVM01			
Threshold description	Default value	Enabled by default	Current setting
Access Control	500.0	Disabled	400.0
AP Antenna Attached Host Changes Per Hour High Threshold	256.0	Enabled	
AP Antenna Attached Host Count High	256.0	Enabled	
AP Antenna Attached Host Count Low	0.0	Disabled	
AP Antenna Attached Host Count Low Threshold	2.0	Disabled	
AP Antenna Frequent Change Threshold	3.0	Enabled	
AP Attached Host Changes Per Hour High Threshold	512.0	Enabled	
AP Attached Host Changes Per Hour Low Threshold	0.0	Disabled	
AP Attached Host Count High	512.0	Enabled	
AP Attached Host Count Low	0.0	Disabled	
ATM VCC High Inbound Utilization	80.0	Enabled	
ATM VCC High Outbound Utilization	80.0	Enabled	
ATM VCC Low Inbound Utilization	0.0	Enabled	
ATM VCC Low Outbound Utilization	0.0	Enabled	
Backplane Bus A High Utilization	50.0	Enabled	
Backplane Bus B High Utilization	50.0	Enabled	
Backplane Bus C High Utilization	50.0	Enabled	
Backplane System Bus High Utilization	50.0	Enabled	
BladeCenter Blade +1.5V Rail High Voltage	1575.0	Enabled	
BladeCenter Blade +1.5V Rail Low Voltage	1425.0	Enabled	
BladeCenter Blade +1.25V Rail High Voltage	1313.0	Enabled	
BladeCenter Blade +1.25V Rail Low Voltage	1188.0	Enabled	
BladeCenter Blade +2.5V Rail High Voltage	2625.0	Enabled	
BladeCenter Blade +2.5V Rail Low Voltage	2375.0	Enabled	
BladeCenter Blade +3.3V Rail High Voltage	3465.0	Enabled	
BladeCenter Blade +3.3V Rail Low Voltage	3135.0	Enabled	
BladeCenter Blade +5V Rail High Voltage	5250.0	Enabled	
BladeCenter Blade +5V Rail Low Voltage	4750.0	Enabled	
BladeCenter Blade +12V Rail High Voltage	12600.0	Enabled	
BladeCenter Blade +12V Rail Low Voltage	11400.0	Enabled	
BladeCenter Blower Slow Speed	50.0	Enabled	
BladeCenter Chassis +1.8V Rail High	1890.0	Enabled	
BladeCenter Chassis +1.8V Rail Low	1/10.0	Enabled	
BladeCenter Chassis +2.5V Rall High	2625.0	Enabled	
BladeCenter Chassis +2.3V Rall Low	23/5.0	Enabled	
BiadeCenter Chassis +3.3V Rail Figh	3403.0	Enabled	
BladeCenter Chassis +5./ Pail Ligh	5250.0	Enabled	
BladeCenter Chassis +5V Rail Law	4750.0	Enabled	
BladeCenter Chassis +12V Rail High	12600.0	Enabled	
BladeCenter Chassis +12V Rail Low	11400.0	Enabled	
BladeCenter Chassis -5V Rail High	5250.0	Enabled	
BladeCenter Chassis -5V Bail Low	4750.0	Enabled	
Class Bit Drop Rate High Threshold	100000.0	Disabled	
Class Bit Rate High Threshold	500000.0	Disabled	
Class Drop Packet Hourly Rate (Buffer Shortage) High Threshold	10.0	Disabled	
CPU1	50.0	Enabled	
CPU2	50.0	Enabled	
CUCM Process CPU Usage (%)	80.0	Enabled	
CUCM Process Memory Usage (%)	20.0	Enabled	
DASD1	50.0	Enabled	
Device Average CPU Utilization Critical	90.0	Enabled	95.0
Device Average CPU Utilization High	80.0	Enabled	85.0
Device Average Memory Usage Critical	90.0	Enabled	
Device Average Memory Usage High	80.0	Enabled	
Device High Active Sessions	1000.0	Disabled	
Device High Messages Received	1000.0	Disabled	
Device Low Disk Space (%)	90.0	Disabled	
Device Reachability	90.0	Disabled	
Falling Latency	30.0	Disabled	
Firewall High Accepted Packet Rate	1000.0	Disabled	
Firewall High Current Connections	1000.0	Disabled	
Filewali Fiuli Drodded Packet Rate	1000.0	Disabled	

Figure 36 Default Server Threshold Settings Report

#### **Default Server Threshold Settings Report Overview**

This report identifies by selected Entuity server the state of each threshold setting (whether enabled or disabled), its default threshold value and if set any custom threshold value.

### **Default Server Threshold Settings Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the views in which you are most interested.

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.

Table 106 Default Server Threshold Settings Report Options

#### **Default Server Threshold Settings Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Differences between views.
Printed on	Date and time the report was generated.
Server	Entuity server.

Table 107 Default Server Threshold Settings Report Header

### **Default Server Threshold Settings Report Details**

Name	Description
Threshold description	Name of the threshold.
Default value	Threshold factory default.
Enabled by default	Indicates whether the factory default is for the threshold to be enabled or disabled.
Current Setting	Only lists a value when the threshold has a server or view level override.

Table 108 Default Server Threshold Settings Report

## **Devices Failing SNMP Polling Report**

E ntuity Rep	port					
Devices Currently Failing to Respond to SNMP Polling				entuity		
Printed on: 8 Oct 2009 20:53:41 BST Description: Devices that failed their most recent SNMP poll for sysUpTime View: Regional						
	Device name	IP address	Device type	Manufacturer / Model	Last successful SNMP poll	Reachable
sam2150		10.44.1.60	Ethernet Switch	Hewlett Packard / A.03.15	Fri Sep 18 18:58:00 2009	No



#### **Devices Failing SNMP Polling Report Overview**

This report details devices currently failing to respond to SNMP polling and whether they are ping reachable.

#### **Devices Failing SNMP Polling Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 109 Devices Failing SNMP Polling Report Options

#### **Devices Failing SNMP Polling Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Devices Failing SNMP Polling.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 110 Devices Failing SNMP Polling Report Header

## Devices Failing SNMP Polling Report Details

Name	Description		
Device Name	IP address or system name for the managed device.		
Entuity Server	Entuity server managing the device.		
IP Address	IP address Entuity uses to poll the device.		
Device Type	The device type.		
Manufacturer / Model	Device manufacturer and model.		
Last Successful SNMP Poll	Time of the last polled system uptime taken from the device.		
Reachable	Indicates whether the polled IP address is currently reachable (Yes) or not (No). Devices that respond to ping are considered reachable		

Table 111 Devices Failing SNMP Polling Report

## **Devices SNMP Response Time Report**

Entuity Rep	ort SNMP Re	esponse T	ïme				entuity
Printed on:       Over the period 05:00 on Tue Oct 15 2013 - 05:00 on Wed Oct 16 2013         Description:       Analysis of devices' SNMP response time         View:       My Network         TopN:       10         Sorted By:       Percentage Waiting							
Device	e name	Device type	Manufacturer / Model	Percentage Waiting (%)	Response Time (ms)	Success Rate (per sec)	Failure Rate (per sec)
entlonsw01		Ethernet Switch	cisco / WS-C3750X-48P-L	49.023	262.098	2.519	0.000
lonsw05		Ethernet Switch	cisco / C2950XL	6.731	774.263	0.294	0.001
bsw1		Ethernet Switch	cisco / 8-port	1.893	255.527	0.287	0.000
entlonsw03		Ethernet Switch	cisco / WS-C3750X-48P-L	1.627	13.009	2.140	0.000
gw-gns3		Router	cisco / CISCO7206VXR	0.733	20.126	0.399	0.000
entlonsw02		Ethernet Switch	cisco / WS-C3750X-24P-L	0.659	7.097	1.166	0.000
lonswdsk2		Ethernet Switch	cisco / 8-port	0.623	13.356	0.354	0.000
10.44.63.2		Router	cisco / 3620	0.556	17.088	0.354	0.000
bottom3550		Ethernet Switch	cisco / WS-C3550-24-EMI	0.521	4.903	1.131	0.000
10.44.44.44		Router	cisco / 3640	0.487	11.081	0.530	0.000



#### **Devices SNMP Response Time Report Overview**

This report details the responsiveness of devices to requests from Entuity. It is intended for use by Entuity Support when troubleshooting performance issues.

#### **Devices SNMP Response Time Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description	
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.	
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.	
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.	
Sort by	You can sort the report on one of these attributes:  Percentage Waiting  Response Time  Success Rate  Failure Rate.	

Table 112 Devices SNMP Response Time Report Options

Name	Description
TopN (0=all)	The number of devices included to the report. By default this is set to the top 10 devices as measured on the selected <i>Sort by</i> metric.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 112 Devices SNMP Response Time Report Options

### **Devices SNMP Response Time Report Header**

Name	Description			
Company Identifiers	Company icon and name defined through the report format.			
Report title	Report title, e.g. Devices SNMP Response Time.			
Printed on	Date and time the report was generated.			
Description	Description of the report.			
View	Entuity view against which the report was run.			
Sorted by	The column on which the report is sorted:			
	Percentage Waiting			
	Response Time			
	Success Rate			
	Failure Rate.			
TopN (0=all)	The number of devices included to the report.			

Table 113 Devices SNMP Response Time Report Header

## **Devices SNMP Response Time Report Details**

Name	Description
Device Name	IP address or system name for the managed device.
Device Type	The device type.
Manufacturer / Model	Device manufacturer and model.
Percentage Waiting (%)	The average time Entuity spent waiting for a response to its SNMP requests to a device expressed as a percentage of the total report period. A higher percentage may indicate a higher load on the device.
Response Time (ms)	The average time over the reporting period between the SNMP request being sent by the Entuity server to a device and it receiving a response.
Success Rate (per sec)	The rate of successful SNMP requests to the device over the reporting period.
Failure Rate (per sec)	The rate of failed SNMP requests to the device over the reporting period.

Table 114 Devices SNMP Response Time Report

Entuity

## **Entuity Server Health Summary Report**

#### E ntuity Report

#### Entuity Server Health Summary

Centuity

Printed on: 21 Nov 2009 12:35:40 GMT

Description: Performance characteristics of the E ntuity server Over the period 00:00 on Fri Nov 20 2009 - 00:00 on Sat Nov 21 2009 No prime time is set for this report



Figure 39 Entuity Server Health Summary Report

#### **Entuity Server Health Summary Report Overview**

This report is a summary of the health of the Entuity server, useful when investigating issues of Entuity server performance. It comprises of a number of sections, each section focuses on

a particular aspect of Entuity server, health, e.g. Database Health, License Health, Server Process Health. These sections also correspond with the Health pages available from the web UI.

### **Entuity Server Health Summary Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description		
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.		
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. last seven days.</li> <li>Range, you can enter start and end dates and times.</li> </ul>		

Table 115 Entuity Server Health Summary Report Options

### Entuity Server Health Summary Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Entuity Server Health Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
Report period	Start and end dates and times over which the report is run.
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 116 Entuity Server Health Summary Report Header

## **Entuity Server Health Summary Report Details**

Name	Description
Device kernel CPU utilization %	Graphs user CPU and system CPU utilization over the report period.
System memory availability (MBytes)	Graphs available physical memory and available swap space over the report period.
Data kernel memory utilization (KBytes)	Graphs resident set size and page file/process size over the report period.

Table 117 Entuity Server Health Summary Report

### Entuity Server Process Health

Process health section indicates the health of processes within Entuity. The status indicator icon is set to:

- Warning, when 1 or more processes are down (permanently) no matter when that happened or 1 or more processes restarted in the last hour.
- Severe, when 2 or more processes are down (permanently) in the last hour or 2 or more processes restarted in the last hour.

Name	Description	
Entuity start time	Date and time of the last Entuity start up.	
Entuity up time	The length of time the device has been up since its last start up.	
Name	Name of the process	
Critical	Indicates whether the process is critical to Entuity.	
Status	Current status of the process.	
Restarts	Number of process restarts since Entuity started.	
Last restart	Date and time the process last restarted.	

Table 118 Process Health

#### **Entuity Server License Health**

License health section indicates the health of processes within Entuity. The status indicator icon is set to:

- Warning: a running subsystem has a license that expires in 3014 days or the license usage reaches 90.0%
- Severe: a running subsystem has no license, the license has expired or the license usage reaches 100.0%.

Name	Description		
Server	Name of the Entuity server.		
Entuity Core Expiry	Date and time the current license for the main, i.e. not modules or integrations, Entuity processes expires.		

Table 119 License Health

Name	Description
Resources	Licenses can be object based or device based.
Total	Number of license credits assigned to the resource.
Used	Number of used license.
Available	Number of available license credits, e.g. it indicates how many more devices can be managed.

Table 120 License Usage

Name	Description
Expiry	Date and time the current license for this resource expires. Expiry dates for all components of a license are usually the same, but can differ.

Table 120 License Usage

Name	Description
Name	Licenses can be object based or device based.
Enabled	Number of license credits assigned to the resource.
Expiry	Date and time the current license for this component expires. Expiry dates for all components of a license are usually the same, but can differ.

Table 121 License Component Usage

#### **Entuity Server Database Health**

From the Database Health section you can monitor the performance of the Entuity database. These health metrics are intended for Entuity representatives, or advanced users, intending to investigate performance problems or tune performance:

- Database Uptime, amount of time since database last start.
- Slow Queries, high values identify possible opportunities for database query optimization.
  - Past Hour, number of queries in the past hour that exceeded the slow query threshold.
  - Average Per Hour, hourly average since the last database restart, of queries that exceeded the slow query threshold.
  - Past 24 Hours, number of queries in the past twenty-four hours that exceeded the slow query threshold.
  - Average per 24 Hours, daily average since the last database restart, of queries that exceeded the slow query threshold.
  - a slow query identifies number of slow queries in past hour and past 24 hours with corresponding averages (averages are calculated since database start).

A large number of slow queries corresponds to a large database load. Where there is a significant deviation of the current number of slow queries from the server's average, this indicates an abnormal database loading that may require investigation.



Slow queries are defined as a query that takes longer the set value. The minimum and default values of long query time are 1 and 15 seconds, respectively.

- Key Cache:
  - Size, size of the configured key cache.
  - Hits in Past 24 Hours, cache-hit percentage in the past 24 hours. Low hit percentage indicates the need in increasing of the cache size.
- Table Cache:
  - Size, current table cache size.

- Tables Opened in Past 24 Hours, daily table open rate over the previous day.
- Average Per 24 Hours, daily average since the last database restart, of table access

A large number of opened tables, or an increase compared to the average indicates the need to increase the table cache.

- Table Lock Acquisitions:
  - Total, number of table lock acquisitions over the previous hour and twenty-four hours.
  - Immediate, number of immediate table lock acquisitions over the hour and twenty-four hours.
  - Waited, number of table delayed lock acquisitions over the previous hour and twentyfour hours.

A large percentage of waited lock acquisitions indicates a large database load.

- Threads:
  - Non-Sleeping, number of current non-sleeping lock threads and average since the last database restart.
  - Waiting on User Lock, number of current waiting on user lock threads and average since the last database restart.

Large numbers and higher deviations from the average indicate a higher current load.

- Maximum Open Connections, the maximum number of open connections since the last database restart. A higher number of open connections indicates higher database utilization.
- Current Open Connections, the current number of open connections. A higher number of open connections indicates higher database utilization.
- Average per 24 Hours, the average daily number of open connections since the last database restart.

A higher number of open connections indicates higher database utilization.

- Overall Status, summary state of Entuity Database Health:
  - **OK**, performance is within acceptable boundaries.
  - Warning, the number of slow queries in the past hour is larger than the corresponding average by five or more.

## Management Start Date and Custom View Memberships Report

Entuity Rep	port				
Management Start Date and Custom View Memberships					
Printed on: Description:	n: 5 Nov 2013 21:11:34 GMT				
devices View	: Mv Networ	k		g	
Device name	,	IP address	Managed since	Custom views	
10.200.5.1		10.200.5.1	9/3/13 3:41 PM		
10.200.5.4		10.200.5.4	9/3/13 3:41 PM	Berlin Office	
10.200.5.6		10.200.5.6	9/3/13 3:41 PM		
10.44.44.44		10.44.44.44	9/3/13 3:41 PM		
10.44.63.2		10.44.63.2	9/3/13 3:41 PM		
10.66.18.1		10.66.18.1	9/3/13 3:41 PM		
10.66.51.1		10.66.51.1	10/24/13 4:54		
10.66.51.7		10.66.51.7	10/24/13 5:09		
10.66.60.1		10.66.60.1	9/3/13 3:41 PM		
10.66.60.4		10.66.60.4	9/3/13 3:41 PM	London	
10.66.60.5		10.66.60.5	9/3/13 3:41 PM		
10.66.70.5		10.66.70.5	9/3/13 3:41 PM		
HPCOL1		10.44.1.62	9/3/13 3:47 PM		
bsw1		10.44.1.102	9/3/13 3:41 PM	Berlin Office	
entlonsw01		10.44.1.27	9/3/13 3:47 PM	Berlin Office	
entlonsw03		10.44.1.29	9/3/13 3:47 PM		
eolus		10.44.1.77	9/3/13 3:47 PM		
gw-gns3		10.44.1.117	9/3/13 3:47 PM		
lonswdsk2		10.44.1.194	9/3/13 3:47 PM		

Figure 40 Management Start Date / Custom View Memberships

#### Management Start Date and Custom View Memberships Report Overview

This report provides an inventory of devices under Entuity management, summary of managed devices and the views to which they belong.

#### Management Start Date and Custom View Memberships Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one, or <b>All Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 122 Management Start Date and Custom View Memberships Report Options

### Management Start Date and Custom View Memberships Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Management Start Date and Custom View Memberships.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 123 Management Start Date and Custom View Memberships Report Header

### Management Start Date and Custom View Memberships Report Details

Name	Description
Device Name	IP address or system name for the managed device.
IP Address	IP address Entuity uses to poll the device.
Managed Since	The date from which Entuity managed the device.
Custom Views	User defined views of which the device is a member.

Table 124 Management Start Date and Custom View Memberships Report

## **Polling Diagnostics Report**

#### Entuity Report Polling Diagnostics

 Printed on:
 5 Nov 2013 21:17:44 GMT

 Description:
 Analysis of stream job timings

 Over the period 00:00 on Tue Oct 29 2013 - 00:00 on Tue Nov 05 2013

#### **Overrun Streams Summary**

Stream Name	Avg Overrun %	Avg Duration (S)	Avg Duration 95th (S)	Avg Wait (S)
chassisman	1.00	16.63	45.13	0.00

### Job Timings Details

AgentRebootTime		Average Overrun	=0.00% Instance Coun	t=1 Period=300s
Time slice period	Overrun %	Duration mean (S)	Duration 95th	Wait (S)
0:00 to 2:59	0.00	0	0	0
3:00 to 5:59	0.00	0	0	0
6:00 to 8:59	0.00	0	0	0
9:00 to 11:59	0.00	0	1	0
12:00 to 14:59	0.00	0	0	0
15:00 to 17:59	0.00	0	1	0
18:00 to 20:59	0.00	0	0	0
21:00 to 23:59	0.00	0	0	0
DeviceMPLS		Average Overrun	=0.00% Instance Coun	t=5 Period=300s
Time slice period	Overrun %	Duration mean (S)	Duration 95th	Wait (S)
0:00 to 2:59	0.00	3	9	0
3:00 to 5:59	0.00	3	8	0
6:00 to 8:59	0.00	3	9	0
9:00 to 11:59	0.00	3	9	0
12:00 to 14:59	0.00	3	5	0
15:00 to 17:59	0.00	3	9	0
18:00 to 20:59	0.00	3	9	0
21:00 to 23:59	0.00	3	9	0
DiscoveredModulesS	tream	Average Overrun	=0.00% Instance Coun	t=19 Period=300s
Time slice period	Overrun %	Duration mean (S)	Duration 95th	Wait (S)
0.001 0.50	0.00	0	0	0
0:00 to 2:59	0.00	0		0
3:00 to 5:59	0.00	0	õ	0
3:00 to 5:59 6:00 to 8:59	0.00 0.00 0.00	0	0	0 0
0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59	0.00 0.00 0.00 0.00	0 0 0	0 0 0	0 0 0
0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 12:00 to 14:59	0.00 0.00 0.00 0.00 0.00	0 0 0 0	0 0 0 0	0 0 0 0
0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 12:00 to 14:59 15:00 to 17:59	0.00 0.00 0.00 0.00 0.00 0.00	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 12:00 to 14:59 15:00 to 17:59 18:00 to 20:59	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0
0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 12:00 to 14:59 15:00 to 17:59 18:00 to 20:59 21:00 to 23:59	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0 0 0 0 0 0 0		
0:00 to 2:59 3:00 to 5:59 9:00 to 11:59 12:00 to 14:59 15:00 to 17:59 18:00 to 20:59 21:00 to 23:59 FanValueStream	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0
0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 12:00 to 14:59 15:00 to 77:59 18:00 to 20:59 21:00 to 23:59 FanValueStream Time slice period	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 1 8 Period=900s Wait (S)
0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 1:200 to 14:59 15:00 to 17:59 18:00 to 20:59 21:00 to 23:59 FanValueStream Time slice period 0:00 to 2:59	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 t=8 Period=900s Wait (S) 0
0:00 to 2:59 3:00 to 5:59 9:00 to 11:59 12:00 to 14:59 15:00 to 17:59 18:00 to 20:59 21:00 to 23:59 FanValueStream <u>Time slice period</u> 0:00 to 2:59 3:00 to 5:59	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0:00 to 2:59 3:00 to 5:59 9:00 to 11:59 12:00 to 14:59 15:00 to 17:59 18:00 to 20:59 21:00 to 23:59 <b>FanValueStream</b> <b>Time slice period</b> 0:00 to 2:59 3:00 to 5:59 6:00 to 8:59	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 t=8 Period=900s Wait (S) 0 0 0
0:00 to 2:59 3:00 to 5:59 9:00 to 11:59 1:20 to 14:59 15:00 to 17:59 18:00 to 20:59 21:00 to 23:59 <b>FarValueStream</b> <b>Time slice period</b> 0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 t=8 Period=900s Wait (S) 0 0 0 0 0 0
0:00 to 2:59 3:00 to 5:59 9:00 to 11:59 12:00 to 14:59 15:00 to 77:59 18:00 to 20:59 21:00 to 23:59 <b>FanValueStream</b> <b>Time slice period</b> 0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 12:00 to 14:59	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 t=8 Period=900s Wait (S) 0 0 0 0 0 0 0
0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 12:00 to 14:59 15:00 to 77:59 18:00 to 20:59 21:00 to 23:59 <b>FanValueStream</b> <b>Time slice period</b> 0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 12:00 to 14:59 15:00 to 17:59	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	t=8 Period=900s Wait (S) 0 0 0 0 0 0 0 0 0
0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 15:00 to 17:59 18:00 to 20:59 21:00 to 23:59 <b>FanValueStream</b> <b>Time slice period</b> 0:00 to 2:59 3:00 to 5:59 6:00 to 8:59 9:00 to 11:59 12:00 to 11:59 12:00 to 17:59 18:00 to 20:59	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

#### Figure 41 Polling Diagnostics Report

Centuity

### **Polling Diagnostics Report Overview**

This report provides information useful for diagnostic investigation of irregularities in Entuity polling streams. As a diagnostic report it is intended for use under guidance of your Entuity representative.

#### **Polling Diagnostics Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. last seven days.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 125 Polling Diagnostics Report Options

### **Polling Diagnostics Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Polling Diagnostics.
Printed on	Date and time the report was generated.
Description	Description of the report.
Over the period	Start and end dates and times over which the report is run.

Table 126 Polling Diagnostics Report Header

## **Polling Diagnostics Report Details**

Na	me	Description
Job Name		The particular stream's name, e.g. rnewsPort.
Period		The stream's polling interval.
Time Slice F	Period	Start and end time for the stream performance.

Table 127 Polling Diagnostics Report

Name	Description
Overrun %	The number of times that the stream overran, i.e. was still running when it is scheduled to run again, as a percentage of the total number of stream instances during <i>Time Slice Period</i> . The over running stream instance is allowed to complete, but the next scheduled instance of the stream is not run.
Duration mean (s)	Mean average of the time of stream duration during <i>Time Slice Period</i> .
Duration 95th Percentile	95th percentile of the time of stream duration during <i>Time Slice Period</i> .

Table 127 Polling Diagnostics Report

## **Process Diagnostics Report**

#### Entuity Report

**Process Diagnostics** 

 Printed on:
 5 Nov 2013 20:43:35 GMT

 Description:
 Analysis of process performance statistics

 Over the period 00:00 on Fri Nov 01 2013 - 00:00 on Tue Nov 05 2013

### Performance Statistics Summary

#### Number of CPU = 1 (Max CPU = 100%)

Process Name	Start Time	Virtual Memory (MB)	Resident Set Memory (MB)	User CPU	System CPU (%)	Read Bytes (MB/s)	Write Bytes (MB/s)
applicationmonitor	Sun Nov 03 11:19:41 GMT 2013	526.45	25.26	0.01	0.01	0.05	0.01
database	Sun Nov 03 11:18:56 GMT 2013	880.17	540.06	0.88	0.16	26.73	5.11
diskmonitor	Sun Nov 03 11:19:56 GMT 2013	17.61	1.80	0.00	0.00	0.00	0.00
dskernel	Sun Nov 03 11:19:21 GMT 2013	506.36	95.43	0.69	0.09	0.16	0.60
eosserver	Sun Nov 03 11:20:16 GMT 2013	743.55	143.15	0.57	0.13	0.28	2.37
eventEngine	Sun Nov 03 11:19:16 GMT 2013	1592.20	127.05	0.98	0.24	0.35	0.08
eyepoller	Sun Nov 03 11:19:46 GMT 2013	375.86	23.32	0.04	0.03	2.59	0.01
flowCollector	Sun Nov 03 11:20:06 GMT 2013	1013.69	80.81	0.27	0.07	0.34	0.00
flowserver	Sun Nov 03 11:20:26 GMT 2013	21.11	2.24	0.00	0.00	0.00	0.00
licenseserver	Sun Nov 03 11:19:06 GMT 2013	16.70	2.14	0.00	0.00	0.00	0.00
macScheduler	Sun Nov 03 11:20:01 GMT 2013	231.25	2.86	0.00	0.00	30.30	0.02
prologV2	Sun Nov 03 11:19:36 GMT 2013	339.62	12.21	0.00	0.00	0.03	0.00
scheduler	Sun Nov 03 11:19:26 GMT 2013	18.73	2.09	0.00	0.00	7.19	0.01
search	Sun Nov 03 11:20:21 GMT 2013	191.47	30.06	0.02	0.01	0.00	0.26
syslogger	Sun Nov 03 11:19:51 GMT 2013	101.20	2.89	0.00	0.00	0.00	0.00
ticker	Sun Nov 03 11:19:31 GMT 2013	241.79	3.58	0.00	0.00	0.00	0.00
tomcat	Sun Nov 03 11:20:11 GMT 2013	1632.30	354.60	0.48	0.05	1.78	0.05
viewserver	Sun Nov 03 11:19:11 GMT 2013	210.03	4.11	0.00	0.00	0.00	0.00
webserver	Sun Nov 03 11:19:01 GMT 2013	70.93	2.74	0.00	0.00	0.24	0.25
virtualization	Sun Nov 03 11:20:31 GMT 2013	1011.59	60.15	0.07	0.01	0.06	0.00

Figure 42 Process Diagnostics Repo	s Diagnostics Report
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Centuity



#### database

Figure 43 Process Diagnostics Process Charts

#### **Process Diagnostics Report Overview**

This report provides information useful for diagnostic investigation of irregularities in Entuity processes. As a diagnostic report it is intended for use under guidance of your Entuity representative.

### **Process Diagnostics Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. last seven days.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 128 Process Diagnostics Report Options

### **Process Diagnostics Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Process Diagnostics.
Printed on	Date and time the report was generated.
Description	Description of the report.
Over the period	Start and end dates and times over which the report is run.

Table 129 Process Diagnostics Report Header

## **Process Diagnostics Report Details**

Report includes:

- A Performance Statistics Summary table, with each row in the table providing a precis of an Entuity process' performance at the time the report is run.
- For each process in the table a set of 4 Performance Statistics Charts; Memory, CPU Time, Read Bytes and Write Bytes, graph performance over the reporting period.

Name	Description
Process Name	The particular process name, e.g. diskmonitor.
Start Time	The date and time the process started.
Virtual Memory (MB)	Average processor virtual memory usage over the reporting period.
Resident Set Memory (MB)	Average processor resident set memory usage over the reporting period.
User CPU (%)	Average user CPU usage as a percentage of total CPU over the reporting period.
System CPU (%)	Average system CPU usage as a percentage of total CPU over the reporting period.

Table 130 Performance Statistics Summary

Name	Description
Read Bytes (MB/s)	Average processor reads, in MB per second, over the reporting period.
Write Bytes (MB/s)	Average processor writes, in MB per second, over the reporting period.

Table 130 Performance Statistics Summary

## **Reports Health Report**

#### Entuity Report

#### Reports Health

entuity

Printed on: 7 Dec 2015 17:04:26 GMT Description: Status information on scheduled Jasper reports Over the period 17:04 on Sun Dec 06 2015 - 17:04 on Mon Dec 07 2015

Report	User Defined	Owner	Run Count	OK Count	Fail Count	Mean Time	Max Time	Total Time
CPU Utilization Details	No	admin	19	19	0	00:00:00	00:00:01	0d, 00:00:04
Polling Diagnostics	No	admin	4	4	0	00:00:53	00:00:55	0d, 00:03:34
View Permissions and User Access	No	admin	19	19	0	00:00:01	00:00:03	0d, 00:00:21

Figure 44 Reports Health Report

#### **Reports Health Report Overview**

This report identifies the performance of scheduled reports, reporting on their success and failure and the time taken to complete. The report is intended to highlight poorly performing reports, many reports may complete within one second and therefore return a legitimate mean time of 0:00:00. Other reports on large installations may legitimately take a long time to complete this report. Reports Health report can indicate which ones they are and that you may be advised to schedule them when your network is quiet (and therefore the load on Entuity is reduced).

By default Entuity retains the history of the last 20 scheduled jobs for each scheduled report definition. If the scheduled report runs more often than that within the report period the report can only report on the last 20 samples.

#### **Reports Health Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the views in which you are most interested.

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Report Period	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.

Table 131 Reports Health Report Options

#### **Reports Health Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.

Table 132 Reports Health Report Header

Name	Description
Report title	Report title, e.g. Reports Health.
Printed on	Date and time the report was generated.
Over the period	Reporting period.

Table 132 Reports Health Report Header

## **Reports Health Report Details**

Name	Description
Report	Name of the schedule report. This is also a hyperlink to the report's scheduled history.
User Defined	Indicates whether the report schedule is user defined or not.
Owner	User that scheduled the report,
Run Count	Number of times the report has run.
OK Count	Number of times the report has run successfully.
Fall Count	Number of times the report has failed to complete.
Mean Time	Average mean time the report has taken to complete.
Max Time	Maximum time the report has taken to complete.
Total Time	Total time the report has taken to complete.

Table 133 Reports Health Report

## **View Comparison Report**

E ntuity Report

#### **Differences between views**

Centuity

Printed on: 15 Nov 2011 10:13:32 GMT First view: Madrid Second view: Miami Third view:

	Devices in Madrid but not Miami	
10.44.1.118		
10.44.1.164		
	Devices in Miami but not Madrid	
bottom2960		
lonsw02		
pluto		



#### **View Comparison Report Overview**

This report compares the list of devices currently within two, optionally three, views. It then details for each view the devices it includes that aren't included to the comparison view.

#### **View Comparison Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the views in which you are most interested.

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
First View	View against which other view(s) in the report are compared.
Second View	The content of this view is compared against the content of First View.
Third View (optional)	The content of this view is compared against the content of First View.

Table 134 View Comparison Report Options

#### **View Comparison Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.

Table 135 View Comparison Report Header

Name	Description
Report title	Report title, e.g. Differences between views.
Printed on	Date and time the report was generated.
First View	View against which other view(s) in the report are compared.
Second View	The content of this view is compared against the content of First View.
Third View	The content of this view is compared against the content of First View.

Table 135 View Comparison Report Header

### **View Comparison Report Details**

Name	Description
Title	The title of the table identifies the context of the list of devices, for example, Devices in Miami but not Madrid. Where a view does not contain devices that are not found in other views the report does not generate a comparison table.

Table 136 View Comparison Report

## **View Hierarchy Report**

Entuity Report

#### View Hierarchy

Printed on: 18 May 2015 15:33:41 BST

Description: View Hierarchy across one or more Entuity servers

View	Read Only	Manually Populated	Servers
All Objects	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (admin)	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (emmabrown)	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (jamessmith)	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (juangarcia)	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (kofiyeboah)	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (mariaperez)	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (meichen)	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (nanatoure)	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (rilee)	Yes	No	century.entuity.local, ENTLONPPVM01
My Network (user)	Yes	No	century.entuity.local, ENTLONPPVM01
Africa	No	Yes	century.entuity.local, ENTLONPPVM01
Africa/Cairo	No	Yes	century.entuity.local
Africa/Lagos	No	Yes	century.entuity.local, ENTLONPPVM01
Americas	No	Mixed	century.entuity.local, ENTLONPPVM01
Americas/New York	No	Mixed	century.entuity.local, ENTLONPPVM01
Asia	No	Yes	century.entuity.local, ENTLONPPVM01
Asia/peking	No	Yes	century.entuity.local
Europe	No	No	century.entuity.local, ENTLONPPVM01
Europe/London	No	Yes	century.entuity.local, ENTLONPPVM01
Europe/Madrid	No	Yes	century.entuity.local, ENTLONPPVM01
Europe/New York	No	Yes	ENTLONPPVM01
London	No	Yes	century.entuity.local, ENTLONPPVM01
Madrid	No	Yes	century.entuity.local, ENTLONPPVM01
New York	No	Yes	century.entuity.local, ENTLONPPVM01
Peking	No	Yes	century.entuity.local, ENTLONPPVM01
Port Elizabeth	No	Yes	century.entuity.local, ENTLONPPVM01
routers	No	No	ENTLONPPVM01
ucs	No	Yes	ENTLONPPVM01
udp	No	Yes	ENTLONPPVM01



#### **View Hierarchy Report Overview**

This report provides a summary of view configuration parameters, useful in multi-server environments when maintaining consistency of view configuration across servers. Views are sorted alphabetically, allowing you to identify differences in view name casing; Entuity view names are case sensitive.

#### **View Hierarchy Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the servers in which you are most interested.

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.

Table 137 View Hierarchy Report Options

#### **View Hierarchy Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. View Hierarchy.
Printed on	Date and time the report was generated.
Description	Description of the report.

Table 138 View Hierarchy Report Header

#### **View Hierarchy Report Details**

Name	Description
View	Name of the view path, a sub-view is identified through its position in the hierarchy, for example <b>view2/subview2</b> indicates subview2 is a sub-view of view2.
Read Only	<ul> <li>Indicates whether the view is a system view. When set to:</li> <li>Yes, it is a read only system view, i.e. All Objects content and filters cannot be amended, My Network views content cannot be amended but their event and incidents filters can be amended.</li> <li>No, it is a user defined view.</li> </ul>
Manually Populated	Indicates whether the view is a automatically populated or manually populated. When set to:
	Yes, it is a manually populated view.
	No, it is not an automatically populated view, for example a view based on one or more other views.
	Mixed, indicates the view is a manually populated view on at least one server and an automatically populated view on at least one other server. Entuity recommend that a view with the same view path on different
	servers is populated using the same mechanism.
Servers	The Entuity servers on which the view installed.

Table 139 View Hierarchy Report

## View Permissions and User Access Control Report

#### Entuity Report

View Permissions and User Access Control



Printed on: 18 May 2015 18:03:18 BST

Description: Lists group membership, which views each group has access to and all users that have access to each device

#### **Users and Group Membership**

User	Server	Groups
admin	ENTLONPP VM01	Administrators, All Users
EmmaBrown	ENTLONPP VM01	All Users, Beijing
JamesSmith	ENTLONPP VM01	Advanced, Africa, All Users, London
JuanGarcia	ENTLONPP VM01	All Users, New York
KofiYeboah	ENTLONPP VM01	All Users, London
MariaPerez	ENTLONPP VM01	All Users, New York
MeiChen	ENTLONPP VM01	All Users, Beijing
NanaToure	ENTLONPP VM01	All Users, New York
RiLee	ENTLONPP VM01	All Users, London
user	ENTLONPP VM01	All Users

#### **Views and Device Membership**

View	Server	Devices
Africa	ENTLONPP	10.44.1.43, 10.44.1.49, 10.44.1.65, bottom2960, bottom3550, c3560, e2821.entuity.local,
	VM01	entlonsw03, HPCOL1, new2610, pluto, r2610, top2960, top3550
Africa/Lagos	ENILONPP	10.44.1.43, 10.44.1.49, 10.44.1.65, bottom2960, e2821.entuity.local, HPCOL1, top2960,
A fui /D		top3550
Africa/Port	ENTLONPP	bottom3550, c3560, entlonsw03, new2610, pluto, r2610
Elizabeth		10 44 1 42 10 44 1 40 10 44 1 65 10 44 1 76 10 44 1 02 10 44 1 116 10 44 1 119
All Objects		10.44.1.43, 10.44.1.49, 10.44.1.03, 10.44.1.70, 10.44.1.93, 10.44.1.110, 10.44.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.1.110, 10.44.110, 10.44.110, 10.44.110, 10.44.110, 10.44.110, 10.44.110,
	VIVIO I	10.44.1.122, 10.44.1.123, 10.44.1.131, 10.44.1.249, 10.44.1.232, 10.44.2.110, 10.44.2.140,
		10.44.2.209, april 1, april 2, april 3, april 4, AWS, blade, blade, endury local, bottom 2900, bettem 2550, bettem 2550, ciace 2560, ciace 200,
		UCS6248 o2821 optuity local optionsw03 optionweue01 galaxy HPCOL1 idrae galaxy
		idroo millower, ion gw. juniter longwidelt longwidelt, millower, pow 2010
		oraclovm ontuity local pfconso pluto poplar router ontuity local guidway ontuity local r2610
		silicon stack 3750 stratford router ton 2060 ton 3550 yearter antuity local vertex
Amoricas	ENTLONPP	oper1
Americas	VM01	aperi
Americas/New	ENTLONPP	
York	VM01	
Asia	ENTLONPP	
	VM01	
Europe	ENTLONPP	10.44.1.151, 10.44.1.249, 10.44.1.252, blade, blade.entuity.local, buildervm, cisco-7203,
	VM01	Cisco-CIMC, Cisco-UCS6120, Cisco-UCS6248, galaxy, idrac-galaxy, idrac-milkyway, jan-gw,
		jupiter, lonswdsk1, lonswdsk2, milkyway, oraclevm.entuity.local, pfsense,
		quidway.entuity.local, silicon, vcenter.entuity.local
Europe/London	ENILONPP	cisco-7203, Cisco-CIMC, Cisco-UCS6120, Cisco-UCS6248, galaxy, idrac-galaxy, idrac-
	VM01	milkyway, jan-gw, jupiter, milkyway, oraclevm.entuity.local, ptsense, vcenter.entuity.local
Europe/Madrid	ENILONPP	10.44.1.151, 10.44.1.249, 10.44.1.252, blade, blade.entuity.local, buildervm, lonswdsk1,
		lonswdsk2, quidway.entuity.local, silicon
London		millower in an initial millower analog antitules for the second state of the second st
Maduid		mikyway, jan-yw, jupiter, mikyway, oracievin.entuity.iocal, pisense, vcenter.entuity.iocal
Madrid	VM01	
My Network	ENTLONPP	10.44.1.43, 10.44.1.49, 10.44.1.65, 10.44.1.76, 10.44.1.93, 10.44.1.116, 10.44.1.118,
(admin)	VM01	10.44.1.122, 10.44.1.123, 10.44.1.151, 10.44.1.249, 10.44.1.252, 10.44.2.110, 10.44.2.140,
. ,		10.44.2.205, apcr1, apcr2, apcr3, apcr4, AWS, blade, blade.entuity.local, bottom2960,
		bottom3550, bsw1, buildervm, c3560, cisco-7203, Cisco-CIMC, Cisco-UCS6120, Cisco-

Figure 47 View Permissions and User Access Control Report

#### View Permissions and User Access Control Report Overview

This report comprises of a series of optional tables that detail user and user group access to views and devices.

### View Permissions and User Access Control Report Options

Report Options allow you to configure the parameters of the report, focusing it on the access in which you are most interested.

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Show group membership	Includes to the report a table that lists for each user, by Entuity server, the user groups of which they are members. Selected by default.
Show group view access	Includes to the report a table that lists for each view, by Entuity server, the devices available through that view.
Show device user access membership	Includes to the report a table that lists for each device, by Entuity server, the users that have access.
Show device access membership	Includes to the report a table that lists for each device, by Entuity server, the users that have access.
Show user's tool permissions	Includes to the report a table that lists for each user group, by Entuity server, the tools to which they have access.

Table 140 View Permissions and User Access Control Report Options

### View Permissions and User Access Control Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. View Permissions and User Access Control.
Printed on	Date and time the report was generated.
Description	Description of the report.

Table 141 View Permissions and User Access Control Report Header

Name	Description		
View	Name of the view path, a sub-view is identified through its position in the hierarchy, for example <b>view2/subview2</b> indicates subview2 is a sub-view of view2.		
Read Only	Indicates whether the view is a system view. When set to:		
	Yes, it is a read only system view, i.e. All Objects content and filters cannot be amended, My Network views content cannot be amended but their event and incidents filters can be amended.		
	<b>No</b> , it is a user defined view.		
Manually Populated	Indicates whether the view is a automatically populated or manually populated. When set to:		
	Yes, it is a manually populated view.		
	No, it is not an automatically populated view, for example a view based on one or more other views.		
	Mixed, indicates the view is a manually populated view on at least one server and an automatically populated view on at least one other server.		
	Entuity recommend that a view with the same view path on different servers is populated using the same mechanism.		
Servers	The Entuity servers on which the view installed.		

## View Permissions and User Access Control Report Details

Table 142 View Permissions and User Access Control Report

Device	Server	Users
10.44.1.43	ENTLONPP VM01	admin, JamesSmith
10.44.1.49	ENTLONPP VM01	admin, JamesSmith
10.44.1.65	ENTLONPP VM01	admin, JamesSmith
10.44.1.76	ENTLONPP VM01	admin
10.44.1.93	ENTLONPP VM01	admin
10.44.1.116	ENTLONPP VM01	admin
10.44.1.118	ENTLONPP VM01	admin
10.44.1.122	ENTLONPP VM01	admin
10.44.1.123	ENTLONPP VM01	admin
10.44.1.151	ENTLONPP VM01	admin, JamesSmith, KofiYeboah, RiLee
10.44.1.249	ENTLONPP VM01	admin, JamesSmith, KofiYeboah, RiLee
10.44.1.252	ENTLONPP VM01	admin, JamesSmith, KofiYeboah, RiLee
10.44.2.110	ENTLONPP VM01	admin
10.44.2.140	ENTLONPP	admin

Figure 48 View Permissions and User Access Control Report
.

Group	Server	Tools
Administrators	ENTLONPP VM01	Annotation Manager, Application Monitor, Auto Discovery Administration, Configuration Monitor, Create Services, Create Views, Data Export, Edit Maps, Edit View Filters, Entuity Health, Event Administration, Event Notification Administration, Event Suppression, Flex Reports, Flow Inspection, Inventory Administration, Inventory Snapshots Administration, Managed Port Administration, Multi-Server Administration, Remote Terminal, Report Builder (Requires Reports and InSight Center), Reports and InSight Center, Save Maps, Share Views, Show Advanced Tools, Show Remedy, Show User Menus, Ticker, Trace Route, User Defined Polling. View Audit Log. View Maps
Advanced	ENTLONPP VM01	Auto Discovery Administration, Inventory Administration, Inventory Snapshots Administration, Managed Port Administration
Africa	ENTLONPP VM01	
All Users	ENTLONPP VM01	
Beijing	ENTLONPP VM01	
London	ENTLONPP VM01	
New York	ENTLONPP VM01	

Figure 49 View Permissions and User Access Control Report

# 4 Availability Reports

This set of reports allow you to monitor the reachability and availability of applications, devices, servers and ports on your network.

## **Running Availability Reports**

You can run Availability reports from the web interface:

- 1) Click Reports.
- 2) Click Availability Reports. Entuity displays the list of available reports.

	0 er	tuity									User: admin@entlonp Page Updated: 09:58:	ovm01 <u>[Loqout]</u> 45, GMT
D	ashboards	InSight Center	Explorer E	vents M	laps Charts	Flows	Reports	Tools	Administration	Help		P
Reports												
	reports > <u>A</u>	ailability										
	Report		Schedule	History	Description							
	Application	Availability	11	<u>*</u>	Details of appli	cation read	hability					
	Device Stat	us	<b>11</b>	<u> </u>	Device status l	based on I	CMP and/or !	SNMP				
	Infrastruct	ure Availability	11	<u>~</u>	Details of infra	structure d	evice reacha	bility and	uptime outages w	rith totals	5	
	Network De	livery Perspective	<b>11</b>	2	Summary of av	ailability fo	r services, a	oplication	s, servers and infra	astructur	e devices	
	Network De	livery Summary	11	<u>*</u>	Summary of av	ailability fo	r services, a	oplication	s, servers and infra	astructur	e devices	
	Outages R	eport	<b>11</b>	2	Outages Repo	rt						
	Port Availab	ility	11	1	Summary of Po	ort Availabil	ity					
	Port Opera	tional States	11	2	Port Operation	al States						
	Server Avai	lability	11	1	Details of serve	er reachab	ility and upti	ne outag	es with totals			
	Uptime Rea	chability and Rebo	ots 🚮	2	Summary of de	vice uptim	e, reachabili	ty and reb	poots			
	Schedule	d Reports										

Figure 50 Availability Reports

## **Application Availability Report**

#### Entuity Report

#### **Application Availability**

Centuity

Printed on:	13 Nov 2009 16:43:25 EST			
Description:	Details of application reachability			
View:	Regional			
Applications:				
Over the period 16:00 on Thu Nov 12 2009 - 16:00 on Fri Nov 13 2009				

Application name	Server name	Reachability %
telnet on 192.168.141.2	192.168.141.2	0.00
telnet on 192.168.242.123	192.168.242.123	0.00
telnet on 192.168.244.1	192.168.244.1	0.00
telnet on 192.168.245.11	192.168.245.11	0.00
netbios-ssn on 192.168.40.101	CHICAGO-SERVER	0.00
netmeeting on 192.168.40.101	CHICAGO-SERVER	0.00
ftp on 192.168.3.67	condor	88.13
http on 192.168.3.67	condor	0.00
mysql on 192.168.3.67	condor	87.13
telnet on 192.168.3.67	condor	87.53



#### **Application Availability Report Overview**

Entuity uses a separate polling mechanism (ICMP ping) to gather Reachability data, to that used to gather Reboot and Uptime metrics (SNMP polling). There are likely to be slight variations between the Reachability and Uptime values due to the different polling methods and polling cycles. Larger differences may indicate problems on the device, for example:

- Discarding ICMP pings when a device is heavily utilized.
- Differences may also occur when Entuity has been offline and devices have rebooted in that period.
- SNMP service is suspended or down on the device, Entuity requires SNMP to fully manage a device.

#### **Application Availability Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.

Table 143 Application Availability Report Header

Name	Description
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 143 Application Availability Report Header

#### **Application Availability Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Application Availability.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run. Configurable through Report Options.
Applications	Start and end dates and times over which the report is run. Configurable through Report Options.

Table 144 Application Availability Report Header

### **Application Availability Report Details**

Name	Description
Application Name	Name of the application.
Server Name	Name of the server hosting the application.
Reachability	Percentage Reachability during the reporting period.

Table 145 Application Availability Report

## **Device Status Report**

Entuity Report

#### **Device Status**

Printed on: 28 Oct 2014 13:03:09 GMT

Description: Device status based on ICMP and/or SNMP, plus hostname resolution and system status

View: My Network

#### ENTLONPPVM01

Name	Device Type	Polled IP	Status
😢 10.44.2.56	Unclassified	10.44.2.56	ICMP not responding (SNMP disabled)
8 10.66.51.8	Ethernet Switch	10.66.51.8	ICMP & SNMP not responding
entlonpcmc01	Unclassified (Full)	10.44.2.21	SNMP not responding
🕕 radium	Ethernet Switch	10.44.1.233	SNMP not responding
r10.gns3.zurich.entuity.lab	Router	172.20.176.10	Unable to resolve hostname to IP
r11.gns3.zurich.entuity.lab	Router	172.20.176.11	Unable to resolve hostname to IP
r12.gns3.zurich.entuity.lab	Router	172.20.176.12	Unable to resolve hostname to IP
r13.gns3.zurich.entuity.lab	Router	172.20.176.13	Unable to resolve hostname to IP
r13-host.gns3.zurich.entuity.lab	Managed Host	192.168.79.201	Unable to resolve hostname to IP
r15.gns3.zurich.entuity.lab	Router	172.20.176.15	Unable to resolve hostname to IP
r3.gns3.zurich.entuity.lab	Router	172.20.176.3	Unable to resolve hostname to IP
r4.gns3.zurich.entuity.lab	Router	172.20.176.4	Unable to resolve hostname to IP
r6.gns3.zurich.entuity.lab	Router	172.20.176.6	Unable to resolve hostname to IP
r7.gns3.zurich.entuity.lab	Router	172.20.176.7	Unable to resolve hostname to IP
r8.gns3.zurich.entuity.lab	Router	172.20.176.8	Unable to resolve hostname to IP
P.gns3.zurich.entuity.lab	Router	172.20.176.9	Unable to resolve hostname to IP
10.44.1.118	Unclassified	10.44.1.118	ICMP responding (SNMP disabled)
10.44.1.122	Unclassified	10.44.1.122	ICMP responding (SNMP disabled)
🕑 10.44.1.151	Unclassified	10.44.1.151	ICMP responding (SNMP disabled)
<b>V</b> 10.44.1.249	Managed Host	10.44.1.249	Ok
10.44.1.252	Ethernet Switch	10.44.1.252	Ok
<b>I</b> 0.44.1.43	Router	10.44.1.43	Ok
🕑 10.44.1.49	Managed Host	10.44.1.49	Ok
<b>I</b> 0.44.1.65	Uninterruptible Power	10.44.1.65	Ok
<b>V</b> 10.44.1.76	Unclassified	10.44.1.76	ICMP responding (SNMP disabled)
<b>I</b> 0.44.1.93	Managed Host	10.44.1.93	Ok
<b>I</b> 0.44.2.1	Unclassified	10.44.2.1	ICMP responding (SNMP disabled)
<b>I</b> 0.44.2.140	Managed Host	10.44.2.140	Ok
10.44.2.51	Unclassified	10.44.2.51	ICMP responding (SNMP disabled)
10.66.100.185	Blade Center	10.66.100.185	Ok
10.66.100.188	Ethernet Switch	10.66.100.188	Ok
10.66.100.189	Wireless Controller	10.66.100.189	Ok
🕑 10.66.100.190	Ethernet Switch	10.66.100.190	Ok
-		1	

Figure 52 Device Status Report

#### **Device Status Report Overview**

Entuity uses a separate polling mechanism (ICMP ping) to gather reachability data, to that used to gather reboot and uptime metrics (SNMP polling). There are likely to be slight variations between the reachability and uptime values due to the different polling methods and polling cycles. Larger differences may indicate problems on the device, for example

discarding ICMP pings when a device is heavily utilized. Differences may also occur when Entuity has been offline and devices have rebooted in that period.

#### Using ICMP Ping to Identify Device Status

Entuity Availability Monitor sends an ICMP ping to the management IP address of managed devices, by default every two minutes. Devices that respond are considered reachable, those that do not respond, after the set number of retries, are considered unreachable. When Availability Monitor is not running, then the reachability of the device is Unknown for that period, although Entuity maintains the last known state of the device.

#### **Device Status Report Options**

Name	Description
Server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
View	Entuity view against which the report is to be run. From the drop down list you can select one or <b>All Views</b> to run the report against.

Table 146 Device Status Report Header

#### **Device Status Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Device Reachability.
Printed on	Date and time the report was generated.
Description	Description of the report.
Server	Entuity server against which the report was run. Configurable through Report Options when the Entuity server has one or more remote Entuity servers. You can select the server, individual servers or All Servers against which you want to run the report. Report Server populates <i>Please select a view</i> , with the views to which you have access on the selected server(s).
View	Entuity view against which the report was run. Configurable through Report Options.

Table 147 Device Status Report Header

## **Device Status Report Details**

Name	Description
lcon	Device state icon. The report is sorted on device state, with the devices in the most critical state appearing earlier in the report.
Name	Resolved name or the IP address of the device.
Device Type	Device type.
Polled IP	Device's management IP address.
Status	Indicates the device reachable and available status.

Table 148 Device Status Report

## Infrastructure Availability Report



Figure 53 Infrastructure Availability Report

#### Infrastructure Availability Report Overview

Entuity uses a separate polling mechanism (ICMP ping) to gather Reachability data, to that used to gather Reboot and Uptime metrics (SNMP polling). There are likely to be slight variations between the Reachability and Uptime values due to the different polling methods and polling cycles. Larger differences may indicate problems on the device, for example discarding ICMP pings when a device is heavily utilized. Differences may also occur when Entuity has been offline and devices have rebooted in that period.

#### Using ICMP Ping to Identify Infrastructure Availability

Entuity Availability Monitor sends an ICMP ping to the management IP address of managed devices, by default every two minutes. Devices that respond are considered reachable, those that do not respond, after the set number of retries, are considered unreachable. When Availability Monitor is not running, then the reachability of the device is Unknown for that period, although Entuity maintains the last known state of the device.

#### Infrastructure Availability Report Options

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one or <b>All Devices</b> to run the report against.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Only show devices with imperfect reachability or uptime	Indicates whether all devices, or only those with imperfect reachability or uptime records are included to the report.
Show tables of reachability and uptime outage periods	Indicates whether the imperfect reachability or uptime tables are included to the report.

Table 149 Infrastructure Availability Report Header

#### Infrastructure Availability Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Infrastructure Availability.

Table 150 Infrastructure Availability Report Header

Name	Description
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run. Configurable through Report Options.
Devices	Indicates the number of devices included to the report, and the number within the view.
Over the period	Start and end dates and times over which the report is run. Configurable through Report Options.

Table 150 Infrastructure Availability Report Header

#### Infrastructure Availability Report Details

The bar chart on the report uses these metrics:

- Unknown, Entuity server is down.
- Down, which is the period of time the device is down. Entuity determines device outage by comparing its reboot time with the Entuity polling time. Entuity checks when the last reboot happened and:
  - If the reboot time is older than the last polling time then the device is considered as up for the polling interval.
  - If the reboot time is different between two successful consecutive Entuity polls it implies the device went up and down during the polling interval. Entuity takes the difference between the reboot time and the time of the poll prior to that, and assigns half the time as device down time and half as device uptime.
  - If there is a poll failure between a device reboot and the last successful poll before that time, then the device is considered as down for all of those unsuccessful poll intervals, apart from the first unsuccessful poll interval. Entuity assigns half of the first unsuccessful polling interval as device uptime and half as device down time.
- Reachable, the device has responded to the ping request.
- Unreachable, the device failed to respond to the ping request.

Although the reachability, down time and unknown metrics do not interact there is an order of precedence that determines how they are overlaid on the report availability bar chart. Reachable and Unreachable have the lowest precedence (and are therefore laid down first) followed by Down and with Unknown having the highest precedence.

Name	Description
Name	Resolved name or the IP address of the device
Device Type	Device type.
Polled IP Address	Device's management IP address.

Table 151 Infrastructure Availability Report

Name	Description
Reachable	Availability bar with reachability and uptime values, prime time values in brackets.
Reachability table	Indicates the start and end times of reachability outages. Duration column with reachability and uptime values, prime time values in brackets.

Table 151 Infrastructure Availability Report

## **Network Delivery Perspective**

#### "Network Delivery Perspective (TM)

#### Network Delivery Summary View: Regional Over the period 00:00 on Wed Nov 26 2012 - 00:00 on Thu Nov 27 2012 **Overall Summary** Reachability / Status Uptime 100% 1 Service N/A 16 Applications 46% N/A 100% 10 Servers 100% (known for 10 ser 88.4% 27 Infrastructure devices 95.6% (known for 23 dev Service status Services Summary In the range Total duration Range Services with outages: 0 0-50.0% 0 (0%) 0s Total downtime: 0s 50.0-85.0% 0 (0%) 0s Average downtime 0s 85.0-95.0% 0 (0%) 0s per service: See detailed report for services 95.0-100% 1 (100%) $\rightarrow \Box$ 0s Applications Summary Application reachability Apps with outages: 12 0-50.0% 12 (75%) 8d 15h 21m 36 Total unreachability: 8d 15h 21m 36s 50.0-85.0% 0 (0%) 0s Average unreachability 12h 57m 36s 85.0-95.0% 0 (0%) 0s per application: See detailed report for applications 95.0-100% 4 (25%) $\rightarrow \Box$ 0s Servers Summarv Server reachability Servers with outages: 0 0-50.0% 0 (0%) 0s Total unreachability: 0s 50 0-85 0% 0 (0%) 0s Average unreachability 0s per server: 85.0-95.0% 0 (0%) 0s See detailed report for servers $\rightarrow \Box$ 95.0-100% 10 (100%) 0s Infrastructure Devices Summary Infrastructure device reachability Devices with outages: 7 3 (11.1%) 3d 0h 0m 0s 0-50.0% Total unreachability: 3d 3h 11m 20s 50.0-85.0% 0 (0%) 0s Avg unreachability 2h 47m 5s 85.0-95.0% 2 (7.4%) 3h 5m 17s per device: $\rightarrow \Box$ 95.0-100% 22 (81.5%) 6m 3s See detailed report for devices

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	Report Guide
	1. Network Delivery Summary Report         →□           This redisplays the information in the Network Delivery Perspective in a form suitable for printing.         ■
vers)	2. Service Availability Report  This report identifies which Services have experienced  outages. The times and durations of the outages are  listed along with details of which components and/or sub- services were responsible.
1	3. Applications Availability Report →□ This report identifies which Monitored Applications have experienced outages. Application reachability is monitored from Entuity servers using TCP port probing techniques. The total duration of the outages are listed along with details of which servers they are hosted on. Where the loss of Application reachability was observered to have been attributable to either the hosting server or network onsections.
òs	Server Availability Report     Server Availability Report     This report identifies which Monitored Servers have experienced losses of reachability and/or uptime. Server reachability is minitored from Entuity servers using ping (ICMP loopback). Uptime is monitored using the sysUptime SNMP metric. The times and durations of the outages are displayed on a graphical timeline and listed in a tabular textual manner.
	5. Infrastructure Device Availability Report → This report identifies which routers, switches, firewalls and other non-server managed devices have experienced losses of reachability and/or uptime. Device reachability is minitored from Entuity servers using ping (ICMP loopback). Uptime is monitored using the sysUptime SMMP metric. The times and durations of the outages are displayed on a graphical timeline and listed in a tabular textual manner.

Figure 54 Network Delivery Perspective

#### **Network Delivery Perspective Overview**

The Network Delivery Perspective provides a high level, view based summary of network service delivery against four key components: services, applications, server devices and infrastructure devices. For each component it provides a summary of availability and latency, with a more detailed summary also including links to component specific availability reports. The perspective is also available in a layout suitable for printing.

You can access this perspective through **Reports > View Reports > Availability > Network Delivery Perspective** and **InSight Center > Network Delivery Perspective**.

#### **Network Delivery Perspective Report Options**

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.

Table 152 Network Delivery Perspective Report Options

Name	Description
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Report Period	Period over which the report applies. When you select:
	Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time. By default this perspective views the previous day's data.
	<b>Range</b> , you can enter start and end dates and times.

Table 152 Network Delivery Perspective Report Options

#### **Network Delivery Perspective Header**

Name	Description
Report title	Report title, e.g. Network Delivery Perspective.
Server	Entuity server against which the report was run.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.

Table 153 Network Delivery Perspective Header

#### **Network Delivery Perspective Details**

Name	Description
Overall Summary	A breakdown of reachability, status and uptime by services, applications, servers and infrastructure devices.
Services Summary	Provides access to the Service Availability report and a summary of service delivery:
	Services with outages, number of services with outages.
	Total downtime, total time across all services the service was down.
	Average downtime per service, average time the services were down during the reporting period.
	Pie chart displays a breakdown of service status.
Applications Summary	Provides access to the Applications Availability report and a summary of application delivery during the reporting period:
	Apps with outages, number of applications with outages.
	Total unreachability, total time across all applications the applications were unreachable.
	Average unreachability per application, average time the applications were down.
	Pie chart displays a breakdown of application reachability.

Table 154 Network Delivery Perspective

Name	Description
Servers Summary	Provides access to the Service Availability report and a summary of server delivery during the reporting period:
	Servers with outages, number of servers with outages. A device is considered a server if it is a managed host, a VM platform or an unclassified device with at least one monitored application.
	Total unreachability, total time across all servers the servers were unreachable.
	Average unreachability per server, average time the servers were down.
	Pie chart indicates the breakdown of server reachability.
Infrastructure Devices Summary	Provides access to the Infrastructure Device Availability report and a summary of infrastructure service delivery during the reporting period:
	Devices with outages, number of devices with outages.
	Total unreachability, total time across all devices the devices were down.
	Avg unreachability per device, average time the devices were down.
	Pie chart displays a breakdown of infrastructure device reachability.
Report Guide	<ul> <li>Provides descriptions and links to the network delivery reports: Network Delivery Summary Application Availability Server Availability Infrastructure Device Availability</li> </ul>

Table 154 Network Delivery Perspective

## **Network Delivery Summary**

#### Entuity Report

#### Network Delivery Summary

Printed on: 25 Nov 2009 21:01:38 GMT

 Description:
 Summary of availability for services, applications, servers and infrastructure devices

 View:
 Regional

 Over the period 00:00 on Tue Nov 24 2009 - 00:00 on Wed Nov 25 2009



Figure 55 Network Delivery Summary Report

#### **Network Delivery Summary Overview**

The Network Delivery Summary concisely displays details of services, applications, servers, and infrastructure device availability across the environment. You can configure which summary panels to include to the report. It displays in a printer suitable format the same information as the Network Delivery Perspective.

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Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Show Services Summary	Select to include the services summary panel to the report.
Show Applications Summary	Select to include the applications summary panel to the report.
Show Servers Summary	Select to include the servers summary panel to the report.
Show Infrastructure Devices Summary	Select to include the infrastructure devices summary panel to the report.
Report Period	Period over which the report applies. When you select:
	Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time. By default this perspective views the previous day's data.
	Range, you can enter start and end dates and times.

#### Network Delivery Summary Report Options

Table 155 Network Delivery Summary Report Options

### Network Delivery Summary Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Network Delivery Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.

Table 156 Network Delivery Summary Header

### **Network Delivery Summary Details**

Name	Description
Overall Summary	A breakdown of reachability, status and uptime by services, applications, servers and infrastructure devices.

Table 157 Network Delivery Summary

Name	Description
Services Summary	Provides access to the Service Availability report and a summary of service delivery: <i>Services with outages</i> , number of services with outages. <i>Total downtime</i> , total time across all services the service was down. <i>Average downtime per service</i> , average time the services were down during the reporting period. Pie chart displays a breakdown of service status.
Applications Summary	Provides access to the Applications Availability report and a summary of application delivery during the reporting period: <i>Apps with outages</i> , number of applications with outages. <i>Total unreachability</i> , total time across all applications the applications were unreachable. <i>Average unreachability per</i> application, average time the applications were down. Pie chart displays a breakdown of application reachability.
Servers Summary	Provides access to the Service Availability report and a summary of server delivery during the reporting period: <i>Servers with outages</i> , number of servers with outages. A device is considered a server if it is either a managed host or an unclassified device with at least one hosted application. <i>Total unreachability</i> , total time across all servers the servers were unreachable. <i>Average unreachability per server</i> , average time the servers were down. Pie chart indicates the breakdown of server reachability.
Infrastructure Devices Summary	Provides access to the Infrastructure Device Availability report and a summary of infrastructure service delivery during the reporting period: <i>Devices with outages</i> , number of devices with outages. <i>Total unreachability</i> , total time across all devices the devices were down. <i>Avg unreachability per device</i> , average time the devices were down. Pie chart displays a breakdown of infrastructure device reachability.
Report Guide	Provides descriptions and links to the network delivery reports: Network Delivery Summary Application Availability Server Availability Infrastructure Device Availability

Table 157 Network Delivery Summary

## **Outages Report**

Entuity Report Centuity **Outages Report** Printed on: 17 Nov 2013 12:20:12 GMT Description: All devices suffering outages View: My Network Over the period 00:00 on Sun Nov 10 2013 - 00:00 on Sun Nov 17 2013 No prime time is set for this report Device: 10.44.12.12 Server: century.entuity.local IP Address: 10.44.12.12 System Name: SAF-FRCBE1-POA-CR01 Rebooted: No Total Outage: 1 day 8 hrs 9 mins 53 secs **Outages** Tue Nov 12 17:53:23 GMT 2013 -> Tue Nov 12 17:53:46 GMT 2013 (23s) Fri Nov 15 15:50:30 GMT 2013 -> Sun Nov 17 00:00:00 GMT 2013 (1d 8h 9m 30s) Device still suffering an outage at the end of the report period.

	D	evice: 10.44.44.44	4
Server:	ppk	IP Address:	10.44.44.44
System Name:	madrid-routerb	Rebooted:	Yes
Total Outage:	1 day 18 hrs 23 mins 17 secs		
<u>Outages</u>			
Fri Nov 15 05:36:43 GMT 2013 -> Sun Nov 17 00:00:00 GMT 2013 (1d 18h 23m 17s)			

Device still suffering an outage at the end of the report period.	
---	--

	Devic	ce: 10.44.53.25	54
Server:	ppk	IP Address:	10.44.53.254
System Name:	supportTestRt1	Rebooted:	Yes
Total Outage:	2 days 13 hrs 29 mins 30 secs		
<u>Outages</u>			
Thu Nov 14 10:30:30 GMT 2013 -> Sun Nov 17 00:00:00 GMT 2013 (2d 13h 29m 30s)			
Device still suffering an outage at the end of the report period.			



#### **Outages Report Overview**

By default this report lists all devices that have been down in the previous twenty-four hours, for the selected server(s) view:

For each device the total time of the outage during the reporting period and also during prime time within the reporting period.

- For each device outage the length of that outage and also the length of that outage that occurred within prime time.
- Listed items now sorted by device name with a secondary sort on server name.

#### **Outages Report Options**

Name	Description	
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.	
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one or <b>All Views</b> to run the report against.	
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>	

Table 158 Outages Report Header

#### **Outages Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Outages.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Report Period	Start and end dates and times over which the report is run.

Table 159 Outages Report Header

#### **Outages Report Details**

Name	Description
Device	Resolved name or the IP address of the device.
System Name	Device description.
IP Address	Device's management IP address.
Rebooted	Indicates whether the device was rebooted during the reporting period.
Outages	Start and end time of the outage. The report also indicates whether the device is currently down.

Table 160 Outages Report

## Port Operational States Report

Entuity Report Port Operational States			entuity	
Printed of	on:	8 Oct 2009 20:45:04 BST		
Descript	ion:	Port Operational States for physical device ports		
View:		Regional		
		Server: COMF	RESSOR	
		10.44.1.2	254	
		Port Id	Time in state	
<b>S</b>	[ 000	001 ] ncmac0	30 mins 5 secs	
•	[ 000	002 ] ppp0	112 days 9 hrs 45 mins 5 secs	

Figure 57 Port Operational States Report

#### Port Operational States Report Overview

This report lists all ports and their current operational state for the selected device.

#### **Port Operational States Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.

Table 161 Port Operational States Report Options

#### Port Operational States Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Operational States.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 162 Port Operational States Report Header

## Port Operational States Report Details

Name	Description
Server	Name of the Entuity server managing the device.
Device	Name of the device.
Operational state	Indicates the operational state, up when the indicator is green, down when the indicator is red.
Port Id	Port identifier.
Time in state	Time the port has been in its current state.

Table 163 Port Operational States Report

## Port Availability Report

Entuity Report

Port Availability

Printed on: 14 Mar 2013 15:50:08 GMT Description: Summary of Port Availability

View: My Network

Over the period 15:00 on Wed Mar 13 2013 - 15:00 on Thu Mar 14 2013

No prime time is set for this report

Availability Summary for My Network			Reachability (Mean)	Ava (I	ailability Mean)	
Overall Port Availability (Mean)			21.38%	70	0.00%	
Availability Details, sorted by % Availability         Ports with full availability excluded         Ports are Admin Down excluded         Device Name       Interface Description         Outages       Reachability         Availability       Longest         Outage       Downtime				Total Downtime		
10.66.20.2	[ 00002 ] Port 2	1	21.77%	0.00% +0.00	1.0days	1.0days
10.66.20.2	[ 00003 ] Port 3	1	21.77%	0.00% +0.00	1.0days	1.0days
cisco-c2950- c3.vendor.entuity.lab	[ Fa0/5 ] *** Connection to NetScout Probe ***	1	21.06%	0.00% +0.00	1.0days	1.0days

Availability Details, sorted by % Reachability Ports with full reachability excluded Ports are Admin Down excluded **Device Name** Interface Description Outages Reachability Availability Longest Total Outage Downtime cisco-c2950-[VL1]VLAN1 0 21.06% 100.00% +0.00 0.0mins 0.0mins c3.vendor.entuity.lab [Fa0/1]\*\*\* Connection 21.06% 100.00% +0.00 cisco-c2950-0.0mins 0.0mins c3.vendor.entuity.lab to lonwhs01r07 fa1/0/0 \*\* cisco-c2950- [Fa0/2] \*\*\* Connection 0 21.06% 100.00% +0.00 0.0mins 0.0mins to GBN Router c3.vendor.entuity.lab ECLON003 F1/1/0 \*\*\* [Fa0/3] \*\*\* Connection to lonwhs01h02 \*\*\* [Fa0/4] \*\*\* Connection to Spiffer \*\*\* 100.00% +0.00 21.06% 0.0mins cisco-c2950-0 0.0mins c3.vendor.entuity.lab 100.00% +0.00 cisco-c2950-0 21.06% 0.0mins 0.0mins to Sniffer \*\*\* [ Fa0/5 ] \*\*\* Connection c3.vendor.entuity.lab 0.00% +0.00 cisco-c2950-21.06% 1.0days 1.0days 1 c3.vendor.entuity.lab to NetScout Probe \*\* 10.66.20.2 [00001]Port 1 0 21 77% 100.00% +0.00 0.0mins 0.0mins 10.66.20.2 [00002]Port 2 21.77% 0.00% +0.00 1.0days 1 1.0days 10.66.20.2 0.00% +0.00 [ 00003 ] Port 3 1 21.77% 1.0davs 1.0days 10.66.20.1 [ 00001 ] Ctron SEHI 0 22.09% 100.00% +0.00 0.0mins 0.0mins EnetPort

#### **Availability Charts**

There are no charts included in this report. This is either because user chose not to, or there were no ports, or because none of the charts would have contained useful information, i.e. the port was in the same state for the whole of the report period.

Figure 58 Port Availability Report

#### Port Availability Report Overview

The Port Availability report uses two key metrics:

Availability is a calculated measure of the port's availability during the reporting period. It has one of three states, Up, Down and Unknown (?). Entuity uses two MIB variables for this report: the operational state of the port (ifOperState) and the last time that the port's

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state changed (ifLastChangeTime). Since the polling is scheduled at regular intervals, the ifLastChangeTime read on a successful poll provides the actual time at which the current state was entered.

The availability calculation is supplemented through monitoring of the port's Port Link Up and Port Link Down SNMP traps. These indicate the state of the port between pollings. SNMP trap forwarding on the device must be enabled.

Reachability is the proportion of time that Entuity can confirm the port is reachable during the reporting period. A port is considered reachable when Entuity successfully polls the port's ifOperState, unreachable if it cannot.

Entuity calculates reachability using the state (ifOperState) information retrieved during polling. If a null poll occurs, then the reachability figure is affected by the time stamp for the poll. For example consider hourly polling and a report over an hourly period. Say the hourly poll occurs at 15 minutes past the hour and that Entuity polls in the hours before, during and after the report period. Furthermore, say the poll before was null, the poll during was valid and the poll after was null. Then reachability is 75% since the null poll can account for 25% of the reportable hour, but the valid poll at 15 minutes past the hour renders the component reachable for the remaining time.

By default the report:

- Restricted to router (WAN) ports, but the port filter can be amended to include all ports or restricted to other types of ports, e.g. leased line, frame relay
- Does not include ports that are 100% available in the Reachability and Availability tables, but does include these ports in the mean totals for port Reachability and Availability.

Unlike other Entuity availability measures that are based on results from ping, this report's information is derived from both SNMP polling of port MIB variables and SNMP traps received by Entuity.



Entuity retains data for the Port Availability report for the last fourteen days, i.e. reports can only be run over the last fourteen days. The retention time can be extended by amending the configuration.

The report displays statistics in Header, Executive Summary, Port Details table and Port Details graph sections.

#### Port Availability Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.

Table 164 Port Availability Report Options

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a view	From the drop down list select one view to run the report against.
Maximum displayed ports	Number of ports to include to the report.
Use device system name	
Include ports with full availability	
Include ports that are Admin Down	
Display Availability Charts	
Exclude Virtual Ports	
Exclude Spare Ports	
Exclude Host Ports	
Exclude Core Ports	
Report period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>From you can enter start and end date and time.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 164 Port Availability Report Options

#### Port Availability Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Operational States.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 165 Port Availability Report Header

#### Port Availability Report Details

#### **Executive Summary**

Executive Summary presents the overall mean average availability and reachability for all ports in the current view that are of the same type as port's included in the report. For example, by default the report only reports on router reports. Entuity excludes from the

Availability and Reachability tables router ports that are 100% available, but the mean average totals includes those ports.

#### **Port Details Tables**

Port Details tables sorted by availability, with hyperlinks to the availability graphs of ports that have change(s) in availability status during the reporting period.

Device Name	By default the object's sysname, although through report parameters this can be amended if required.
Interface Description	Description of the device interface.
Outages	Number of outages during the reporting period.
Reachability	Proportion of time that Entuity can confirm the port is reachable during the reporting period. <i>Reachability</i> is calculated over the period Entuity attempts to poll the port. When a report period starts before this time, e.g. before Entuity managed the port, the reachability value only applies to the polling period. For example, when a port is discovered on day three of a five day reporting period, but is 100% reachable from that time on, the report shows the port as being 100% reachable. Entuity makes a similar adjustment when the end of the reporting period is later than the last known data for the port.

Table 166 Port Availability Tables

Availability	Proportion of time that Entuity can confirm the port is available during the reporting period. Confirmation is through polling of the port and monitoring of the port's SNMP traps. A port's SNMP traps allow Entuity to monitor port availability between pollings. <i>Availability</i> takes the polling data, e.g. the port was up when polled at 01:00 and 02:00 and supplement it with information from traps e.g. a Port Link Down trap was sent at 01:01 and a Port Link Up trap was sent at 01:59. Availability is usually calculated over the period Entuity attempts to poll the port. When a report period starts before this time the availability value applies to the polling period plus the period prior to this for which the port state is known. So, from the first poll Entuity takes the port's time of last state change. For example, when a port is discovered on day three of a five day reporting period, but is 100% available. When the port's last state change was on day two of the reporting period then the graph shows data for four days. Entuity makes a similar adjustment when the end of the reporting period is later than the last poll of the port, for example a report is run up to the current hour before the polls for that last hour are complete. When a port generates a trap after the last poll but before the end of the reporting period Availability is calculated up to the time of the last trap. Entuity presents three availability values:
	<ul> <li>Upper boundary value, which shows the maximum possible margin of error when port unknown time is considered as available.</li> <li>Lower boundary value, which shows the maximum possible margin of error when unknown time is considered as downtime.</li> </ul>
Longest Outage	Longest outage during the reporting period, unless prime time is set when it's the longest outage during a single prime time period within the reporting period.
Total Downtime	Total downtime during the reporting period, unless prime time is set when it's the total downtime during prime time period within the reporting period.

Table 166 Port Availability Tables

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Entuity's Change History tool shows port availability through polling and the Link Status tool shows port availability as indicated by SNMP traps (see the *Entuity User Guide*).

#### Port Availability Graphs

Entuity generates availability graphs for ports that have changing states during the reporting period, i.e. they are neither 100% or 0% available. The table repeats port details from the summary Availability and Reachability tables, and includes hyperlinks back to the Availability tables.

#### Entuity

The graphs are stepped line graphs that indicate port availability, specifically the length of time a port is in each of the three states, **Down**, **Unknown** (?) and **Up**. When Prime Time is configured gray bands indicate the Prime Time period.

## Server Availability Report

Entuity Rep	ort					
Server A	vailability					entuity
Printed on: Description: View: Servers: Over the perio No prime time	17 Nov 2013 12:02:4 Details of server read My Network 11 od 00:00 on Sun Oct 2 b is set for this report	7 GMT chability and uptime tot 0 2013 - 00:00 on Sun	als and outages Nov 17 2013			
Re	eachable:	Unreachable:	Down:		Unknown:	
ciscomcs7	835h2.vendor.en Reachability	<b>tuity.lab</b> = 99.95%	Uptime	e = 100%		
	21-Oct	28-Oct	4-Nov		11-Nov	18-Nov
Reach	ability outage start	Reachab	ility outage end		Duration	
Thu Nov 07 1	2:44:13 GMT 2013	Thu Nov 07 13:0	1:42 GMT 2013	17m 29s	Bulation	
Thu Nov 07 1	3:48:09 GMT 2013	Thu Nov 07 13:4	9:42 GMT 2013	1m 33s		
ciscomcs7	845h.vendor.entu Reachability	uity.lab = 99.95%	Uptime	e = 100%		
	21-Oct	20.0.1				
	21-001	28-OCI	4-Nov		11-Nov	18-Nov
Reach	ability outage start	Reachab	4-Nov		11-Nov Duration	18-Nov
Reach Thu Nov 07 1	ability outage start 2:44:13 GMT 2013	Reachab Thu Nov 07 13:0	4-Nov ility outage end 1:42 GMT 2013	17m 29s	11-Nov Duration	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1	ability outage start           2:44:13 GMT 2013           3:48:09 GMT 2013	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:4	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013	17m 29s 1m 33s	11-Nov Duration	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1 cisco-wsle	ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 .vendor.entuity.la Reachability	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:4           Ib           = 99.95%	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime	17m 29s 1m 33s a = 100%	11-Nov Duration	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1 cisco-wsle	ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 .vendor.entuity.la Reachability	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:4           ab           = 99.95%	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime	17m 29s 1m 33s a = 100%	11-Nov Duration	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1 cisco-wsle	ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 .vendor.entuity.la Reachability 21-Oct	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:4           ab           = 99.95%           28-Oct	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov	17m 29s 1m 33s e = 100%	11-Nov	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1 Cisco-wsle Reach	ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 .vendor.entuity.la Reachability 21-Oct ability outage start 2:44:13 GMT 2013	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:4           ab           = 99.95%           28-Oct           Reachab           Thu Nov 07 13:4	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov ility outage end 1:42 GMT 2013	17m 29s 1m 33s e = 100%	11-Nov Duration 11-Nov Duration	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1 cisco-wsle Reach Thu Nov 07 1 Thu Nov 07 1	21-0ct           ability outage start           2:44:13 GMT 2013           3:48:09 GMT 2013           .vendor.entuity.lz           Reachability           21-0ct           ability outage start           2:44:13 GMT 2013           3:48:09 GMT 2013	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:0           Thu Nov 07 13:4           b           = 99.95%           28-Oct           Reachab           Thu Nov 07 13:0           Thu Nov 07 13:0           Thu Nov 07 13:0	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013	17m 29s 1m 33s e = 100% 17m 29s 1m 33s	11-Nov Duration 11-Nov Duration	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1 cisco-wsle Reach Thu Nov 07 1 Thu Nov 07 1 Thu Nov 07 1	ability outage start           2:44:13 GMT 2013           3:48:09 GMT 2013           .vendor.entuity.la           Reachability           21-Oct           ability outage start           2:44:13 GMT 2013           3:48:09 GMT 2013           3:48:09 GMT 2013           3:48:09 GMT 2013           3:48:09 GMT 2013           2:44:13 GMT 2013           3:48:09 GMT 2013           2:44:04 GMT 2013	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:0           Thu Nov 07 13:4           ab           28-Oct           Reachab           Thu Nov 07 13:0           Thu Nov 07 13:4           y.lab           = 99.95%	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime	17m 29s 1m 33s = 100% 17m 29s 1m 33s = 100%	11-Nov  11-Nov  Duration  11-Nov  Duration	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1 cisco-wsle Reach Thu Nov 07 1 Thu Nov 07 1 Thu Nov 07 1	ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 .vendor.entuity.la Reachability 21-Oct ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 3:48:09 GMT 2013 2ptf.vendor.entuit Reachability	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:0           Thu Nov 07 13:4           ab           28-Oct           Reachab           Thu Nov 07 13:0           Thu Nov 07 13:4           y.lab           = 99.95%	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov	17m 29s 1m 33s = 100% 17m 29s 1m 33s = 100%	11-Nov  11-Nov  Duration  11-Nov  Duration	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1 cisco-wsle Reach Thu Nov 07 1 Thu Nov 07 1 Thu Nov 07 1 f5-bigip-4.2	ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 .vendor.entuity.la Reachability 21-Oct ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 2ptf.vendor.entuit Reachability 21-Oct ability outage start	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:0           Thu Nov 07 13:4           ab           = 99.95%           28-Oct           Reachab           Thu Nov 07 13:0           Thu Nov 07 13:4           Thu Nov 07 13:4           Thu Nov 07 13:4           Thu Nov 07 13:4           Secott           Reachab	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov ility outage end	17m 29s 1m 33s e = 100% 17m 29s 1m 33s e = 100%	11-Nov  11-Nov  11-Nov  Duration  11-Nov  Duration  11-Nov  Duration	18-Nov
Reach Thu Nov 07 1 Thu Nov 07 1 cisco-wsle Reach Thu Nov 07 1 f5-bigip-4.2 Reach Thu Nov 07 1	ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 .vendor.entuity.la Reachability 21-Oct ability outage start 2:44:13 GMT 2013 3:48:09 GMT 2013 2ptf.vendor.entuit Reachability 21-Oct ability outage start 2:44:13 GMT 2013	Reachab           Thu Nov 07 13:0           Thu Nov 07 13:0           Thu Nov 07 13:4           ab           = 99.95%           28-Oct           Reachab           Thu Nov 07 13:0           Thu Nov 07 13:4           ty.lab           = 99.95%           28-Oct           Reachab           Thu Nov 07 13:4           ty.lab           = 99.95%           28-Oct           Reachab           Thu Nov 07 13:0	4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov ility outage end 1:42 GMT 2013 9:42 GMT 2013 Uptime 4-Nov ility outage end 1:42 GMT 2013	17m 29s 1m 33s e = 100% 17m 29s 1m 33s e = 100% 17m 29s	11-Nov  11-Nov  11-Nov  Duration  11-Nov  Duration	18-Nov



#### Server Availability Report Overview

Server Availability Report presents for the selected view and time period all servers within that view and their availability over the period. A server is a Managed Host, a VM Platform or an unclassified device with applications. For each server a stack chart represents the availability status of the server during the reporting period.

#### Server Availability Report Options

Name	Description
Server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a View	From the drop down list you can select one view to run the report against.
Please select a server device	From the drop down list Entuity displays the available server devices. Server devices are: Managed Hosts
	Unclassified devices with monitored applications
	VM Platforms. You can run the report against one or All devices.
Only show servers with imperfect reachability or uptime	When selected only those with imperfect reachability or uptime records are included to the report, otherwise all are servers are included to the report.
Show tables of reachability and uptime outage periods	When selected imperfect reachability or uptime tables are included to the report, otherwise they are not included.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>From you can enter start and end date and time.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 167 Server Availability Report Options

#### Server Availability Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Server Availability.
Printed on	Date and time the report was generated.
Description	Description of the report.
Servers	Number of servers in the view.
View	Entuity view against which the report was run.
Over the period	Identifies the reporting period.

Table 168 Server Availability Report Header

#### Server Availability Report Details

For each server device the report charts its availability status.

Name	Description
Name	Resolved name or the IP address of the device.
Reachability	<ul> <li>Two measures of reachability, the percentage of time the server was reachable during the:</li> <li>Reporting period.</li> <li>Set prime time within the reporting period.</li> </ul>
Uptime	Percentage of time the server was up during the reporting period, prime time values in brackets.
Reachability table	Charts and tabulates the start times, end times and duration of reachability outages.
Uptime table	Charts and tabulates the start times, end times and duration of uptime outages.
Reachable	Indicates whether the device is <b>Reachable</b> , <b>Unreachable</b> , <b>Down and Unknown</b> .

Table 169 Server Availability Report Details

## Device Uptime, Reachability and Last Reboot Report

Device Uptime, Reachability and Last Reboot Time

Entuity Report

17 Nov 2013 12:16:48 GMT Printed on: Description: Device Uptime and Reachability and the Last Reboot Time if it occurred within the report period View: My Network Over the period 00:00 on Sun Nov 03 2013 - 00:00 on Sun Nov 17 2013 No prime time is set for this report Sort by: Uptime Last reboot Device name Device type Manufacturer / model Uptime % **Reachability %** within timefram stealth2 Autonomous WAP Netgear / Stealth2 0 0 w2 Autonomous WAP cisco / WAP4410N-E 0 0 0 0 eolus Router cisco / 7206VXR Tue Nov 05 10.44.53.254 cisco / 1720 64.02 38.09 Router 12:33:00 2013 10.44.44.44 cisco / 3640 87.38 41.34 Router selenium Router cisco / n/a 88 64 92 91 Tue Nov 12 10 44 12 12 Unclassified (Full) Hewlett Packard / 1810G 90.43 99.99 17:53:46 2013 Fri Nov 15 Brother Industries Ltd. / NCbrotherm Unclassified (Full) 99.97 100 6500h 13:52:50 2013 Thu Nov 07 entlonsw03 Ethernet Switch cisco / WS-C3750X-48P-L 99.99 100 12:15:21 2013 Thu Nov 07 cisco / C2621XM-2FF r2610 Router 100 100 15:04:51 2013 Thu Nov 07 bottom2960 Ethernet Switch cisco / WS-C2960-24TT-L 100 100 13:03:58 2013 10.66.24.1 Autonomous WAP cisco / AP1210 100 100 crossbeam-firewall.vendor.entuity.lab Firewall Crossbeam Systems Inc. / X45 100 100 HPCOL1 Ethernet Switch Hewlett Packard / C.25.80 100 100 10.44.1.49 Managed Host Dell Computer Corporation / n/a 100 100 shiva-6.120.vendor.entuity.lab VPN Shiva Corporation / 3110 100 100 top3550 cisco / WS-C3550-24-FMI Ethernet Switch 100 100 nokia-fw Firewall Nokia / General Software 100 100 PoE Midspan microsemi-midspan-12-port-ac-Microsemi / 100 100 dc.vendor.entuity.lab midspan\_12\_port\_AC\_DC Injector bottom3550 Ethernet Switch cisco / WS-C3550-24-EMI 100 100 bvt Blade Center IBM / 1XX 100 100 cisco / 10.44.12.10 Ethernet Switch 100 99.99 pc1ltmvpod02.us.dell.com 100 100 buildervm Managed Host VMware Inc. / 5.0.0 F5 Networks, Inc. / Big IP 10 66 13 22 Load Balancer 100 100 Optimus jupiter Managed Host VMware Inc. / 5.0.0 100 100 Wide Area cisco / OE-511 100 cisco-waas.vendor.entuity.lab 100 Application Service e2821.entuity.local Router cisco / 2821 100 100 r7204 Router cisco / 7204VXR 100 100 c3560 Ethernet Switch cisco / WS-C3560-24TS-E 100 100 Brother Industries Ltd. / NC-10.44.1.249 Unclassified (Full) 100 100 230h blade Managed Host VMware Inc. / 4.0.0 100 100 F5 Networks, Inc. / Big IP 10.66.13.25 Load Balancer 100 100 VIPRION 10.44.1.62 Hewlett Packard / C.25.80 Managed Host 100 100 100 pluto Managed Host VMware Inc. / 4.1.0 100 Uninterruptible American Power Conversion 10.44.1.65 100 100 Power Supply Corp. / (MB:v3.8.6 top2960 Ethernet Switch cisco / WS-C2960-24TT-L 100 100 Thu Nov 07 new2610 cisco / 2651XM 100 100 Router 15:29:42 2013 New Oak Communications Inc. contivity1700.vendor.entuity.lab VPN 100 100 /V04 76.023

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Figure 60 Device Uptime, Reachability and Last Reboot Report

#### Device Uptime, Reachability and Last Reboot Report Overview

This report details device Uptime, Reachability and Reboots.

Entuity uses a separate polling mechanism (ICMP ping) to gather Reachability data, to that used to gather Reboot and Uptime metrics (SNMP polling). There are likely to be slight variations between the Reachability and Uptime values due to the different polling methods and polling cycles. Larger differences may indicate problems on the device, for example:

- A lower reachability value than the uptime value may indicate the device is discarding ICMP pings because it is heavily utilized.
- A lower uptime value than the reachability value may indicate a problem with the SNMP service on the device, maybe it is suspended or down; Entuity requires SNMP to fully manage a device.

Apparently incongruous differences in Uptime, Reachability and Reboot metrics may also occur when Entuity has been offline and devices have rebooted in that period.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Sort by	Indicates the metric on which the devices in the report are ordered, i.e. Uptime, Reachability, Device Name.
Only show devices with imperfect reachability or uptime	When selected only includes devices to the report that have did not have complete reachability or uptime during the reporting period.
Report Period	Period over which the report applies. When you select:
	Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.
	<b>Range</b> , you can enter start and end dates and times.
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

#### Device Uptime, Reachability and Last Reboot Report Options

Table 170 Device Uptime, Reachability and Last Reboot Report Options

#### Device Uptime, Reachability and Last Reboot Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.

Table 171 Device Uptime, Reachability and Last Reboot Report Header

Name	Description
Report title	Report title, e.g. Device Uptime, Reachability and Last Reboot.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Only show devices with imperfect reachability or uptime	When selected only includes devices to the report that have did not have complete reachability or uptime during the reporting period.
Over the period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
Sort by	Indicates the metric on which the devices in the report are ordered, i.e. Uptime, Reachability, Device Name.

Table 171 Device Uptime, Reachability and Last Reboot Report Header

#### Device Uptime, Reachability and Last Reboot Report Details

Name	Description
Device Name	Resolved name or the IP address of the device
Device Type	Device type.
Manufacturer / Model	Device manufacturer and device model.
Uptime %	Time the device was up as a percentage of the reporting period, with its percentage uptime during prime time in brackets.
Reachability %	Time the device was reachable as a percentage of the reporting period, with its percentage uptime during prime time in brackets.
Last reboot within timeframe	Time of the last reboot within the reporting period.

Table 172 Device Uptime, Reachability and Last Reboot Report

# **5 Branch Office Perspective Reports**

This set of reports provides access to the data available through the Branch Office Perspective suite. Branch Office suite requires a specific view configuration for the perspective and report to run correctly. (See the *Entuity User and System Administrator Guide*.)

## **Running Branch Office Perspective Reports**

You can run these reports from the web interface:

- 1) Click Reports. Entuity displays the Reports Home page.
- 2) Click Branch Office Perspective. Entuity displays the list of available reports.



Figure 61 Branch Office Perspective Reports

## **Branch Office Details Report**



Figure 62 Branch Office Details Report

#### **Branch Office Details Overview**

The Branch Office Details report breakdowns branch network connectivity using three type of information:

- Branch Connectivity, with detailed time series charts for WAN ports. You can click on a WAN port chart line to launch the corresponding interactive chart.
- Device Reachability.

Service Delivery through Cisco IP SLA Operations. You can click on an IP SLA color ribbon, to open the IP SLA Details report which reports on the same operation in the selected timeframe but with a ten times zoom.

Branch Office suite requires a specific view configuration for the perspective and report to run correctly. (See the *Entuity User and System Administrator Guide*.)

#### **Branch Office Details Options**

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 173 Branch Office Details Options

#### **Branch Office Details Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Echo.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 174 Branch Office Details Header
### **Branch Office Details**

Name	Description
Branch Office Connectivity	Indicates the subsequent charts graph measures of connectivity.
Server Name	Name of the Entuity server.
Components	List of ports, and their logical operator, that form the branch office connectivity with the external world.
Timeline	Connectivity timeline that shows the state of the connectivity components over the reporting period, i.e. Up, Down and Unknown. The total time within the reporting period the connectivity link was in each state is also displayed.
Port	For each port within the connectivity link, Entuity presents a connectivity section.
Port Timeline	Connectivity timeline that shows the state of the port over the reporting period, i.e. Up, Down and Unknown. The total time within the reporting period the port was in each state is also displayed.
Utilization %	Indicates port inbound and outbound utilization as a percentage of port speed. The chart also includes the static high inbound and outbound thresholds, transgressions of which change the reported port utilization state. You can also click on the lines in the chart to open the data in an interactive graph.
Fault %	Indicates port inbound and outbound faults as a percentage of total inbound and outbound packets, respectively. The chart also includes the static high inbound and outbound thresholds, transgressions of which change the reported port fault state. You can also click on the lines in the chart to open the data in an interactive graph.
Discards %	Indicates port inbound and outbound discards as percentages of port total inbound and outbound packets, respectively. The chart also includes the static high inbound and outbound thresholds, transgressions of which change the reported port discards state. You can also click on the lines in the chart to open the data in an interactive graph.
Entuity server to device ping latency	Indicates latency from the Entuity server to the device. The chart also includes the static threshold, transgressions of which change the reported port latency state. You can also click on the lines in the chart to open the data in an interactive graph.
Device Reachability	Indicates the subsequent charts graph the reachability of devices in the branch office view.
Device name	Identifier of the device, e.g. host name or IP address.

Table 175 Branch Office Details

Name	Description	
Reachability %	The length of time the device responds to ping as a percentage of the reporting period.	
Unreachable Time	The length of time the device was unreachable during the reporting period.	
SLA Quality		
IP SLA Name	Name of the IP SLA object defined in Entuity.	
Min RTT	Minimum successful round trip completion time.	
Max RTT	Maximum successful round trip completion time.	
Mean RTT	Mean average of successful round trip completion times.	
Success	Operator success as a percentage of total created operators. For a new operator, its first instance always fails.	
Threshold	Indicates the event threshold level, or whether it is disabled.	
Timeline	Operator timeline that shows the state of the operator over the reporting period, i.e. Unknown, Failed, Over threshold and Success.	
Echo Operator Chart		
Operator timeline	Operator timeline shows the state of the operator over the reporting period, i.e. Unknown, Failed, Over threshold and Success. It allows drilldown to the next sample level.	
Min RTT	Minimum successful round trip completion time.	
Max RTT	Maximum successful round trip completion time.	
Mean RTT	Mean average of successful round trip completion times.	
Success	Operator success as a percentage of total created operators. For a new operator, its first instance always fails.	
Threshold	Indicates the event threshold level, or whether it is disabled, DNS translation time, TCP connect time and HTTP download time.	
Chart	Chart displays threshold level, ping success and average round trip time.	
HTTP Operator Chart		
Operator timeline	Operator timeline shows the state of the operator over the reporting period, i.e. Unknown, Failed, Over threshold and Success. It allows drilldown to the next sample level.	
Min RTT	Minimum successful round trip completion time.	
Max RTT	Maximum successful round trip completion time.	
Mean RTT	Mean average of successful round trip completion times.	
Success	Operator success as a percentage of total created operators. For a new operator, its first instance always fails.	
Threshold	Indicates the event threshold level, or whether it is disabled, DNS translation time, TCP connect time and HTTP download time.	
Chart	Chart displays threshold level, total operation time.	

Table 175 Branch Office Details

Name	Description
UDP, TCP, DNS Operator Charts	These operators use the same style of chart.
Operator timeline	Operator timeline shows the state of the operator over the reporting period, i.e. Unknown, Failed, Over threshold and Success. It allows drilldown to the next sample level.
Chart	Chart displays threshold level and total operation time.
Jitter Operator Charts	Three charts, Loss, Delay and Jitter.
Operator timeline	Operator timeline shows the state of the operator over the reporting period, i.e. Unknown, Failed, Over threshold and Success. It allows drilldown to the next sample level.
Loss chart	Loss chart displays Total loss, Loss from source to destination and Loss from destination to source.
Jitter chart	Jitter chart displays Average Jitter from source to destination and Average Jitter from destination to source.
Delays chart	Delays chart displays threshold, Round trip time, Delay from source to destination and Delay from destination to source.

Table 175 Branch Office Details

### **Branch Office Perspective**

#### Branch Office Perspective Overview of network activity for a branch office Report Guide View: Berlin Over the period 21:43 on Sat Jul 10 2010 - 21:43 on Sun Jul 11 2010 **1. Device Inventory Report** →E Catalog of devices and their modules with location, model, version, serial number, etc Last sample in Branch Office Connectivity Over the period this period 2. Spare Ports Report →Π -Availability Ø Ø List of Ethernet switches with an analysis of the quantities of physical - Utilization ø ø ports broken out by spare and used categories. - Faults 0000 000 3. Infrastructure Availability Report Details of Infrastructure Device reachability with uptime totals and - Discards outages. Latency 4. Server Availability Report →□ Device reachability Details of server reachability with uptime totals and outages. 5. Outages Report $\rightarrow \Box$ List of individual device outage incidents. <u>See detailed performance report</u> <del>></del> 6. Switch Port Connectivity Report →□ Switch port details including connected hosts. Spare switch port summary 7. Event History Report →□ Includes all physical ports on Ethernet switches Chronologically ordered listing of individual events. Switches: 2 Spare ports: 27 (28.1%) →□ 8. Event Summary Report Summary of real-time events raised. Physical ports: 96 Used ports: 69 (71.9%) 9. Routing Summary Report →□ Summary of devices providing layer 3 routing services. **10. Switching Summary Report** $\rightarrow \Box$ **Branch Office Perspective** Summary of devices providing layer 2 switching services. This provides an overview of both the current state and recent behavior of network related components that 11. Managed Host Summary Report →□ are related to the operation of a branch office. Several aspects of the behavior of the WAN connectivity are covered and this also accomodates any redundancy, load balancing or dial-backup configuration. The Summary of servers (managed hosts). reachability of all devices being monitored as part of the branch office view is also represented. Further details are displayed when the cursor is placed over any of the status icons and a click will drill down to a detailed report. The Service Quality section, if present, is based on IP SLA operations. The Spare Switch Port Summary covers all the devices in the branch office view that are classified as switches. A spare port is defined as a physical port that has been continuously operationally down for at least 40 days.



### **Branch Office Perspective Overview**

The Branch Office Perspective provides an overview of both the last sample and recent health of the network equipment at the selected branch office, allowing for easy discrimination of current and longer term issues.

Branch Office suite requires a specific view configuration for the perspective and report to run correctly. (See the *Entuity User and System Administrator Guide*.)

Several aspects of the behavior of the WAN connectivity are covered and this also accommodates any redundancy, load balancing or dial-backup configuration. The reachability of all devices being monitored as part of the branch office view is also represented. Further details are displayed when the cursor is placed over any of the status icons, with drill down to the Branch Office Details report also available.

The report only includes an SLA quality section when the view includes Cisco IP SLA operations. Where multiple operations are configured for a branch office their results are listed separately, with drill downs to the IP SLA Details report available.

The Spare Switch Port Summary section covers all the devices in the branch office view that are classified as switches. There is also access to the Spare Ports report. A spare port is defined as a physical port that has been continuously operationally down for at least 40 days.

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The green report guide panel provides report launch facilities in the context of the selected branch office view.

### **Branch Office Perspective Options**

Name	Description	
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.	
Please select a branch office view	Entuity view against which the report is to be run. From the drop down lis you can select one view to run the report against.	
Report period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>	

Table 176 Branch Office Perspective Options

### **Branch Office Perspective Header**

Name	Description
Report title	Report title, e.g. Branch Office Perspective.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.

Table 177 Branch Office Perspective Header

### **Branch Office Perspective Details**

This report provides an overview of branch performance, using icons to indicate metric performance over the last sample and over the reporting period. Each icon is also a hyperlink that opens the Branch Office Details report, or for the Cisco IP SLA icons the IP SLA Details report.

Name	Description
Availability	Availability icons indicate the state of the connectivity service, as provided by all of the Branch Office connectivity links. There are two measures, over the last sample and over the reporting period.
Utilization	Utilization icons indicate threshold crossings, high or low, on any of the Branch Office connectivity links, during the last sample and over the reporting period.

Table 178 Branch Office Perspective Details

Name	Description
Faults	Faults icons indicate threshold crossings, e.g. level of packet corruption and transmit errors, on any of the Branch Office connectivity links, during the last sample and over the reporting period.
Discards	Discards icons indicate threshold crossings, e.g. a high level of port data loss within routers, on any of the Branch Office Connectivity links, during the last sample and over the reporting period.
Latency	Latency icons indicate the state of threshold crossings for the ICMP echo (ping) round trip latency as measured between the Entuity server and the devices used to implement the Branch Office connectivity links during the last sample and over the reporting period.
Device Reachability	Reachability icons indicate overall device reachability, during the last sample and over the reporting period.
SLA Quality	For each IP SLA an icon indicates the state of the operation during the last sample and over the reporting period.
Switches	Number of ethernet switches in the view.
Physical Ports	Number of ethernet switch physical ports within the view.
Spare Ports	Number of switch spare ports within the view, expressed as both a count and as a percentage of the total number of switch ports in the view. A spare port is considered one that has been continuously operationally down for the last forty or more days.
Used Ports	Number of switch used ports within the view, expressed as both a count and as a percentage of the total number of switch ports in the view.

Table 178 Branch Office Perspective Details

### **Multiple Branch Office Perspective**

#### "Multiple Branch Office Perspective

#### Overview of network activity for multiple branch offices

Over the period 21:40 on Sat Jul 10 2010 - 21:40 on Sun Jul 11 2010

Describe self as a series		Branch office connectivity			Device	CLA availa	
Branch office hame	Availability	Utilization	Faults	Discards	Latency	reachability	SLAquainty
<u>lerlin</u>	<b>S</b>	0	0	0	0	0	
ondon	•						•
lew York	8						
ultiple Branch Office Perspective							
his provides an overview of the recent	t behavior of net	work relate	d compor	ents that a	re related	to the oper	ration of a
e accessible branch offices. Several	aspects of the	behavior -	of the Wo	AN connect	ivity are	covered an	d this als
comodates any redundancy, load b opitored as part of the branch office :	alancing of dia	i-backup c scented Fu	rther det	on. Ine re aile aro dien	achability Javed who	or all dev	nces bein pris place
er any of the status icons and a click	will drill down to	a Branch C	)ffice Per	spective foo	used on th	ne selected	office. Th
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Figure 64 Multiple Branch Office Perspective

#### **Multiple Branch Office Perspective Overview**

Multiple Branch Office Perspective, provides an overview of the health of the network equipment in all of the branch offices that are accessible to the user. For each branch office you can drill down to the Branch Office Perspective, which inherits its timeframe from the Multiple Branch Office Perspective. From each icon you can drill down to the Branch Details report, click on a:

- connectivity icon, and the report details all of the connectivity measures for the branch.
- reachability icon, and the report details device reachability for the branch.
- SLA Quality icon, and the report details all of the Cisco IP SLA operators for the branch.



Branch Office suite requires a specific view configuration for the perspective and report to run correctly. (See the *Entuity User and System Administrator Guide*.)

### **Multiple Branch Office Perspective Report Options**

Name	Description
Report Period	By default the period over which the report applies is set to the last twenty- four hours (1440 minutes). When you select:
	<ul> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 179 Multiple Branch Office Perspective Header

### **Multiple Branch Office Perspective Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Multiple Branch Office Perspective.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.
Prime Time Definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 180 Multiple Branch Office Perspective Header

### **Multiple Branch Office Perspective Details**

Name	Description
Branch Office Name	Name of the branch office, derived from the name of the view holding the branch office service.
Availability	Availability icon indicates the state of the connectivity service, as provided by all of the Branch Office connectivity links, over the reporting period.
Utilization	Utilization icon indicates threshold crossings, high or low, on any of the Branch Office connectivity links, over the reporting period.
Faults	Faults icon indicates threshold crossings, e.g. level of packet corruption and transmit errors, on any of the Branch Office connectivity links, over the reporting period.
Discards	Discards icon indicates threshold crossings, e.g. a high level of port data loss within routers, on any of the Branch Office Connectivity links, over the reporting period.

Table 181 Multiple Branch Office Perspective Details

Name	Description
Latency	Latency icon indicates the state of threshold crossings for the ICMP echo (ping) round trip latency as measured between the Entuity server and the devices used to implement the Branch Office connectivity links over the reporting period.
Device Reachability	Reachability icon indicates overall device reachability, over the reporting period.
SLA Quality	IP SLA icon indicates the combined state of all of the Cisco IP SLA operations over the reporting period.

Table 181 Multiple Branch Office Perspective Details

## 6 CIO Perspective Reports

This set of reports provides access to the data available through the CIO Perspective suite.



CIO Perspective suite requires a specific view configuration for the perspective and report to run correctly. (See the *Entuity User and System Administrator Guide*.)

### **Running CIO Perspective Reports**

You can run these reports from the web interface:

- 1) Click Reports. Entuity displays the Reports Home page.
- 2) Click CIO Perspective. Entuity displays the list of available reports.



Figure 65 CIO Perspective Reports

### **CIO SLA Summary Report**

#### CIO SLA Summary

Centuity

 Printed on:
 29 May 2012 10:14:14 BST

 Description:
 Summary of SLA conformance

 View:
 CIO London Office

 Over the period 00:00 on Thu May 24 2012 - 00:00 on Tue May 29 2012

Network	Uptime	Downtime	Availability %	SLA goal %
Global Wireless	5d 0h 0m 0s	0s	100.000	98.00
Data Center Core	3d 23h 23m 33s	1d 0h 36m 26s	79.494	98.00
VM Platforms	5d 0h 0m 0s	0s	100.000	98.00

Figure 66 CIO SLA Summary Report

#### **CIO SLA Summary Report Overview**

This report allows you to monitor the SLA compliance of key components within a CIO Perspective. It is available from the CIO Perspective section of the report center, and also as a drilldown through the CIO Perspective.

CIO Perspective suite requires a specific view configuration for the perspective and report to run correctly. (See the *Entuity User and System Administrator Guide*.)

### **CIO SLA Summary Report Options**

Name	Description
Please select a server	Available when the server acts as a central server in a multiple Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select the view with a CIO service to run the report against.
Report period	<ul> <li>Period over which the report applies, by default twenty-four hours. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 182 CIO SLA Summary Report Header

### **CIO SLA Summary Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. CIO SLA Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.

Table 183 CIO SLA Summary Report Header

### **CIO SLA Summary Report Details**

The details vary according to the configuration of your CIO Perspective.

Name	Description
Name	Name of this column is taken from the service immediately below the CIO Service, for example Network. Each row within this column is a technology, for example within Network.
Uptime	Length of time the service was available during the reporting period.
Downtime	Length of time the service was unavailable during the reporting period.
Availability %	Service availability as a percentage of the time the service was available during the reporting period. When availability is below <i>SLA Goal</i> % its values is displayed in red.
SLA Goal %	The level of required service delivery, expressed as a percentage of service availability.

Table 184 CIO SLA Summary

### **CIO Perspective Report**

Description       Description         Description       Description       Description         Description       Description       Description       Description         Image: Control of the second balance       Amage: Control of the second balance       Amage: Control of the second balance       Description         ONS       Amage: Control of the second balance       One second balance       One second balance       One second balance       One second balance       Second balance<
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Image:
PCOP Perspective Device of service availability across multiple technologies as of 31 Oct 2014 23 07.45 04.15 Terrier O London Office
Public Perspective         Developed availability accounding is as of 31 Oct 2014 23 07:84 0MI         View       OL Ondoro Office         Image: Color Developed availability Image: Color Developed Av
Overview of service availability across multiple technologies as of 31 Oct 2014 23.07:24 GMT         Vier:       OL Dendon Office         Image: Analiship       Port         Load Balancer       Image: Analiship         DNS       Availability         DNS       Availability         DNS       Image: Analiship         Image: Analiship       Image: Analiship         DNS       Image: Analiship         Image: Analiship       Image: Analiship         ONS       Image: Image: Analiship         Image: Analiship       Image: Image
View       CI0 London Office         Lade Bilancer       Availability       Port       Device       Schoolity       SLA         Lood Bilancer       Image: Schoolity       States       Schoolity       SLA         DNS       Availability       Utilization       Faults       Discuss       SLA         DNS       Availability       Utilization       Faults       Discuss       SLA         DNS       Image: Schoolity       Utilization       Faults       Discuss       SLA         DNS       Image: Schoolity       Utilization       Faults       Discuss       SLA         DNS       Image: Schoolity       Utilization       Faults       Discuss       SLA         Olobal VPN       Image: Schoolity       Utilization       Faults       Discuss       SLA         Global VPN       Image: Schoolity       Image: Schoolity       Image: Schoolity       SLA         Discuss       Image: Schoolity       Image: Schoolity       SLA       SLA         Discuss       Image: Schoolity       Image: Schoolity       SLA       SLA         Discuss       Image: Schoolity       Image: Schoolity       SLA       SLA         Discuss       Image: Schoolity       Image: Schoolity
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Understein       Understein       Database       Descent       Descent         DNS       Image: Construction of the second s
VPN       Availability       Port       Device       Latency       SLA         Global VPN       Image: Control of the starts       Discards       reachability       Latency       SLA         Global VPN       Image: Control of the starts       Discards       reachability       Latency       SLA         Global Wreless       Image: Control of the starts       Image: Control of the starts       Discards       reachability       SLA         Global Wreless       Image: Control of the starts       Image: Control of the starts       Image: Control of the starts       SLA         Global Wreless       Image: Control of the starts       Image: Control of the starts       Image: Control of the starts       SLA         Global Wreless       Image: Control of the starts       Image: Control of the sta
VFN       Availability       Port       Device reachability       Latency       SLA         Global VFN       Image: State of the second
urre       Availability       Utilization       Faults       Discards       waschability       Littlety       BLA         Global VPN       Image: Construction of the constructio
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Network       Availability       Port       Device       Latency       SLA         Global Wireless       Image: Construction of the second of t
Network       Availability       Dist       Distance       Distance       BLA         Global Wireless       Image: Comparison of the second of
Clobal Wireless       Quickine       Louise       Lo
VLH Platforms       V         Data Center Core       Image: Core         Internet       Availability         Internet       Availability         UBLication       Faults         Discords       Teachability         Internet       Availability         UBLication       Faults         Discords       Teachability         Internet Proxy       Image: Core         Internet Proxy       Image: Core         Internet Access       Image: Core         CIO Perspective       Image: Core         An overview of the recent behavior of network related components based on their role in the enterprise. Exceptional conditions relating to ports and devices is indicated. Further dealls are displayed when the cursor is placed over any of the talaus icons. Drilldowns are availability and SLA icons. Icons will only be present if the netwart underlying operations have been configured.         Measurement categories       Availability or the relevant monitored components is acceptable.         Evaliability:       Current availability of the relevant monitored components is acceptable.
Via Faultalitie       Image: Core       Image: Core </td
Data Center Core         Internet       Port       Device       SLA         Internet Proxy       Port       Device       SLA         Internet Proxy       Port       Device       SLA         Internet Access       ©       ©       O       SLA         Internet Access       ©       ©       ©       O       SLA         Internet Access       ©       ©       ©       O       O       O       O         CIO Perspective       An overview of the recent behavior of network related components based on their role in the enterprise. Exceptional conditions relating to ports and devices is indicated. Further details are displayed when the cursor is placed over any of the status icons. Diritidown are available from the Availability and SLA icons. Icons will only be present if the relevant underlying operations have been configured.         Measurement categories         Availability: Current availability of the relevant monitored components is acceptable.         Willization issues both high and low threshold graphical graphical may of the relevant monitored
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Intersaul entime. Lougoures Availability: Current availability of the relevant monitored components is acceptable. Utilization: Utilization issues both high and low threshold crossings on any of the relevant monitored
Utilization: Utilization issues, both high and low threshold crossings, on any of the relevant monitored
ports.
Faults: Significant packet corruption and transmit errors on any of the relevant ports.
Discards: Port level data loss within routers resulting in threshold crossings on any of the relevant ports.
Device reachability: Loss of ICMP echo (ping) reachability to any of the relevant monitored devices.
Latency: The combination of the results of the IP SLA operations, if any, being performed.
SLA: The conformance to the availability SLA, if configured, for this month so far.

Figure 67 CIO Perspective Report

### **CIO Perspective Report Overview**

The CIO Perspective allows a high level overview of the network health. It identifies different categories of service. It allows an executive to rapidly determine whether there have been any recent issues that have impacted any of the business services that the company relies on. Where problems are identified it is easy to identify which parts of the company have been impacted and when that impact would have been felt. Importantly this perspective distinguishes between service impacting issues and those that can be safely accommodated through the redundant nature of the network.



CIO Perspective suite requires a specific view configuration for the perspective and report to run correctly. (See the *Entuity User and System Administrator Guide*.)

The perspective has a multi-level drill down approach, whereby the top level presentation indicates whether there were any relevant issues and which business service they were related to. Each of the services and related metrics allow drilldowns that would present more details about the issues specific to the service and part of the network that were selected. This second level drilldown displays when the issues were experienced using a color ribbon presentation. A third level drilldown lists all the components being monitored for the specific service along with an indication of which one(s) was/were responsible for the issue(s).

### **CIO Perspective Report Options**

Name	Description
Please select a server	Available when the server acts as a central server in a multiple Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select the view with a CIO service to run the report against. Entuity only displays those services which include a CIO service.
Report period	<ul> <li>Period over which the report applies, by default twenty-four hours. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 185 CIO Perspective Report Header

### **CIO Perspective Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. CIO Perspective.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Printed On	Date and time at which the report was run.

Table 186 CIO Perspective Report Header

### **CIO Perspective Report Details**

The details vary according to the configuration of your CIO Perspective.

This report provides an overview of branch performance, using icons to indicate metric performance over the last sample and over the reporting period. Each icon is also a hyperlink that opens a drilldown report.

Name	Description
Availability	Availability icons indicate the current state of the connectivity service, as provided by all of the components within the service connectivity links.
Utilization	Utilization icons indicate threshold crossings, high or low, on any of the ports during the last sample.
Faults	Faults icons indicate threshold crossings, e.g. level of packet corruption and transmit errors, on any of the ports, during the last sample.
Discards	Discards icons indicate threshold crossings, e.g. a high level of port data loss within routers, on any of the ports, during the last sample.
Latency	Latency icons indicate the state of threshold crossings for the ICMP echo (ping) round trip latency as measured between the Entuity server and the devices used to implement the service connectivity links during the last sample.
Device Reachability	Reachability icons indicate overall device reachability, during the last sample.
SLA Quality	For each SLA an icon indicates the current state of SLA compliance to the SLA goal set against the service.

Table 187 CIO Perspective

# 7 Configuration Reports

This set of reports provides access to the data available through Entuity Configuration Monitor.

### **Running Configuration Reports**

You can run these reports from the web interface:

- 1) Click **Reports**. Entuity displays the Reports Home page.
- 2) Click Configuration Reports. Entuity displays the list of available reports.

Į.	Ser	ituity										User: admin@entlonp Page Updated: 09:58:	ovm01 <u>[Loqout]</u> <del>1</del> 5, GMT
D	ashboards	InSight Center	Explorer	Events	Maps	Charts	Flows	Reports	Tools	Administration	Help		P
	Report reports > Co	<b>ts</b> infiguration											
	Report		Schedule	History	Descrip	tion							
	Configuratio	on Monitor Settings	11	<u></u>	Summar	y of Config	uration M	onitor settin	gs				
	Device Cont	iquration Status	11	<u> </u>	Summar	y of curren	t device o	onfiguration	status				
	Device Cont	iquration Summary	11	<u></u>	Summar	y of device	configura	tion change	s and pol	icy violations over f	ime		
	Schedule	d Reports											

Figure 68 Configuration Reports

### **Configuration Monitor Settings Report**

### Entuity Report Configuration Monitor Settings

 Description:
 Summary of Configuration Monitor settings

 View:
 My Network (admin)

 Printed on:
 6 Aug 2016 14:26:38 BST

Device name	Model	Location	Policy checking	Scheduled upload	Maximum archives retained
192.168.97.110		Jan-GNS-BGP	cisco-generic-	Off	4
			policies.cfg		
cfgmon Dell				Off	4
cfgmon HP		Server-Room - Server Rack	hp-generic-policies.cfg	Off	4
cfgmon Huawei		Server Room - Server Rack		Off	4
cfgmon Juniper		Jeff's desk		Off	4
cfgmon Matt's HP			hp-generic-policies.cfg	Off	4



### **Configuration Monitor Settings Overview**

The Configuration Monitor Settings report summarizes the current configuration monitor settings of devices.

### **Configuration Monitor Settings Options**

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a sort option	Select the column on which you want to sort the results.

Table 188 Configuration Monitor Settings Options

### **Configuration Monitor Settings Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Configuration Monitor Settings.
Printed on	Date and time the report was generated.
Description	Description of the report.

Table 189 Configuration Monitor Settings Header

8 entuity

Name	Description
View	Entuity view against which the report was run.

Table 189 Configuration Monitor Settings Header

### **Configuration Monitor Settings**

Name	Description
Device Name	Device name or IP address Entuity uses to manage the device.
Model	Device model as identified by Entuity.
Location	Description of device location.
Policy Checking	Indicates whether policy checking of retrieved configuration for the device is enabled or disabled, and the name of the policy file.
Sched Upload	Indicates whether scheduled configuration retrieval for the device is enabled or disabled.
Maximum Archives Retained	Number of archives retrieved for the device, by default 4.

Table 190 Configuration Summary Details

### **Device Configuration Status Report**

### Entuity Report Device Configuration Status

Centuity

 Description:
 Summary of current device configuration status

 View:
 Regional

 Printed on:
 27 Jun 201111:46:52 BST

 Sorted by:
 Device name

			Last attempted configuration retrieval			
Device name	Model	Location	Time	Outcome	Config changed	Policy compliance
172.16.47.22	SRX210-H	Jeff's desk	27/06/11 11:21	Succeeded	Yes	Yes
bottom3550	WS-C3550-24-EMI	Entuity Test Room	27/06/11 11:03	Succeeded	Yes	No
lonsw04	J4812A ProCurve Switch	Hot House	27/06/11 11:44	Succeeded	Yes	No

Figure 70 Device Configuration Status Report

#### **Device Configuration Status Overview**

The Device Configuration Status report details the last attempt at configuration retrieval.

#### **Device Configuration Status Options**

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a sort option	Select the column on which you want to sort the results.

Table 191 Device Configuration Status Options

### **Device Configuration Status Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Device Configuration Status.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 192 Device Configuration Status Header

Name	Description
Sorted by	Column on which the results are sorted.

Table 192 Device Configuration Status Header

### **Device Configuration Status**

Name	Description	
Device Name	Device name or IP address Entuity uses to manage the device.	
Model	Device model as identified by Entuity.	
Location	Description of device location.	
Last Attempted Configuration Retrieval		
Time	The time of the last policy retrieval.	
Outcome	Indicates whether the last configuration retrieval for the device was successful.	
Config Changed	Indicates whether the configuration changed between the last and previous poll.	
Policy Compliance	Indicates whether the device configuration was or was not compliant with the policy statement mandate.	

Table 193 Device Configuration Status Details

### **Device Configuration Summary Report**

#### Entuity Report Device Configuration Summary



 Description:
 Summary of device configuration changes and policy violations over time

 View:
 Regional

 Over the period 00:00 on Fri May 27 2011 - 00:00 on Mon Jun 27 2011
 Printed on: 27 Jun 2011 11:47:37 BST

 Sorted by:
 Days with policy violations

Device name	Model	Location	Days with policy violations	Uploads with changes	Time of last config upload	Outcome of last upload
172.16.47.22	SRX210-H	Jeff's desk	0	0	27/06/11 11:21	Succeeded
bottom3550	WS-C3550-24-EMI	Entuity Test Room	0	0	27/06/11 11:03	Succeeded
lonsw04	J4812A ProCurve Switch	Hot House	0	0	27/06/11 11:44	Succeeded



### **Device Configuration Summary Overview**

The Device Configuration Summary report summarizes the device configuration of the reporting period.

### **Device Configuration Summary Options**

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a sort option	Select the column on which you want to sort the results.
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 194 Device Configuration Summary Options

### **Device Configuration Summary Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.

Table 195 Device Configuration Summary Header

Name	Description
Report title	Report title, e.g. IP SLA Echo.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.
Sorted by	Column on which the results are sorted.

Table 195 Device Configuration Summary Header

### **Device Configuration Summary**

Name	Description
Device Name	Device name or IP address Entuity uses to manage the device.
Model	Device model as identified by Entuity.
Location	Description of device location.
Days with policy violations	Number of days within the report period policy violations were reported on the device.
Uploads with changes	Number of uploads within the report period changes in configuration were reported on the device.
Time of last config upload	Time of the last configuration upload.
Outcome of last upload	Indicates whether the last configuration retrieval for the device was successful.

Table 196 Device Configuration Summary Details

## 8 Connectivity and Routing Reports

This set of reports allow you to monitor the routing, topology and connectivity characteristics of your network.

### **Running Connectivity and Routing Reports**

You can run Connectivity and Routing reports from the web interface:

- 1) Click **Reports**. Entuity displays the Reports Home page.
- 2) Click **Connectivity and Routing**. Entuity displays the list of available reports.

£ entuity			User: admin@entlonpym Page Updated: 09:58:45,	01 <mark>(Loqo</mark> GMT
Dashboards InSight Center	Explorer	Events	Maps Charts Flows Reports Tools Administration Help	
Reports				
reports > Connectivity				
Report	Schedule	History	/ Description	
BGP Router Peering	11	<u> </u>	Inventory of routers participating in BGP with their peer details	
BGP State Transitions	11	<u></u>	Inventory of BGP peers that have changed state	
CDP Port Adjacencies	11	<u></u>	Inventory of devices and ports with connectivity details obtained via Cisco Discovery Protocol	
EIGRP Router Peering	11	<u></u>	Inventory of routers participating in EIGRP with their peer details	
HSRP Ports	11	<u></u>	Configuration details of ports within HSRP groups	
MPLS LDP Label Ranges	11	<u></u>	Inventory of MPLS Label Distribution Protocol label ranges	
MPLS LDP Peer Details	11	<u></u>	Detailed inventory of MPLS Label Distribution Protocol peers	
MPLS LDP Peer Performance	11	<u> </u>	Inventory of MPLS Label Distribution Protocol entities	
MPLS LDP Summary	11	<u></u>	Inventory of routers running MPLS Label Distribution Protocol	
MPLS LSR Detail	11	<u> </u>	Inventory of MPLS Label Switched Router ports	
MPLS LSR Inventory	11	<u></u>	Inventory of MPLS Label Switched Routers	
MPLS LSR Performance	11	<u> </u>	Performance of MPLS Label Switched Router ports	
MPLS VPN Device Details	11	<u></u>	Inventory of devices participating in MPLS VPNs	
MPLS VPN Device Summary	11	<u></u>	Inventory of Label Switch Routers participating in VPNs	
MPLS VPN Route Capacity	11	<u>(*)</u>	Inventory of VRFs and their route counts	
OSPF Router Peering	11	<u></u>	Inventory of routers participating in OSPF with their peer details	
OSPF State Transitions	11	<u>6</u>	Inventory of OSPF peers that have changed state	
Switch Port Connectivity	11	<u> </u>	Switch port details including connected host(s)	
Scheduled Reports				

Figure 72 Connectivity and Routing Reports

### **BGP Router Peering Report**

#### Entuity Report BGP Router Peering

Centuity

Printed on: 17 Nov 2012 16:27:28 EST

Description: Inventory of routers participating in BGP with their peer details

View: Regional

Over the period 16:00 on Tue Nov 16 2012 - 16:00 on Wed Nov 17 2012

Router name	Model	Location	Local AS	BGP identifier	BGP peer count
10.66.23.61	WS-C6509-NEB-A	"Simulator"	65217	192.168.255.226	2
bottom3550	WS-C3550-24-EMI	Entuity Test Room	64132	10.44.1.12	3
c2821	2821		109	192.168.159.123	2
e2821	2821	Cisco corner in the test room	109	10.44.1.59	2
new2610	2610	Entuity Test Room	64000	204.143.4.36	5
r2610	2610	Entuity Test Room	64000	204.4.143.35	5
bottom3550	WS-C3550-24-EMI	Entuity Test Room	64132	10.44.1.12	3
c2821.entuity.local	2821		109	192.168.159.123	2
c3560.entuity.local	WS-C3560-24TS-E	Entuity Test Room	110	10.44.1.39	1
e2821.entuity.local	2821	Cisco corner in the test room	109	10.44.1.59	2
foundrynetiron4000.vendor.entuity.la b	NI-XMR-1Gx20-SFP 20-port 1GbE/100FX Module		2495	164.113.199.103	9
new2610	2610	Entuity Test Room	64000	204.143.4.36	5
r2610	2610	Entuity Test Room	64000	204.4.143.35	5

#### BGP peer details for device 10.66.23.61

Local IP address	Remote IP address	Remote AS	Peer type	BGP peer state	BGP admin status	Established time	State transition count	Peered router
192.168.255.226	192.168.255.246	65217	Internal	Established	Start	Wed Sep 19 08:05:26 EDT	23118	
192.168.255.226	192.168.255.248	65217	Internal	Established	Start	Thu Sep 20 02:21:01 EDT	22664	

#### BGP peer details for device bottom3550

Local IP address	Remote IP address	Remote AS	Peer type	BGP peer state	BGP admin status	Established time	State transition count	Peered router
10.44.1.12	10.44.1.39	110	External	Established	Start	Mon Nov 05	0	
						06:47:59 EST 2012		
10.44.1.12	10.44.1.58	109	External	Established	Start	Mon Nov 05	0	c2821
						06:26:38 EST 2012		
10.44.1.12	10.44.1.59	109	External	Established	Start	Wed Nov 14	0	e2821
						10:57:13 EST 2012		

BGP pe	BGP peer details for device c2821							
Local IP ad	dress Remote IP address	Remote AS	Peer type	BGP peer state	BGP admin status	Established time	State transition count	Peered router
10.44.1.58	10.44.1.12	64132	External	Established	Start	Mon Nov 05 06:26:19 EST 2012	0	bottom3550
10.44.1.58	10.44.1.59	109	Internal	Established	Start	Wed Nov 14 10:57:06 EST 2012	0	e2821

BGP peer details for device e2821								
Local IP address	Remote IP address	Remote AS	Peer type	BGP peer state	BGP admin status	Established time	State transition count	Peered router
10.44.1.59	10.44.1.12	64132	External	Established	Start	Wed Nov 14 10:56:59 EST 2012	0	bottom3550
10.44.1.59	10.44.1.58	109	Internal	Established	Start	Wed Nov 14 10:56:59 EST 2012	0	c2821

BGP peer details for device new2610								
Local IP address	Remote IP address	Remote AS	Peer type	BGP peer state	BGP admin status	Established time	State transition count	Peered route
Unknown	10.44.1.12	64132	External	Active	Stop	Fri Sep 12 12:04:40 EDT	0	bottom3550
Unknown	10.44.1.42	64132	External	Active	Stop	Fri Sep 12 12:04:40 EDT	0	top3550



### **BGP Router Peering Report Overview**

This report provides an inventory of routers participating in BGP with their peer details.

### **BGP Router Peering Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description		
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.		
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.		
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>		

Table 197 BGP Router Peering Report Options

### **BGP Router Peering Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. BGP Router Peering.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.

Table 198 BGP Router Peering Report Header

### BGP Router Peering Report Details

Name	Description
Router Name	Device name.
Model	Device model.
Location	Location of the device.
Local AS	Local AS of the device.

Table 199 BGP Router Peering Report

Name	Description
BGP Identifier	Each router running BGP has a BGP identifier. This identifier is included in the BGP identifier field of open messages, which are sent between two BGP peers when establishing a BGP session
BGP peer count	Number of BGP peers.

Table 199 BGP Router Peering Report

This table identifies the BGP peers of the device.

Name	Description
Local IP Address	Local IP address of the device.
Remote IP Address	The remote IP address of this entry's BGP peer.
Remote AS	The remote autonomous system number.
Peer Type	When set to External, peering is between routers in different AS. Internal, peering is between routers in the same AS.
BGP Peer State	When set to Established, allows passing of information, otherwise when set to Idle, Connect, Active, Open Sent and Open Confirm the peer is not established.
BGP Admin Status	Administrator set value when set to Start should be operating and when Stop should be down.
Established Time	Transitions into and out of the Established state cause this timer to be reset.
State Transition Count	Established Transitions Count, number of changes in peer status during the polling period. A high value may indicate flapping and require further investigation.
Peered router	Identifier of the peered device.

Table 200 BGP Peer Device Details

### **BGP Peering State Transitions Report**

E ntuity Report								
BGP Peering State Transitions						entuity		
Printed on: 1	Printed on: 17 Nov 2009 16:28:09 EST							
Description: I	nventory of BGP	peers that h	ave change	ed state				
View F	Regional		5					
	16:00 are Mare N	16 2000	16.00 T					
Over the period	16:00 on Mon N	00 16 2009 -	16:00 on 1	ue Nov 17 200	19			
Local IP address	Remote Ip address	Remote AS	Peer type	BGP peer state	BGP admin status	State transition count	Local router	Peered router
192.168.255.226	192.168.255.246	65217	Internal	Established	Start	23118	10.66.23.61	
192.168.255.226	192.168.255.248	65217	Internal	Established	Start	22664	10.66.23.61	
164.113.199.103	164.113.199.100	2495	Internal	Connect	Start	9485	foundrynetiron4000.vend or.entuity.lab	
164.113.212.9	164.113.212.10	2701	External	Established	Start	9443	foundrynetiron4000.vend	
164.113.199.103	164.113.199.107	2495	Internal	Connect	Start	9326	foundrynetiron4000.vend	
164.113.199.103	164.113.199.105	2495	Internal	Connect	Start	9288	foundrynetiron4000.vend	
164.113.199.103	164.113.199.102	2495	Internal	Connect	Start	9198	foundrynetiron4000.vend	
164.113.199.103	164.113.199.3	2495	Internal	Established	Start	8993	foundrynetiron4000.vend or.entuity.lab	
164.113.199.103	164.113.199.104	2495	Internal	Connect	Start	8931	foundrynetiron4000.vend	
Unknown	164.113.199.101	2495	Internal	Active	Start	8784	foundrynetiron4000.vend	
164.113.212.5	164.113.212.6	2701	External	Established	Start	8530	foundrynetiron4000.vend or.entuity.lab	



### **BGP Peering State Transitions Report Overview**

This report provides an inventory of BGP peers that have changed states within the reporting period.

### **Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description				
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.				
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.				
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>				

Table 201 Report Options

### **BGP Peering State Transitions Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. BGP Peering State Transitions.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.

Table 202 BGP Peering State Transitions Report Header

### **BGP Peering State Transitions Report Details**

Name	Description
Local IP Address	Local IP address of the device.
Remote IP Address	The remote IP address of this entry's BGP peer.
Remote AS	The remote autonomous system number.
Peer Type	When set to External, peering is between routers in different AS. Internal, peering is between routers in the same AS.
BGP Peer State	When set to Established, allows passing of information, otherwise when set to Idle, Connect, Active, Open Sent and Open Confirm the peer is not established.
BGP Admin Status	Administrator set value when set to Start should be operating and when Stop should be down.
State Transition Count	Established Transitions Count, number of changes in peer status during the polling period. A high value may indicate flapping and require further investigation.
Local router	Identifier of the local device.
Peered router	Identifier of the peered device.

This table identifies the BGP peers of the device.

Table 203 BGP Peer Device Details

## Port CDP Adjacencies Report

#### Entuity Report

#### Port CDP Adjacencies

Printed on: 8 Oct 2012 20:16:12 BST

Description: Inventory of devices and ports with connectivity details obtained via Cisco Discovery Protocol View: Regional

Device name	Model	Location	Connected ports
10.44.1.9	C2950XL		1
bottom2960	WS-C2960-24TT-L	Entuity Test Room	6
bottom3550	WS-C3550-24-EMI	Entuity Test Room	5
c2821	2821		4
c3560	WS-C3560-24TS-E	Entuity Test Room	2
e2821	2821	Cisco corner in the test room	6
ioalana	7513	"Europe,ColchesterGDC,7513_2"	21
lonsw01	WS-C5505		3
lonsw02	WS-C5505	Development cabinet	2
lonsw03	WS-C5505		5
new2610	2610	Entuity Test Room	1
r2501	2501	Entuity Test Room	2
r2610	2610	Entuity Test Room	1
sunrise	WSX5302	4th_Floor_9a_Devonshire_Square	1
top2960	WS-C2960-24TT-L	The real top of the pile	4

CDP connectivity details for device 10.44.1.9					
Port ID	Alias	MIB-2 interface description	Admin/Oper status	Port role	Remote device:port
[Fa0/1]	TRUNK	FastEthernet0/1	up / up	Trunk	10.44.1.5:2/3

#### CDP connectivity details for device bottom2960

	-				
Port ID	Alias	MIB-2 interface description	Admin/Oper status	Port role	Remote device:port
[Fa0/1]		FastEthernet0/1	up / up	Trunk	10.44.1.7:2/8
[Fa0/9]		FastEthernet0/9	up / up	Trunk	10.44.1.12:FastEthernet0/2
[Fa0/15]		FastEthernet0/15	up / up	Uplink	10.44.1.35:Ethernet0/0
[Fa0/17]		FastEthernet0/17	up / up	Uplink	10.44.1.36:Ethernet0/0
[ Gi0/1 ]		GigabitEthernet0/1	up / up	Uplink	10.44.1.58:GigabitEthernet0/0
[ Gi0/2 ]		GigabitEthernet0/2	up / up	Uplink	10.44.1.59:GigabitEthernet0/0

#### CDP connectivity details for device bottom3550

Port ID	Alias	MIB-2 interface description	Admin/Oper status	Port role	Remote device:port
[Fa0/1]		FastEthernet0/1	up / up	Trunk	10.44.1.40:FastEthernet0/7
[Fa0/2]		FastEthernet0/2	up / up	Trunk	10.44.1.41:FastEthernet0/9
[Fa0/11]		FastEthernet0/11	up / up	None	192.168.136.1:FastEthernet0/11
[ Gi0/1 ]		GigabitEthernet0/1	up / up	Trunk	10.44.1.39:GigabitEthernet0/2
[ Gi0/2 ]		GigabitEthernet0/2	up / up	None	10.44.1.42:GigabitEthernet0/2

CDP connectivity details for device c2821					
Port ID	Alias	MIB-2 interface description	Admin/Oper status	Port role	Remote device:port
[ Gi0/0 ]	Connection to 10.44 Ian"ETH-LAN"	GigabitEthernet0/0	up / up	Router	10.44.1.41:GigabitEthernet0/1
[Gi0/1]		GigabitEthernet0/1	up / up	Router	10.44.1.59:GigabitEthernet0/1

Figure 75 Port CDP Adjacencies Report

Centuity

### Port CDP Adjacencies Report Overview

This report provides an inventory of devices and ports with connectivity details obtained via Cisco Discovery Protocol.

### Port CDP Adjacencies Report Options

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 204 Port CDP Adjacencies Report Options

### Port CDP Adjacencies Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port CDP Adjacencies.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 205 Port CDP Adjacencies Report Header

### Port CDP Adjacencies Report Details

Name	Description
Device name	Identifier of the device, e.g. host name or IP address.
Model	Model of the device.
Location	A text description of the physical location of the device that is contained on the device, e.g. Development Cabinet.
Connected ports	Number of ports connected to the device.

Table 206 Port CDP Adjacencies

Name	Description
Port id	Port identifier
Alias	Port alias.
MIB 2 Interface Description	Port description taken from SNMP-MIB2.

Table 207 CDP Connectivity

Name	Description
Admin/Oper port status	Current operational status, e.g. up, down, and the port status as set by the system administrator.
Port role	The port type, e.g. router, uplink.
Remote device:port	Remote device and port to which the port is connected.

Table 207 CDP Connectivity

### **EIGRP Router Peering Report**

#### Entuity Report

#### **EIGRP Router Peering**

Centuity

Printed on: 8 Oct 2009 20:17:36 BST

Description: Inventory of routers participating in EIGRP with their peer details

View: Regional

Over the period 20:00 on Wed Oct 07 2009 - 20:00 on Thu Oct 08 2009

Router name	Model	Location	EIGRP peer count
c2821	2821		6
e2821	2821	Cisco corner in the test room	10

#### EIGRP peer details for device c2821

Local IP address	Remote IP address	Peered router
192.168.248.129	192.168.248.130	
192.168.249.17	192.168.249.18	e2821
192.168.249.1	192.168.249.2	e2821
192.168.249.33	192.168.249.34	e2821
192.168.249.49	192.168.249.50	e2821
192.168.249.65	192.168.249.66	e2821

EIGRP peer details for device e2821					
Local IP address	Remote IP address	Peered router			
10.44.1.59	10.44.1.12	bottom3550			
10.44.1.59	10.44.1.35	r2610			
10.44.1.59	10.44.1.36	new2610			
192.168.141.1	192.168.141.2	r2501			
192.168.242.124	192.168.242.123				
192.168.249.2	192.168.249.1	c2821			
192.168.249.18	192.168.249.17	c2821			
192.168.249.34	192.168.249.33	c2821			
192.168.249.50	192.168.249.49	c2821			
192.168.249.66	192.168.249.65	c2821			

Figure 76 EIGRP Router Peering Report

### **EIGRP Router Peering Report Overview**

This report provides an inventory of routers participating in EIGRP with their peer details.

### **EIGRP Router Peering Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.

Table 208 EIGRP Router Peering Report Options

Name	Description				
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.				
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>				

Table 208 EIGRP Router Peering Report Options

### EIGRP Router Peering Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. EIGRP Router Peering.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.

Table 209 EIGRP Router Peering Report Header

### **EIGRP Router Peering Report Details**

Name	Description
Router Name	Device name.
Model	Device model.
Location	Location of the device.
EIGRP peer count	Number of EIGRP peers.

Table 210 EIGRP Router Peering Summary

Name	Description
Local IP Address	Local IP address of the router.
Remote IP Address	Remote IP address of the router.
Peered router	Identifier of the peered device.

Table 211 EIGRP Router Peers

### **HSRP Ports Report**

Entuity Report								
HSRP Ports Report					8 entuity			
Printed on:	inted on: 30 Oct 2013 13:19:05 GMT							
Description:	Configuration details of ports within HSRP groups							
View:	My Network							
Devid	ce name	Interface	Group number	Priority	Active router	Standby router	Virtual IP	Virtual MAC
bottom3550		FastEthernet0/11	101	200	192.168.136.1	192.168.136.2	192.168.136.3	00:00:0c:07:ac:65
ton3550		EastEthernet0/11	101	250	192 168 136 4	192 168 136 5	192 168 136 3	00:00:0c:07:ac:65

#### Figure 77 HSRP Ports Report

#### **HSRP Ports Report Overview**

This report provides configuration details of ports within HSRP groups.

#### **Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 212 HSRP Ports Report Options

### **HSRP Ports Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. HSRP Port.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 213 HSRP Ports Report Header

### HSRP Ports Report Details

Name	Description
Device Name	Identifier of the device, e.g. host name or IP address.
Interface	Interface description.
Group Number	Identifies the HSRP standby group. For Token Ring, values between 0 and 2 inclusive are valid. For other media values between 0 and 255 inclusive are valid.
Priority	The priority level of the router. When comparing priorities of two different routers, the router with the numerically higher priority wins, becoming the active router. When both routers have the same priority level the router with the higher IP address wins.
Virtual IP Address	The virtual IP address of the group. When a router's virtual IP address is not configured, it can be derived through an authenticated HSRP hello message.
Active Router	The IP address of the current active router for this HSRP standby group. If the value returned is 0.0.0.0 this indicates HSRP configuration is incomplete or connectivity with devices in its HSRP group is broken
Standby Router	The IP address of the current standby router for this HSRP standby group. If the value returned is 0.0.0.0 this indicates HSRP configuration is incomplete or connectivity with devices in its HSRP group is broken.
Virtual MAC Address	For Ethernet and FDDI, the automatically generated MAC address when HSRP is configured. The standard virtual MAC address used is: 0000.0C07.ACxy, where xy is the group number in hexadecimal. The functional address is used for Token Ring.

Table 214 HSRP Ports Report

### MPLS LDP Label Ranges Report

E ntuity Report				
LDP Label Ranges				Centuity
Printed on:	8 Oct 2009 20:20:45 BST			
Description:	Inventory of MPLS Label Distribution Protocol label ranges			
View:	Regional			
Devices:	2			
	Device name			LDP label ranges
c2821				1
e2821				1
MPLS LDP label range details for device c2821				
	Port	Minimum labe	əl	Maximum label
Serial0/2/0.212			16	100000
MPLS LDP label range details for device e2821				
	Port	Minimum labe	el	Maximum label
Serial0/1/1.402			16	100000

Figure 78 MPLS LDP Label Ranges Report

### MPLS LDP Label Ranges Report Overview

This report provides an inventory of MPLS Label Distribution Protocol label ranges.

### **MPLS LDP Label Ranges Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 215 MPLS LDP Label Ranges Report Options

### MPLD LDP Label Ranges Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. LDP Label Ranges.
Printed on	Date and time the report was generated.

Table 216 MPLS LDP Label Ranges Report Header
Name	Description
Description	Description of the report.
Devices	Number of devices included to the report.
View	Entuity view against which the report was run.

Table 216 MPLS LDP Label Ranges Report Header

# LDP Label Ranges Report Details

Name	Description			
Device Name	Name of the device.			
LDP label ranges	Number of label ranges associated with the device.			

Table 217 LDP Label Ranges Summary Report

Name	Description
Port	Name of the port.
Minimum label	Minimum boundary of the label range.
Maximum label	Maximum boundary of the label range.

Table 218 LDP Label Ranges Peers Report

# **MPLS LDP Peer Details Report**

E ntuity Rep	E ntuity Report								
LDP Peer	LDP Peer Details @entuity								
Printed on:	8 Oct 20	09 20:21:51 BST							
Description:	Detailed	inventory of MPLS Label	Distribution	Protocol pee	rs				
View:	Regiona	l							
Devices:	There are	e no qualifying devices in	this view						
Device name			LSR ID	Loop d	etection capability	Label retention mode	LDP session enabled	traps	LDP Peers
MPLS LDP	MPLS LDP peer details for device null								
Advertis	Advertised IP Label distribution method Path vector		ctor hop limit	LDP version	тс	P port	I	UDP Port	
null		null		null	nu	11	null		null

Figure 79 LDP Peer Details Report

## MPLS LDP Peer Details Report Overview

This report provides a detailed inventory of MPLS Label Distribution Protocol peers.

## **MPLS LDP Peer Details Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 219 MPLS LDP Peer Details Report Options

#### MPLS LDP Peer Details Report Header

Name	Description			
Company Identifiers	Company icon and name defined through the report format.			
Report title	Report title, e.g. LDP Peer Details.			
Printed on	Date and time the report was generated.			
Description	Description of the report.			
Devices	Number of devices included to the report.			
View	Entuity view against which the report was run.			

Table 220 LDP Peer Details Report Header

# LDP Peer Details Report Details

Name	Description					
Device Name	Name of the device.					
LSR ID	abel Switching Router (LSR) identifier is the first 4 bytes of the Label istribution Protocol (LDP) identifier.					
Loop detection capability	<ul> <li>indicates the LSR loop detection capability, and not necessarily its current state. Loop detection is determined during session initialization, individual sessions may not run with loop detection. Loop detection can be:</li> <li>None, loop detection is not supported on this LSR.</li> <li>Other, loop detection is supported but by a method other than those explicitly defined in the MIB.</li> <li>Hop Count, loop detection is supported only through hop count.</li> <li>Path Vector, loop detection is supported only through path vector.</li> <li>Hop Count And Path Vector, loop detection is supported by both hop count and path vector.</li> </ul>					
Label retention mode	<ul> <li>Label Retention Mode, when set to:</li> <li>Conservative, the advertised label mappings are retained only if they will be used to forward packets, i.e. if label came from a valid next hop.</li> <li>Liberal, all advertised label mappings are retained whether they are from a valid next hop or not.</li> </ul>					
LDP session traps enabled	<ul> <li>LDP Session Traps Enabled, when set to:</li> <li>Enabled, the mplsLdpSessionUp and mplsLdpSessionDown can be generated.</li> <li>Disabled, the mplsLdpSessionUp and mplsLdpSessionDown can not be generated. The default is Disabled.</li> </ul>					
LDP Peers	Number of LDP peers.					

Table 221 LDP Peer Details Report

Name	Description
Advertised IP	IP address advertised to its LDP peers.
Label distribution method	<ul> <li>Label Distribution Method, when the LSR is using:</li> <li>Downstream Unsolicited distribution it advertises FEC-label bindings to its peers when it is ready to forward packets in the FEC by means of MPLS.</li> </ul>
	Downstream on Demand distribution provides FEC-label bindings to a peer in response to specific requests from the peer for a label for the FEC.

Table 222 LDP Peer Details Report

Name	Description
Path vector loop limit	Path Vector Hop Limit, when set to: 0, loop detection for path vectors is disabled.
	a value greater than zero, loop detection for path vectors is enabled, and the Path Vector Limit is this value. Sor the Path Vector Hone Limit to have effect the device's Lean Detection
	Capability must be set to either Hop Count And Path Vector or Path Vector.
LDP version	Version number of the LDP protocol. When set to 0, this indicates that the version of the protocol is unknown.
TCP port	LDP TCP port 646 used for establishing transport connection.
UDP port	The UDP port, by default 646, used with the discovery message.

Table 222 LDP Peer Details Report

# MPLS LDP Peer Performance Report

E ntuity Report								
LDP Peer Performance				R	entuity			
Printed on:	Printed on: 8 Oct 2009 20:23:48 BST							
Description:	Inventory of MPLS Label Distribution Protocol entities							
View:	Regional							
Entity count:	2							
Over the perio	d 20:00 on Wed Oct 07 2009 - 20:00	on Thu Oct 08 2	2009					
No prime time	e is set for this report							
			Admin	0.000	Chutdowno	Beiested		Shutdauma

Device name	Advertised IP	Admin status	Oper status	Shutdowns received	Rejected sessions	Error delta	Shutdowns sent
c2821	192.168.248.162	Enable	Enable	0	0	0	0
e2821	192.168.246.199	Enable	Enable	0	0	0	0

Figure 80 MPLS LDP Peer Performance Report

## **MPLS LDP Peer Performance Report Overview**

This report provides an inventory of MPLS Label Distribution Protocol entities.

## **MPLS LDP Peer Performance Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 223 MPLS LDP Peer Performance Report Options

## LDP Peer Performance Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.

Table 224 LDP Peer Performance Report Header

Name	Description			
Report title	Report title, e.g. LDP Peer Performance.			
Printed on	Date and time the report was generated.			
Description	Description of the report.			
View	Entuity view against which the report was run.			
Entity count	Number of discovered entities.			
Over the period	Start and end dates and times over which the report is run.			
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.			

Table 224 LDP Peer Performance Report Header

# LDP Peer Performance Report Details

Name	Description			
Device Name	Name of the device.			
Advertised IP	IP address advertised to its LDP peers.			
Admin Status	<ul> <li>Admin Status, the administrative status of this LDP Entity. When set to:</li> <li>Enable, the entity can create new sessions with its peer.</li> <li>Disable, any existing peer connections are lost. When set to disable</li> </ul>			
	the administrator can amend entity values			
Oper Status	<ul> <li>Oper Status, the operational status of the LDP entity, which can be:</li> <li>Unknown, this should only be a transitional state.</li> <li>Enabled.</li> </ul>			
	Disabled.			
Shutdowns Received	Number of Shutdown Notifications received related to session(s) (past and present) associated with this LDP Entity.			
Rejected Sessions	Number of rejected sessions.			
Error Delta	The change in the number of errors between the two most recent pollings.			
Shutdowns Sent	The number of Shutdown Notifications sent related to session(s) (past and present) associated with this LDP Entity.			

Table 225 LDP Peer Performance Report

# **MPLS LDP Summary Report**

Entuity Rep LDP Sum	oort Imary				e	entuity
Printed on:     8 Oct 2009 20:25:07 BST       Description:     Inventory of routers running MPLS Label Distribution Protocol       View:     Regional						
	Device name	LSR ID	Loop detection capability	Label retention mode	LDP session traps enabled	LDP Peers
c2821		192.168.246.199	Hop Count and Path Vector	Unknown	Disabled	1
e2821		192.168.248.162	Hop Count and Path Vector	Unknown	Disabled	1

#### Figure 81 MPLS LDP Summary Report

## **MPLS LDP Summary Report Overview**

This report provides an inventory of routers running MPLS Label Distribution Protocol.

### **MPLS LDP Summary Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 226 MPLS LDP Summary Report Options

## MPLS LDP Summary Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. LDP Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 227 MPLS LDP Summary Report Header

# LDP Summary Report Details

Name	Description			
Device Name	Name of the device.			
LSR ID	Label Switching Router (LSR) identifier is the first 4 bytes of the Label Distribution Protocol (LDP) identifier.			
Loop detection capability	<ul> <li>indicates the LSR loop detection capability, and not necessarily its current state. Loop detection is determined during session initialization, individual sessions may not run with loop detection. Loop detection can be:</li> <li>None, loop detection is not supported on this LSR.</li> <li>Other, loop detection is supported but by a method other than those explicitly defined in the MIB.</li> <li>Hop Count, loop detection is supported only through hop count.</li> <li>Path Vector, loop detection is supported only through path vector.</li> <li>Hop Count And Path Vector, loop detection is supported by both hop count and path vector.</li> </ul>			
Label retention mode	<ul> <li>Label Retention Mode, when set to:</li> <li>Conservative, the advertised label mappings are retained only if they will be used to forward packets, i.e. if label came from a valid next hop.</li> <li>Liberal, all advertised label mappings are retained whether they are from a valid next hop or not.</li> </ul>			
LDP session traps enabled	<ul> <li>LDP Session Traps Enabled, when set to:</li> <li>Enabled, the mplsLdpSessionUp and mplsLdpSessionDown can be generated.</li> <li>Disabled, the mplsLdpSessionUp and mplsLdpSessionDown can not be generated. The default is Disabled.</li> </ul>			
LDP Peers	Number of LDP peers.			

Table 228 LDP Peer Details Report

# **MPLS LSR Detail Report**

E ntuity Report LSR Detail Printed on: 8 Oct 2009 20:26:06 BST Description: Inventory of MPLS Label Switched Router ports View: Regional Ports: 3						
Device	name	Port description (MIB-2)	Min/Max label (RX)	Min/Max label (TX)	Allocated space	Label space
c2821		Serial0/2/0.212-mpls layer	16 / 100000	16/100000	0	Per Platform
e2821		Serial0/1/1.555-mpls layer	16/100000	16/100000	0	Per Platform
e2821		Serial0/1/1.402-mpls layer	16 / 100000	16/100000	0	Per Platform

Figure 82 MPLS LSR Detail Report

### **MPLS LSR Detail Report Overview**

This report provides an inventory of MPLS Label Switched Router ports.

## **MPLS LSR Detail Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 229 MPLS LSR Detail Report Options

## **MPLSLSR** Detail Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. LSR Detail.
Printed on	Date and time the report was generated.
Description	Description of the report.
Ports	Number of LSR ports.
View	Entuity view against which the report was run.

Table 230 MPLSLSR Detail Report Header

# MPLS LSR Detail Report Details

Name	Description			
Device Name	Name of the device.			
MIB 2 Interface Description	Port description taken from SNMP-MIB2.			
Min / Max label (RX)	Min label (RX) is the minimum value of an MPLS label that this LSR is willing to receive on this interface. Max label (RX) is the maximum value of an MPLS label that this LSR is willing to receive on this interface.			
Min / Max label (TX)	Min label (TX) is the minimum value of an MPLS label that this LSR is willing to send on this interface. Max label (TX) is the maximum value of an MPLS label that this LSR is willing to send on this interface.			
Allocated Space	Indicates the total amount of buffer space allocated for this interface. This variable is not applicable when applied to the interface with index 0.			
Label Space	<ul> <li>Label Space can be set to:</li> <li>perInterface(1) bit is set then the value of Min label (RX), Max label (RX), Min label (TX), and Max label (TX) for this entry reflect the label ranges for this interface.</li> <li>perPlatform(0) bit is set, then the value of value of Min label (RX), Max label (RX), Min label (TX), and Max label (TX) for this entry must be identical to the instance of these objects with index 0.</li> </ul>			

Table 231 MPLS LSR Detail Report

# **MPLS LSR Inventory Report**

Entuity Report LSR Inventory						
Printed on:     8 Oct 2009 20:27:16 BST       Description:     Inventory of MPLS Label Switched Routers       View:     Regional						
Device name		Max label stack depth	LSR in segment trap mode	LSR out segment trap mode	LSR cross connect trap mode	Number of LSR ports
c2821		4	Disabled	Disabled	Disabled	1
e2821		4	Disabled	Disabled	Disabled	2



### **MPLS LSR Inventory Report Overview**

This report provides an inventory of MPLS Label Switched Routers.

# **MPLS LSR Inventory Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description		
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.		
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.		
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>		
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.		

Table 232 MPLS LSR Inventory Report Options

## **MPLS LSR Inventory Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. LSR Inventory.
Printed on	Date and time the report was generated.
Description	Description of the report.

Table 233 MPLS LSR Inventory Report Header

Name	Description
View	Entuity view against which the report was run.

Table 233 MPLS LSR Inventory Report Header

# **MPLS LSR Inventory Report Details**

Name	Description		
Device Name	Name of the device.		
Max Label Stack Depth	Maximum stack depth supported by this LSR.		
LSR In Segment Trap Mode	Traps indicating incoming MPLS segments (labels). If administrative and operational status objects are down, the LSR does not forward packets. If these status objects are up, the LSR forwards packets.		
LSR out Segment Trap Mode	Traps indicating outbound MPLS segments (labels).		
LSR cross-connect Trap Mode	Traps indicating changes to the cross-connect table, e.g. the association between incoming and outgoing segments (labels).		
Number of LSR ports	Number of ports.		

Table 234 MPLS LSR Inventory Detail

# **MPLS LSR Performance Report**

Entuity Rep	Entuity Report LSR Performance				entuity		
Printed on:	8 Oct 200	8 Oct 2009 20:28:27 BST					
Description:	Performance of MPLS Label Switched Router ports						
View:	Regional						
Ports:	3						
Device n	ame	Port description (MIB-2)	Mean/Max available bandwidth (Kbits/sec)	Mean/Max available space	RX/TX discard no error packet rate	RX discard lookup failure packet rate	RX discard lookup failure packet rate
c2821	Serial0/2/0.212-mpls layer         0 / 0         0 / 0         0 / 0         0         0					0	
e2821 Serial0/1/1.555-mpls layer		0/0	0/0	0/0	0	0	
e2821	21 Serial0/1/1.402-mpls layer			0/0	0/0	0	0

Figure 84 MPLS LSR Performance Report

## **MPLS LSR Performance Report Overview**

This report details the performance of MPLS Label Switched Router ports.

# **MPLS LSR Performance Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description		
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.		
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.		
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>		
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.		

Table 235 MPLS LSR Performance Report Options

#### MPLS LSR Performance Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. LSR Performance.

Table 236 MPLS LSR Performance Report Header

Name	Description
Printed on	Date and time the report was generated.
Description	Description of the report.
Ports	Number of LSR ports.
View	Entuity view against which the report was run. Configurable through Report Options.

Table 236 MPLS LSR Performance Report Header

# **MPLS LSR Performance Report Details**

Name	Description			
Device Name	Name of the device.			
Port Description (MIB 2)	Port description taken from SNMP-MIB2.			
Mean / Max available bandwidth (KBits/sec)	Usable Bandwidth, this value indicates the total amount of usable bandwidth on this interface and is specified in kilobits per second (Kbps). This variable is not applicable when applied to the interface with index 0.			
Mean / Max available space	Available Bandwidth, this value indicates the total amount of available bandwidth available on this interface and is specified in kilobits per second (Kbps). This value is calculated as the difference between the amount of bandwidth currently in use and that specified in mplsInterfaceTotalBandwidth. This variable is not applicable when applied to the interface with index 0.			
RX / TX discard no error packet rate	Received Discard No Error Packet Rate is the difference between two contiguous inbound Error Free Discards sampled values, as a per second average. Transmitted Discard No Error Packet Rate is the difference between two contiguous outbound Error Free Discards sampled values, as a per second average. Error Free Discards are discarded packets even though no errors had been detected to prevent their being transmitted / received. One possible reason for discarding such a labelled packet could be to free up buffer space.			
RX / TX discard lookup failure packet rate	Received Discard Lookup Failure Packet Rate, the difference between two contiguous inbound Packets (Rx) sampled values, as a per second average. Transmitted Discard Lookup Failure Packet Rate, the difference between two contiguous outbound Packets (Rx) sampled values, as a per second average.			

Table 237 MPLS LSR Performance Report

# **MPLS VPN Device Details Report**

Entuity Rep VPN Dev	<sup>port</sup> vice Details						Pentuity
Printed on: Description: View: Devices:	8 Oct 2009 20:29 Inventory of dev Regional 2	9:58 BST /ices participating in	MPLS VPNs				
			Device name				VRF count
c2821							2
e2821							2
MPLS VR	F details for o	device c2821					
VR	RF name	VRF route distinguisher	Active interfaces	Associated interfaces	Routes	Maximum routes	MPLS route targets
?Jeff_Voice		65400:400	1	1	1	0	2
Jeff_Data		65400:300	0	0	0	0	3
MPLS rou	te targets for	device c2821	VRF ?Jeff_Vo	oice			
	Ro	oute target			T	/pe	
65400:109				Import and Export			
65400:102				Export			
MPLS rou	te targets for	device c2821	VRF Jeff_Dat	а			
	Ro	oute target			τ	/ре	
65400:101				Import and Export			
65400:102				Import			
65400:104				Export			
MPLS VR	F details for o	device e2821					
VR	RF name	VRF route	Active interfaces	Associated	Routes	Maximum routes	MPLS route
?Jeff_Voice		65400:400	1	1	1	0	1
Jeff_Data		65400:300	0	0 0 0 1			1
MPLS rou	te targets for	device e2821	VRF ?Jeff_Vo	oice			
	Ro	oute target			Tj	/pe	
65400:102				Import and Export			
MPLS rou	te targets for	device e2821	VRF Jeff_Dat	a			
	Ro	oute target			т	/pe	
65400:101				Import and Export			

Figure 85 MPLS VPN Device Details Report

### MPLS VPN Device Details Report Overview

MPLS VPN device summary report – list of devices showing name, global route limit, number of configured VRFs, number of active VRFs and number of interfaces connected to VRFs.

## **MPLS VPN Device Details Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 238 VPN Device Details Report Options

## **MPLS VPN Device Details Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. VPN Device Details.
Printed on	Date and time the report was generated.
Description	Description of the report.
Devices	Number of devices with VRFs.
View	Entuity view against which the report was run.

Table 239 MPLS VPN Device Details Report Header

## **MPLS VPN Device Details Report Details**

Device Details table identifies the devices within the view that have VRFs.

Name	Description
Device Name	Resolved device name or IP address.
MPLS VRFs	Number of VRF associated with the device. It is also a hyperlink to the MPLS VRF table, where each row details a VRF associated with the device.

Table 240 MPLS VPN Device Details

MPLS VRF Details table identifies the MPLS VRFs associated with the device identified in the table header:

MPLS Route Target Details table identifies the route targets associated with the device.

Name	Description
VRF Name	VRF name.
VRF Route Distinguisher	It is the Route Distinguisher that makes the VRF unique, distinguishing between overlapping addresses in the VRF.
Active Interfaces	Number of interfaces associated with the VRF that are up.

Table 241 MPLS VPN Device Details Report

Name	Description
Associated Interfaces	Number of interfaces associated with the VRF, including both active and inactive interfaces.
Routes	Number of routes currently used by this VRF.
Maximum Routes	Maximum number of routes on the VRF. It must be less than or equal to the maximum possible number of routes unless it is set to 0.
MPLS Route Targets	Number of route targets associated with the VRF. It is also a hyperlink to the MPLS Route Target Details table, where each row details a route target associated with the VRF.

Table 241 MPLS VPN Device Details Report

This table details the MPLS route targets for the device.

Name	Description
Route target	It is the Route Distinguisher that makes the VRF unique, distinguishing between overlapping addresses in the VRF.
Туре	Indicates the import/export distribution policy for the route target, i.e. import, export and import and export. The configuration of the VPN topology is determined through the Type setting of VRFs.

Table 242 MPLS VPN Device Details Report

# **MPLS VPN Device Summary Report**

Entuity Report VPN Device Summary			<b>C</b> entuity		
Printed on:     8 Oct 2009 20:32:40 BST       Description:     Inventory of Label Switch Routers participating in VPNs       View:     Regional					
Device name Number of configured VRFs Number of active VRFs VPN global ro limit			VPN global route limit		
c2821		2	1	1	0
e2821		2	1	1	0

Figure 86 MPLS VPN Device Summary Report

## **MPLS VPN Device Summary Report Overview**

This report provides an inventory of Label Switch Routers participating in VPNs.

### **MPLS VPN Device Summary Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 243 MPLS VPN Device Summary Report Options

## MPLS VPN Device Summary Report Header

Name	Description	
Company Identifiers	Company icon and name defined through the report format.	
Report title	Report title, e.g. VPN Device Summary.	
Printed on	Date and time the report was generated.	
Description	Description of the report.	
View	Entuity view against which the report was run. Configurable through Report Options.	

Table 244 MPLS VPN Device Summary Report Header

# MPLS VPN Device Summary Report Details

Name	Description	
Device Name	Name of the device.	
Number of configured VRFs	Number of configured VRFs on the device.	
Number of active VRFs	Number of active VRFs on the device	
VPN global route limit	Indicates the maximum number of routes, summed across all VRFs, which the device allows. When set to 0, this indicates that the device is unable to determine the absolute maximum, and you could potentially set a configured maximum greater than that allowed by the device.	

Table 245 MPLS VPN Device Summary Report

# **MPLS VPN Route Capacity Report**

E ntuity Report VPN Route Capacity			© entuity	
Description:	Description: Inventory of VRFs and their route counts			
View:	Regional			
	Device name	VRF name	Routes	Maximum routes
c2821 ?Jeff_Voice		?Jeff_Voice	1	Unlimited
e2821 ?Jeff_Voice 1 Unlimit		Unlimited		
c2821 Jeff_Data 0		Unlimited		
e2821 Jeff_Data 0		0	Unlimited	

Figure 87 VPN Route Capacity Report

## **MPLS VPN Route Capacity Report Overview**

This report provides an inventory of VPN VRF's and their route count, ordered by VRF name.

## **MPLS VPN Route Capacity Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 246 MPLS VPN Route Capacity Report Options

# MPLS VPN Route Capacity Report Header

Name	Description	
Company Identifiers	Company icon and name defined through the report format.	
Report title	Report title, e.g. VPN Route Capacity.	
Printed on	Date and time the report was generated.	
Description	Description of the report.	
View	Entuity view against which the report was run.	

Table 247 MPLS VPN Route Capacity Report Header

# **MPLS VPN Route Capacity Report Details**

Name	Description	
Device Name	Resolved device name or IP address.	
VRF Name	VRF name.	
Routes	Number of routes currently used by this VRF.	
Maximum Routes	Maximum number of routes on the VRF. It must be less than or equal to the maximum possible number of routes unless it is set to 0.	

Table 248 MPLS VPN Route Capacity Report

# **OSPF Router Peering Report**

#### E ntuity Report

#### **OSPF** Router Peering

Centuity

Printed on: 8 Oct 2009 20:34:16 BST

Description: Inventory of routers participating in OSPF with their peer details

View: Regional

Over the period 20:00 on Wed Oct 07 2009 - 20:00 on Thu Oct 08 2009

	Router name	Model	Location	Admin status	Area border router	AS border router	Router ID	TOS support	OSPF peer count
c	:3560	WS-C3560-24TS-E	Entuity Test Room	Enabled	False	False	204.4.143.39	False	3
6	2821	2821	Cisco corner in the test room	Enabled	False	False	10.44.1.59	False	3
ī	oalana	7513	"Europe,ColchesterGDC,7513_2	Enabled	False	False	10.255.250.25	False	36
ī	new2610	2610	Entuity Test Room	Enabled	False	False	10.44.1.36	False	3
r	2610	2610	Entuity Test Room	Enabled	False	False	10.44.1.35	False	3

OSPF peer details for device c3560										
Local peer IP address	Remote peer IP address	Peer state	State transition count	Peered router						
204.4.143.39	10.44.1.35	Two Way	0	r2610						
204.4.143.39	10.44.1.36	Full	0	new2610						
204.4.143.39	10.44.1.59	Full	0	e2821						

#### OSPF peer details for device e2821

Local peer IP address	Remote peer IP address		Peer state	State transition count	Peered router			
10.44.1.59	10.44.1.35	Full		0	r2610			
10.44.1.59	10.44.1.36	Full		0	new2610			
10.44.1.59	10.44.1.39	Full		0	c3560			

#### OSPF peer details for device ioalana

Local peer IP address	Remote peer IP address		Peer state	State transition count	Peered router			
10.255.250.25	10.10.254.240	Full		0				
10.255.250.25	10.10.254.252	Full		0				
10.255.250.25	10.127.100.189	Full		0				
10.255.250.25	10.127.100.193	Full		0				
10.255.250.25	10.128.100.113	Full		0				
10.255.250.25	10.128.100.117	Full		0				
10.255.250.25	10.128.100.125	Full		0				
10.255.250.25	10.128.100.133	Full		0				
10.255.250.25	10.128.100.153	Full		0				
10.255.250.25	10.128.100.157	Full		0				
10.255.250.25	10.128.100.161	Full		0				
10.255.250.25	10.128.100.173	Full		0				
10.255.250.25	10.128.100.182	Full		0				
10.255.250.25	10.255.250.26	Full		0				
10.255.250.25	10.63.249.21	Full		0				
10.255.250.25	10.63.249.49	Full		0				
10.255.250.25	10.63.249.73	Full		0				
10.255.250.25	10.63.249.77	Full		0				
10.255.250.25	10.63.249.81	Full		0				

Figure 88 OSPF Router Peering Report

# **OSPF Router Peering Report Overview**

This provides an Inventory of routers participating in OSPF together with their peer details.

## **Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description					
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> to run the report against.					
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.					
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>					

Table 249 OSPF Router Peering Report Options

# **OSPF Router Peering Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. OSPF Router Peering.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 250 OSPF Router Peering Report Header

# **OSPF Router Peering Report Details**

Name	Description					
Router Name	Device name.					
Model	Device model.					
Location	Location of the device.					
Admin status	Indicates whether OSPF is enabled.					
Area border router	Indicates whether the router is an area border router (ABR), one that connects one or more areas to the main backbone network.					

Table 251 OSPF Router Peering Report

Name	Description
AS border router	Indicates whether the device is an autonomous system boundary router (ASBR), one that is connected to more than one autonomous system (AS) and that exchanges routing information with routers in other ASs.
Router ID	The unique identifier for the router as defined by the ospf router-id command or the address of the loopback 0 interface.
TOS support	Indicates whether the router supports TOS.
OSPF peer count	Number of associated OSPF peers.

Table 251 OSPF Router Peering Report

This table identifies the OSPF peers of the device.

Name	Description					
Local peer IP address	Local IP address of the device.					
Remote peer IP address	The remote IP address of this entry's OSPF peer.					
Peer State	The state of OSPF with this peered router, which can be:					
	init, the initial phase. A HELLO packet was received from this neighbor.					
	twoWay, bidirectional communication with the neighbor. Transmitted HELLO packets have been accepted by the neighbor router (parameters are correct).					
	EXstart, the exchange of Database Description Packets between the router and neighbor is in progress.					
	exchange, the peered routers are currently exchanging Database Description Packets.					
	Ioading, the peered routers are currently exchanging Link State Advertisements.					
	full, the peered routers Link State Database are now synchronized.					
State Transition Count	Established Transitions Count, number of changes in peer status during the polling period. A high value may indicate flapping and require further investigation.					
Peered router	Identifier of the peered device.					

Table 252 OSPF Peer Device Details

# **OSPF Peering State Transitions Report**

## E ntuity Report

### **OSPF** Router Peering

Pentuity

Printed on: 29 Nov 2009 04:22:17 GMT

Description: Inventory of routers participating in OSPF with their peer details

View: Regional

Over the period 00:00 on Thu Nov 05 2009 - 00:00 on Sun Nov 29 2009

Router name	Model	Location	Admin status	Area border router	AS border router	Router ID	TOS support	OSPF peer count
c3560	WS-C3560-24TS-E	Entuity Test Room	Enabled	False	False	204.4.143.39	False	3
e2821	2821	Cisco corner in the test room	Enabled	False	False	10.44.1.59	False	3
ioalana	7513	"Europe,ColchesterGDC,7513_2	Enabled	False	False	10.255.250.25	False	36
new2610	2610	Entuity Test Room	Enabled	False	False	10.44.1.36	False	3
r2610	2610	Entuity Test Room	Enabled	False	False	10.44.1.35	False	3

OSPF peer details for device c3560										
	Local peer IP address	Remote peer IP address	Peer state	State transition count	Peered router					
	204.4.143.39	10.44.1.35	Full	0	r2610					
	204.4.143.39	10.44.1.36	Full	0	new2610					
	204.4.143.39	10.44.1.59	Full	0	e2821					

#### OSPF peer details for device e2821

•									
Local peer IP address	Remote peer IP address	Peer state	State transition count	Peered router					
10.44.1.59	10.44.1.35	Two Way	4	r2610					
10.44.1.59	10.44.1.36	Full	0	new2610					
10.44.1.59	10.44.1.39	Full	0	c3560					

#### OSPF peer details for device ioalana

Local peer IP address	Remote peer IP address		Peer state	State transition count	Peered router
10.255.250.25	10.10.254.240	Full		0	
10.255.250.25	10.10.254.252	Full		0	
10.255.250.25	10.127.100.189	Full		0	
10.255.250.25	10.127.100.193	Full		0	
10.255.250.25	10.128.100.113	Full		0	
10.255.250.25	10.128.100.117	Full		0	
10.255.250.25	10.128.100.125	Full		0	
10.255.250.25	10.128.100.133	Full		0	
10.255.250.25	10.128.100.153	Full		0	
10.255.250.25	10.128.100.157	Full		0	
10.255.250.25	10.128.100.161	Full		0	
10.255.250.25	10.128.100.173	Full		0	
10.255.250.25	10.128.100.182	Full		0	
10.255.250.25	10.255.250.26	Full		0	
10.255.250.25	10.63.249.21	Full		0	
10.255.250.25	10.63.249.49	Full		0	
10.255.250.25	10.63.249.73	Full		0	
10.255.250.25	10.63.249.77	Full		0	
10.255.250.25	10.63.249.81	Full		0	

Figure 89 OSPF Peering State Transitions Report

# **OSPF** Peering State Transitions Report Overview

This report provides an inventory of OSPF peers that have changed state.

## **Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description					
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.					
Please select a view	Entuity view against which the report is to be run. From the drop down lis you can select one view to run the report against.					
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>					

Table 253 Report Options

# **OSPF** Peering State Transitions Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. OSPF Peering State Transitions.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 254 OSPF Peering State Transitions Report Header

# **OSPF** Peering State Transitions Report Details

Name	Description
Local IP address	Local IP address of the device.
Remote IP address	The remote IP address of this entry's OSPF peer.

Table 255 OSPF Peer Device Details

Name	Description					
Peer State	The state of OSPF with this peered router, which can be:					
	init, the initial phase. A HELLO packet was received from this neighbor.					
	twoWay, bidirectional communication with the neighbor. Transmitted HELLO packets have been accepted by the neighbor router (parameters are correct).					
	EXstart, the exchange of Database Description Packets between the router and neighbor is in progress.					
	exchange, the peered routers are currently exchanging Database Description Packets.					
	Ioading, the peered routers are currently exchanging Link State Advertisements.					
	full, the peered routers Link State Database are now synchronized.					
State Transition Count	Established Transitions Count, number of changes in peer status during the polling period. A high value may indicate flapping and require further investigation.					
Local router	Identifier of the local device.					
Peered router	Identifier of the peered device.					

Table 255 OSPF Peer Device Details

# Switch Port Connectivity Report

Entuity Report								
Switch Port Connectivity								Centuity
Printed on: 8 Oct 2012 20:38:27 BST								
Description:	Description: Port configuration and host connection details							
View:	Regional							
Not displaying po	orts that are virtual, trunks, uplinks o	r admin	istrative	ly disabled	1			
Name	: 10.44.1.62							
sysName Location	e: HPCOL1							
Manufacture	r: Hewlett Packard					м	odel: C.25.80	
Serial numbe	r: n/a				в	Ver	sion:	
System descr: HP ETHERNET MULTI-ENVIRONMENT,ROM C.25.80,JETDIRECT,JD115,EEPROM V.28.06,CIDATE 04/27/2004								
	Port description	Oper status	Speed (Mbps)	Duplex	VLAN	Host MAC address	IP address	
[ 00001 ] HP ET ENVIRONMENT	HERNET MULTI- ROM C.25.80, JETDIR	up	10	Unknown				

Figure 90 Switch Port Connectivity Report

### Switch Port Connectivity Report Overview

This report provides an overview of switch port details including connected host(s). It excludes ports that are virtual, trunks, uplinks or administratively disabled.

## **Switch Port Connectivity Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	From the drop down list you can select one device, or <b>All Devices</b> , to run the report against.
Include hostnames (takes longer)	Select to include hostnames to the report. Gathering this extra information increases the length of time to generate the report.

Table 256 Switch Port Connectivity Report Options

# Switch Port Connectivity Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.

Table 257 Switch Port Connectivity Report Header

Name	Description
Report title	Report title, e.g. Switch Port Connectivity.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 257 Switch Port Connectivity Report Header

# Switch Port Connectivity Report Details

Name	Description
Name	Device name.
sysName	Device system name.
Location	Device SysLocation, or where not available it is left blank.
Manufacturer	Manufacturer name is derived by matching the manufacturer number against the first 2500 Private Enterprise Codes compiled by the Internet Assigned Numbers Authority (http://www.iana.org/assignments/ enterprise-numbers). Where the manufacturer code is not matched then the first part of the device name is taken, usually this is the manufacturer's name.
Serial number	Device serial number.
Mngd. IP	IP address Entuity uses to poll the device.
Description	System description, which for a Cisco device is a parsed sysDescr with model, version and serial number.
Model	The device model.
Version	The device version number.
Ports (displayed)	Number of ports on the device included to the report.

Table 258 Device Inventory Summary

# 9 Dashboard Panels

Dashboard panels are a set of reports intended for inclusion to your custom dashboards. They do not include the standard report headers and footers; space within a custom dashboard panel is at a premium and the focus is on the information included to the report.

# **Running Dashboard Panels**

You can run these reports from the web interface:

- 1) Click Reports.
- 2) Click Dashboard Panels. Entuity displays the list of available reports.

Ş	Ser	ntuity										User: admin@entlonp; Page Updated: 09:58:4	ovm01 <u>[Loqout]</u> <del>1</del> 5, GMT
Da	shboards	InSight Center	Explorer	Events	Maps	Charts	Flows	Reports	Tools	Administration	Help		P
	Repor	ts											
	reports > D	ashboard											
	Report			Schedu	e Histor	y Desci	ription						
	Device Rea	chability Transition	Summary	11	<u></u>	Summ	ary of de	vice reachab	ility trans	itions			
	Device Reb	ooot Summary		11	-	Summ	ary of De	vice Reboot	5				
•	Event Seve	erity Summary		11	<u></u>	Summ	ary of ev	ents by seve	rity				
	Module Cha	ange Summary		11	-	Summ	ary of Mo	dule Change	s				
	Port Opera	itional State Transi	tion Summary	11	1	Summ	ary of po	rt operation	al state tr	ansitions			
	<u>Port Utiliza</u>	tion Charts		11	-	Utiliza	tion of po	rts in a servi	ce shown	as mini charts			
	Port Utiliza	tion Gauges		11	1	Utiliza	tion of po	rts in a servi	ce show a	as gauges			
	Schedule	ed Reports											

Figure 91 Dashboard Panels

# **Device Reachability Transition Details**

View: My Network								
Time of transition	Device name	Reachable						
16/11/12 23:39	apcr1	No						
16/11/12 23:41	apcr1	Yes						
16/11/12 23:47	apcr1	No						
16/11/12 23:47	apcr2	No						
16/11/12 23:49	apcr1	Yes						
16/11/12 23:49	apcr2	Yes						
16/11/12 23:57	apcr4	No						
16/11/12 23:59	apcr4	Yes						
17/11/12 00:09	apcr2	No						
17/11/12 00:11	apcr2	Yes						
17/11/12 00:39	apcr1	No						
17/11/12 00:41	apcr1	Yes						
17/11/12 00:59	apcr4	No						
17/11/12 01:01	apcr4	Yes						

# Device Reachability Transition Details

Figure 92 Device Reachability Transition Details

### **Device Reachability Transition Details Overview**

Device Reachability State Transition Details report is opened in the context of the selected column in the Device Reachability Transition Summary report. It lists the changes in device reachability over a two hour period. There is a hyperlink back to the Device Reachability Transition Summary report.

Summary

## **Device Reachability Transition Details Options**

Device Reachability State Transition Details report is opened in the context of the selected column in the Device Reachability Transition Summary report.

## **Device Reachability Transition Details**

Name	Description
View	Entuity view against which the report is run.
Time of transition	Date and time of the change in device reachability.
Device name	Name of the device.
Reachable	The reachability state the device transitioned to.

Table 259 Device Reachability Transition Details

# **Device Reachability Transition Summary**



# Device Reachability State Transition Summary

Figure 93 Device Reachability Transition Summary

## **Device Reachability Transition Summary Overview**

Device Reachability State Transition Summary charts, in 30 minute blocks, the number of changes in reachability of devices within the selected view, on the selected server or servers.

The report includes 4 summaries for the number of devices with transitions; within the last 24 hours, 8 hours, 1 hour and 30 minutes. You can click on the count of each to run in that context a Device Uptime, Reachability and Last Reboot Time report.

The reporting period of the Device Uptime, Reachability and Last Reboot Time report starts from the time the report is called. For example within the context of the 1 hour reporting period, run the report at 10:20 and the reporting period is from 09:21 to 10:20.

From within the chart when you move the mouse pointer over a column the tooltip details for that 30 minute period the:

- Total number of reboots.
- Total number of devices that had reboots.
- Names of devices with reboots and their number of reboots.

# **Device Reachability Transition Summary Options**

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.

Table 260 Device Reachability Transition Summary Options

Name	Description	
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.	
Report period	Period over which the report applies, by default the previous 24 hours with the reporting period starting from the time the report is run. When you select:	
	Recent, you specify time period in relation to the time the report is run, e.g. 24 hours before the report time.	
	<b>Range</b> , you can enter start and end dates and times.	

Table 260 Device Reachability Transition Summary Options

# **Device Reachability Transition Summary**

Name	Description
Counts of devices with reachability state transitions in view	Entuity view against which the report is run. There are 4 summaries for the number of devices with transitions; within the last 24 hours, 8 hours, 1 hour and 30 minutes. You can click on the count of each to run in that context a Device Uptime, Reachability and Last Reboot Time report.
Devices with reachability state transitions	<ul> <li>Each column represents the number of devices with a reachability state transition within the 30 minute period. When you move the mouse pointer over a column the tooltip details the:</li> <li>Total number of reboots.</li> </ul>
	Total number of devices that had reboots.
	<ul> <li>Names of devices with reboots and their number of reboots.</li> <li>You can click on the count of each column to run in that context a Device Reachability Transition Details report.</li> </ul>

Table 261 Device Reachability Transition Summary

# **Device Reboot Details**

## Device Reboot Details

View: My Network	
Time of reboot	Device name
18/09/12 16:58	w2
18/09/12 17:03	w2
18/09/12 17:08	w2
18/09/12 17:13	w2
18/09/12 17:18	w2
18/09/12 17:23	w2
18/09/12 17:28	w2
18/09/12 17:31	brotherm
18/09/12 17:33	w2
18/09/12 17:38	w2
18/09/12 17:42	brotherm
18/09/12 17:43	w2
18/09/12 17:48	w2
18/09/12 17:53	w2
18/09/12 17:58	w2
18/09/12 18:03	w2

Figure 94 Device Reboot Details

#### **Device Reboot Details Overview**

Device Reboot Details report is opened in the context of the selected column in the Device Reboot Summary report. It lists the changes in device reboots over a two hour period. There is a hyperlink back to the Device Reboot Summary report.

Summary

#### **Device Reboot Details Options**

Device Reboot Details report is opened in the context of the selected column in the Device Reboot Summary report.

#### **Device Reboot Details**

Name	Description
View	Entuity view against which the report is run.
Time of reboot	Date and time of the device reboot.
Device name	Name of the device.

Table 262 Device Reboot Details

# **Device Reboot Summary**

# **Device Reboot Summary**



Figure 95 Device Reboot Summary

### **Device Reboot Summary Overview**

Device Reboot Summary charts, in 30 minute blocks, the number of reboots of devices within the selected view, on the selected server or servers.

The report includes 4 summaries for the number of devices with reboots; within the last 24 hours, 8 hours, 1 hour and 30 minutes. You can click on the count of each to run in that context a Device Reboot Details report.

The reporting period of the Device Reboot Details report starts from the time the report is called. For example within the context of the 1 hour reporting period, run the report at 10:20 and the reporting period is from 09:21 to 10:20.

From within the chart when you move the mouse pointer over a column the tooltip details for that 30 minute period the:

- Total number of reboots.
- Total number of devices that had reboots.
- Names of devices with reboots and their number of reboots.

## **Device Reboot Summary Options**

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 263 Device Reboot Summary Options

Name	Description
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 263 Device Reboot Summary Options

# **Device Reboot Summary**

Name	Description
Counts of devices with reachability state transitions in view	Entuity view against which the report is run. There are 4 summaries for the number of devices with reboots; within the last 24 hours, 8 hours, 1 hour and 30 minutes. You can click on the count of each to run in that context a Device Reboot Summary report.
Devices with reachability state transitions	<ul> <li>Each column represents the number of devices with a reboot within the 30 minute period. When you move the mouse pointer over a column the tooltip details the:</li> <li>Total number of reboots.</li> <li>Total number of devices that had reboots.</li> <li>Names of devices with reboots and their number of reboots.</li> </ul>

Table 264 Device Reboot Summary
# **Event Severity Details**

Event Details		Sumn	
Sev	Time	Source	Event type
Critical	12:42:14	brotherm	Network Outage
Severe	12:43:00	w2	Device Reboot Detect
Info	12:44:04	e2821 : EYE (1 on e2821)	IP SLA Test Succeede
Info	12:44:14	brotherm	Network Outage Clear
Severe	12:48:00	w2	Device Reboot Detect
Severe	12:53:00	w2	Device Reboot Detect
Minor	12:56:13	lonswdsk1	SNMP Agent Not Res
Severe	12:58:00	w2	Device Reboot Detect
Info	12:58:14	lonswdsk1	SNMP Agent Respond
Critical	12:59:04	e2821 : EYE (1 on e2821)	IP SLA Test Failed
Severe	13:03:00	w2	Device Reboot Detect
Severe	13:08:00	brotherm	Device Reboot Detect
Severe	13:08:00	w2	Device Reboot Detect

Summary

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Figure 96 Event Severity Details

#### **Event Severity Details Overview**

Event Severity Details report is opened in the context of the selected column in the Event Severity Summary report. It lists events of all severity levels raised over the selected time period. There is a hyperlink back to the Event Severity Summary report.

#### **Event Severity Details Options**

Event Severity Details report is opened in the context of the selected column in the Event Severity Summary report.

#### **Event Severity Details**

Name	Description
View	Entuity view against which the report is run.
Sev	Severity level of the event.
Time	Time Entuity raised the event.
Source	Identifying information of the managed object against which Entuity raises the event.
Event type	The name of the raised event.

Table 265 Event Severity Details

# **Event Severity Summary**

### **Event Severity Summary**



Figure 97 Event Severity Summary

#### **Event Severity Summary Overview**

Event Severity Summary charts, in 30 minute blocks, the number of events Entuity raised in the selected view, on the selected server or servers. The report does not include events with the severity level information only.

The report includes 4 summaries for the number of raised events; within the last 24 hours, 8 hours, 1 hour and 30 minutes. You can click on the count of each to run in that context an Event Severity Details report.

From within the chart when you move the mouse pointer over a column the tooltip details for that 30 minute period the total number of events, and the number of events raised for each event type.

Name	Description	
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.	
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.	
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.	
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>	

#### **Event Severity Summary Options**

Table 266 Event Severity Summary Options

# **Event Severity Summary**

Name	Description
Counts of events in view	Entuity view against which the report is run. There are 4 summaries for the number of raised events; within the last 24 hours, 8 hours, 1 hour and 30 minutes. You can click on the count of each to run in that context an Event Severity Summary report.
Events	Each column represents the number of events raised within the 30 minute period. The severity levels of events is indicated through the color coded chart. When you move the mouse pointer over a column the tooltip details for that 30 minute period the total number of events, and the number of events raised for each event type.

Table 267 Device Reboot Summary

# **Module Change Details**

Module Change Details Summary			
View: My Network			
Device:Module	Change description		
new2610:Module 4:WS-C2960-24TT-L	Removed		
new2610:Module 3:C2600 Mainboard	Removed		
new2610:Module 3:C2600 Mainboard	Added		
new2610:Module 6:WAN Interface Card - Serial 2T	Added		
c3845.vendor.entuity.lab	Removed		
c3845.vendor.entuity.lab:Two port E1 voice interface daughtercard:Two port E1 voice interface daughtercard	Added		
c3845.vendor.entuity.lab:Two port E1 voice interface daughtercard:Two port E1 voice interface daughtercard	Added		
	Iule Change Details Ay Network Device:Module new2610:Module 4:WS-C2960-24TT-L new2610:Module 3:C2600 Mainboard new2610:Module 3:C2600 Mainboard new2610:Module 6:WAN Interface Card - Serial 2T c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab c3845.vendor.entuity.lab:Two port E1 voice interface daughtercard.Two port E1 voice interface daughtercard.Two port E1 voice interface daughtercard.Two port E1 voice interface daughtercard.Two port E1 voice		



#### Module Change Details Overview

Module Change Details report is opened in the context of the selected column in the Module Change Summary report. It lists module changes over a two hour period. There is a hyperlink back to the Module Change Summary report.

#### **Module Change Details Options**

Module Change Details report is opened in the context of the selected column in the Module Change Summary report.

#### Module Change Details

Name	Description
View	Entuity view against which the report is run.
Time	Time of the Module Change.
Device:Module name	Name of the device and the changed module.
Change description	The type of change to the module, e.g. Removed.

Table 268 Module Change Details

# Module Change Summary

### Module Change Summary



Figure 99 Module Change Summary

#### Module Change Summary Overview

Module Change Summary charts, in 30 minute blocks, the number of devices with module changes within the selected view, on the selected server or servers.

The report includes 4 summaries for the number of devices with module changes; within the last 24 hours, 8 hours, 1 hour and 30 minutes. You can click on the count of each to run in that context a Module Change Details report.

From within the chart when you move the mouse pointer over a column the tooltip details for that 30 minute period the:

- Total number of module changes.
- Total number of devices that had module changes.
- Names of devices with module changes and their number of changes.

#### **Module Change Summary Options**

Name	Description	
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.	
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.	
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.	
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>	

Table 269 Module Change Summary Options

# Module Change Summary

Name	Description	
Counts of devices with module changes in view	Entuity view against which the report is run. There are 4 summaries for the number of devices with module changes; within the last 24 hours, 8 hours, 1 hour and 30 minutes. You can click on the count of each to run in that context a Module Change Details report.	
Module Changes	Each column represents the number of devices with a module change within the 30 minute period. When you move the mouse pointer over a column the tooltip details the:  Total number of modules.	
	<ul> <li>Names of devices with module changes and their number of changes.</li> </ul>	

Table 270 Module Change Summary

# Port Operational State Transition Details

#### Device Reboot Details

View: My Network	
Time of reboot	Device name
18/09/12 16:58	w2
18/09/12 17:03	w2
18/09/12 17:08	w2
18/09/12 17:13	w2
18/09/12 17:18	w2
18/09/12 17:23	w2
18/09/12 17:28	w2
18/09/12 17:31	brotherm
18/09/12 17:33	w2
18/09/12 17:38	w2
18/09/12 17:42	brotherm
18/09/12 17:43	w2
18/09/12 17:48	w2
18/09/12 17:53	w2
18/09/12 17:58	w2
18/09/12 18:03	w2

Figure 100 Port Operational State Transition Details

#### Port Operational State Transition Details Overview

Port Operational State Transition Details report is opened in the context of the selected column in the Port Operational State Transition Summary report. It lists Port Operational State Transitions over a two hour period. There is a hyperlink back to the Port Operational State Transition Summary report.

Summary

#### Port Operational State Transition Details Options

Port Operational State Transition Details report is opened in the context of the selected column in the Port Operational State Transition Summary report.

#### Port Operational State Transition Details

Name	Description
View	Entuity view against which the report is run.
Time of change	Date and time of the Port Operational State Transition.
Port	Name of the port.

Table 271 Port Operational State Transition Details

# Port Operational State Transition Summary



#### Port Operational State Transition Summary

Figure 101 Port Operational State Transition Summary

#### Port Operational State Transition Summary Overview

Port Operational State Transition Summary charts, in 30 minute blocks, the number of changes in the operational state of devices within the selected view, on the selected server or servers.

The report includes 4 summaries for the number of ports with transitions; within the last 24 hours, 8 hours, 1 hour and 30 minutes. You can click on the count of each to run in that context a Device Uptime, Reachability and Last Reboot Time report.

The reporting period of the Device Uptime, Reachability and Last Reboot Time report starts from the time the report is called. For example within the context of the 1 hour reporting period, run the report at 10:20 and the reporting period is from 09:21 to 10:20.

From within the chart when you move the mouse pointer over a column the tooltip details for that 30 minute period the:

- Total number of reboots.
- Total number of devices that had reboots.
- Names of devices with reboots and their number of reboots.

### Port Operational State Transition Summary Options

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 272 Port Operational State Transition Summary Options

Name	Description
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 272 Port Operational State Transition Summary Options

### Port Operational State Transition Summary

Name	Description
Device Reachability	Indicates the subsequent charts graph the reachability of devices in the branch office view.
Device name	Identifier of the device, e.g. host name or IP address.
Reachability %	The length of time the device responds to ping as a percentage of the reporting period.
Unreachable Time	The length of time the device was unreachable during the reporting period.

Table 273 Port Operational State Transition Summary

# **Port Utilization Charts**



Figure 102 Port Utilization Charts

#### Port Utilization Charts Overview

Port Utilization Charts report is run against ports in the selected sub-service. It displays for the selected port or ports the last 4 hours of polled inbound and outbound utilization data represented through two filled line charts. You can click on a chart, for example inbound utilization, to display a graph of the previous 24 hours of the selected utilization data, you can also overlay the other set of utilization, for example outbound, data.

#### Port Utilization Charts Options

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a service	Entuity service against which the report is to be run.
Please select a subservice	Entuity service against which the report is to be run. The drop down list includes the root service and all subservices.
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 274 Port Utilization Charts Options

#### Port Utilization Charts Summary

For each port two filled line charts display the last four hours inbound and outbound utilization data. You can click on a chart to display the metric in a configurable chart.

# **Port Utilization Gauges**

Image: Second sec

Figure 103 Port Utilization Gauges

#### Port Utilization Gauges Overview

Port Utilization Gauges report is run against ports in the selected sub-service. It displays for the selected port or ports the last polled inbound and outbound utilization data represented through two charts. You can click on a chart, for example inbound utilization, to display a graph of the previous 24 hours of the selected utilization data, you can also overlay the other set of utilization, for example outbound, data.

#### Port Utilization Gauges Options

Name	Description
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a service	Entuity root service against which the report is to be run.
Please select a subservice	Entuity service against which the report is to be run. The drop down list includes the root service and all subservices.
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time</li> </ul>
	<ul> <li>Range, you can enter start and end dates and times.</li> </ul>

Table 275 Port Utilization Gauges Options

#### Port Utilization Gauges Summary

Gauges provide an at-a-glance speedometer type view of a key metric. A label above the gauge identifies the device and port, Entuity displays the last polled value of the metric below the gauge.

The key metric gauge graphs are of two forms a:

green only gauge is used with metrics that do not have thresholds.

green and red gauge is used with metrics that have thresholds. When the indicator is pointing to the red area then the threshold has been crossed. The relative size of the red and green areas of the gauge is fixed, i.e. the red area does not take a larger or smaller proportion of the total area of the gauge on changes to the threshold level. You can view the current threshold value by passing the cursor over the data value below

the graph.

You can click on a gauge to display the metric in an interactive chart.

# **10 Green IT Reports**

From the InSight Center you can use Entuity's Green IT Perspective<sup>™</sup> to manage the discipline of policies that reduce the energy consumption of your network. The Green IT Perspective:

- Assist both network and general managers to reduce wasted power consumption associated with leaving desktop/notebook PCs running twenty-four/seven where they could be safely turned off outside the working day.
- Quantifies the power savings both enterprise-wide and per department. The savings already being achieved by current equipment shutdown behavior is quantified along with the potential additional savings if all appropriate nightly shutdowns were to be performed across the board.
- Identifies trends in shutdown policy conformance by department.
- Identifies those who should be targeted when looking to achieve better policy conformance and thereby higher savings.
- Quantifies the power used by the managed infrastructure devices.
- Identifies switches with high or low number/proportions of spare ports.
- Quantifies the power used by the switches per used port to evaluate power efficiency.
- Identifies servers that are lightly used and might become the target of consolidation initiatives to reduce data center power utilization.

# **Running Green IT Reports**

You can run Green IT reports from the web interface:

- 1) Click **Reports**. Entuity displays the Reports Home page.
- 2) Click Green Reports. Entuity displays the list of available reports.

8 er	ntuity										User: admin@entlor Page Updated: 14:0	ppvm01 [Logout 3:32, BST
Dashboards	InSight Center	Explorer	Events	Maps	Charts	Flows	Reports	Tools	Administration	Help		F
Repo	ts											
<u>reports</u> > (	reenReports											
Report		Schedule	History	/ Descr	iption							
Green IT	erspective	11	<u> </u>	Overvi	iew of the	reporting	facilities rele	vant to a	Green IT initiative			
Missing De	vice Power	11	<u></u>	Catalo	g those d	evices for	which no noi	ninal pow	er specification is p	present		
Missing Ma	dule Power	11	-	Catalo	g those n	odules for	which no no	minal pov	ver specification is	present		
Power Cor	sumption Overview	11	<u></u>	Overvi	iew of ma	naged dev	ice power co	nsumptio	n for all accessible	views		
Power Cor	sumption by View	11	<u></u>	Manaç	ged device	power co	nsumption fo	r all the c	devices in a view			
Server Act	ivity History	11	<u></u>	Charts	ofactivit	/ metrics fi	or a server					
Shutdown	Compliance by Grou	D 11	<u></u>	Compl	iance to t	ne shutdov	wn policy for	a group				
Shutdown	Compliance by Host	11	<u></u>	Compl	iance to t	ne shutdov	wn policy for	a host				
Shutdown	Policy Compliance	11	<u></u>	Overvi	iew of the	level of co	mpliance of	all policy g	roups			
Spare Por	s Overview	11	<u></u>	Overvi	iew of spa	re port an	d power con	sumption	statistics for multi	ple views		
Spare Por	s by Device	11	<u></u>	Spare	ports for	a device						
Spare Por	s by View	11	<u></u>	Spare	port and	power con	sumption st	itistics for	a view			
Underutili	ed Servers	11	<u></u>	Server	rs ranked	by various	metrics to h	ighlight lo	w usage			
Schedu	ed Reports											

Figure 104 Green IT Reports

# Shutdown Compliance by Host Report

#### Entuity Report

#### **Shutdown Policy Compliance by Host**

Printed on: 26 Nov 2012 15:20:06 GMT

Host: 10.44.1.1 / 10.44.1.1 / 00:1B:54:AB:05:2B



#### List of Violations

#### List of Violations

Date
Tuesday 23rd October
Wednesday 24th October
Thursday 25th October
Friday 26th October
Saturday 27th October
Sunday 28th October
Monday 29th October
Tuesday 30th October
Wednesday 31st October
Thursday 1st November
Friday 2nd November
Saturday 3rd November
Sunday 4th November
Monday 5th November
Tuesday 6th November
Wednesday 7th November
Thursday 8th November
Friday 9th November
Saturday 10th November
Sunday 11th November
Monday 12th November
Tuesday 13th November
Wednesday 14th November

Thursday 15th November
Sunday 18th November
Monday 19th November
Tuesday 20th November
Wednesday 21st November
Thursday 22nd November
Friday 23rd November
Saturday 24th November

Sunday 25th November Monday 26th November

Date

Figure 105 Shutdown Compliance by Host Report

Centuity

### Shutdown Compliance by Host Report Overview

This report provides an overview of shutdown compliance for the selected host.

#### Shutdown Compliance by Host Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Select Group	Entuity group against which the report was run.
Host MAC	MAC address of the device to include to the report.

Table 276 Shutdown Compliance by Host Report Header

#### Shutdown Compliance by Host Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Host.
Printed on	Date and time the report was generated.
Host	MAC address of the device to include to the report.

Table 277 Shutdown Compliance by Host Report Header

### Shutdown Compliance by Host Report Details

Name	Description
Violations	Graphed representation of when the host transgressed the compliance policy during the reporting period.
Average Compliance	The gauge provides the average compliance over the monitoring period for the host, as a percentage of the maximum potential compliance.
Violations by Day of the Week	Number of policy transgressions, graphed by day of the week during the reporting period.
List of Violations	Dates during the reporting period that the host transgressed the compliance policy.

Table 278 Shutdown Compliance by Host

# Shutdown Compliance by Group Report

Entuity Report

#### **Shutdown Policy Compliance by Group**

Centuity

Printed on: 26 Nov 2012 15:16:53 GMT

Group: All Hosts

Total hosts during last check: 360

Estimated\* current annual savings from nightly shutdowns: \$3,086 32,620 kWh 23 tons CO2

Estimated\* maximum annual savings: \$20,192 213,448 kWh 153 tons CO2

Estimated\* potential additional annual savings: \$17,106 180,828 kWh 130 tons CO2



#### Hosts with highest number of violations (capped to 500 hosts)

Host name	IP address	MAC address	Violation count
10.44.1.1	10.44.1.1	00:1B:54:AB:05:2B	33
10.44.1.14	10.44.1.14	00:1A:A0:2C:36:5E	33
redmond.entuity.local	10.44.1.16	00:0C:29:B9:FB:0F	33
lon-dev-tst10.entuity.local	10.44.1.18	00:13:72:94:51:7B	33
wintest02.entuity.local	10.44.1.19	00:0C:29:96:68:46	33
cyclone.entuity.local	10.44.1.20	00:22:19:B9:76:57	33
THUNDERSTORM	10.44.1.21	00:23:8B:BD:AA:B9	33
wintest03.entuity.local	10.44.1.25	00:0C:29:C1:1D:EC	33
sputnik.entuity.local	10.44.1.26	00:15:C5:5E:64:1C	33
windsock.entuity.local	10.44.1.30	08:00:20:BC:58:26	33
MOKE	10.44.1.32	00:04:23:22:BB:B4	33
lonsolfs01.entuity.local	10.44.1.33	00:03:BA:4F:DB:E5	33
lonsoltest01.entuity.local	10.44.1.34	00:03:BA:A6:0C:03	33
top3550.entuity.com	10.44.1.42	00:11:92:EB:3A:00	33
wintest06.entuity.local	10.44.1.49	00:0C:29:16:3A:76	33
wintest07.entuity.local	10.44.1.51	00:0C:29:AD:22:F0	33
wintest08.entuity.local	10.44.1.53	00:0C:29:6D:00:DD	33
redmond2.entuity.local	10.44.1.56	00:0C:29:E4:F4:A2	33
saturn.entuity.local	10.44.1.57	00:0C:29:01:B7:D9	33

\* Estimates are based on data supplied by hardware vendors and configurable values preset by Entuity and modifiable by the user

Page 1 of 11

Figure 106 Shutdown Compliance by Group Report

### Shutdown Compliance by Group Report Overview

This report provides an overview of shutdown compliance for the selected compliance group.

### Shutdown Compliance by Host Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Group Name	Entuity group against which the report was run.
Daily excess kWh for a host	Allows the average wasted power per host per day for hosts that are not shut off when they should be to be set. For a host that should be used for an 8 hour working day there should be 16 hours where it can be shut off. If the average consumption of hosts is 100W (a bit higher than most laptops but lower than desktops) then there would be 1600Wh (1.6kWh) of power associated with those 16 hours.
Cost per kWh of Electricity,	Cost per kilo watt hour of electricity.
Currency symbol	Identifies the currency used to display values, by default \$.
Tons of CO2 per kWh	Tons of CO2 generated per kilo watt hour, by default 0.000718.

Table 279 Shutdown Compliance by Host Report Header

### Shutdown Compliance by Group Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Group.
Printed on	Date and time the report was generated.
Description	Description of the report.
Group	Name of the group to apply the report against, including All Hosts.
Total Hosts during last check	Number of hosts within the group.
Estimated Current annual savings from nightly shutdown	Provides an indicator of the benefits to your organization of this group's compliance to the overnight shutdown initiative.
Estimated maximum annual savings	The potential savings in currency, kilowatts and CO2 if one hundred percent compliance was achieved.
Estimated potential additional annual savings	The difference between current annual savings and maximum annual savings.

Table 280 Shutdown Compliance by Group Report Header

Name	Description
Average Compliance	The gauge provides the average compliance over the monitoring period for the group, as a percentage of the maximum potential compliance.
Total Compliance % over time	Graphs compliance as a percentage of maximum potential compliance over the reporting period.
Last Check Compliance	The gauge provides a measure of workstation shutdown compliance over the last poll (by default the previous day) for the group, as a percentage of the maximum potential compliance.
Hosts and compliant hosts	Graphs total number of hosts and the number of hosts that are compliant over the reporting period.
Hosts with highest Number of violations	Table orders by number of violations the top N incompliant hosts. Eachrow in the table lists for each poor performing host:Host Name, resolved name, or IP address, of the host.IP Address, management IP address of the host.MAC Address, host MAC address.Number of Violations, number of violations in the reporting period.

# Shutdown Compliance by Group Report Details

Table 281 Shutdown Compliance by Group

# Shutdown Compliance Overview Report

#### Entuity Report

#### **Shutdown Policy Conformance Overview**

Centuity

Printed on: 26 Nov 2012 15:10:31 GMT

Sorted by: Group\_Name

Estimated\* current annual savings from nightly shutdowns: \$3,920 41,439 kWh 30 tons CO2 Estimated\* maximum annual savings: \$25,181 266,185 kWh 191 tons CO2 Estimated\* potential additional annual savings: \$21,261 224,746 kWh 161 tons CO2



#### Conformance of all shutdown policy groups

Group name	Average group size	Average % compliance	Compliance trend (slope)	Estimated annual savings Current / Maximum	
All Hosts	365	15.3	Worsening (-0.05)	\$3,086	\$20,192
Edinburgh Office	31	36.7	Worsening (-0.09)	\$643	\$1,751
London Office	58	5.9	Worsening (-0.06)	\$191	\$3,238

Figure 107 Shutdown Compliance Overview Report

#### Shutdown Compliance Overview Report Overview

This report provides an overview of shutdown compliance.

### Shutdown Compliance Overview Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Daily excess kWh for a host	Allows the average wasted power per host per day for hosts that are not shut off when they should be to be set. For a host that should be used for an 8 hour working day there should be 16 hours where it can be shut off. If the average consumption of hosts is 100W (a bit higher than most laptops but lower than desktops) then there would be 1600Wh (1.6kWh) of power associated with those 16 hours.
Cost per kWh of Electricity,	Cost per kilo watt hour of electricity.
Currency symbol	Identifies the currency used to display values, by default \$.
Sort column	Select from the drop-down list the attribute on which you want to sort the groups in the conformance table.
Tons of CO2 per kWh	Tons of CO2 generated per kilo watt hour, by default 0.000718.

Table 282 Shutdown Compliance by Host Report Header

#### Shutdown Compliance Overview Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance Overview.
Printed on	Date and time the report was generated.
Description	Description of the report.
Sorted by	The attribute on which the groups in the conformance table or sorted.
Estimated Current annual savings from nightly shutdown	Provides an indicator of the benefits to your organization of this group's compliance to the overnight shutdown initiative.
Estimated maximum annual savings	The potential savings in currency, kilowatts and CO2 if one hundred percent compliance was achieved.
Estimated potential additional annual savings	The difference between current annual savings and maximum annual savings.

Table 283 Shutdown Compliance Overview Report Header

Name	Description
Average Compliance	The gauge provides the average compliance over the monitoring period for the organization, as a percentage of the maximum potential compliance.
Total Compliance % over time	Graphs compliance as a percentage of maximum potential compliance over the reporting period.
Last check compliance	The gauge provides a measure of workstation shutdown compliance over the last poll (by default the previous day), as a percentage of the maximum potential compliance.
Hosts and compliant hosts	Graphs total number of hosts and the number of hosts that are compliant over the reporting period.
Top 10 Groups by Worst Shutdown Policy Compliance	Graphs the worst performing groups over the reporting period. Each row in the table lists for each poor performing group: <i>Group Name</i> , name of the exclusion policy group. <i>Average Group Size</i> , number of managed objects within the exclusion policy group. <i>Average % Compliance</i> , the number of hosts that were recognized as off overnight, as a percentage of the total managed hosts for that group, averaged over the period Entuity has managed them. <i>Compliance Trend (slope)</i> , indicates the direction of compliance, improving, declining and Flat. The trend is calculated by linear regression,0 is flat, positive is increasing, negative is decreasing. The larger the number the steeper the slope. <i>Annual Savings Current/Maximum</i> , the estimated current and potential maximum monetary value savings.

# Shutdown Compliance Overview Report Details

Table 284 Shutdown Compliance Overview

# **Green IT Perspective Report**



Figure 108 Green IT Perspective Report

#### **Green IT Perspective Report Overview**

This dashboard provides an overview of workstation overnight shutdown compliance, with access to a detailed compliance report and other Green IT Perspective reports.

Access to these reports:

- Green IT Perspective Detail report
- Workstations Shutdown Policy Compliance report
- Underutilized Servers report
- Spare Ports and Power Consumption report
- Known Power Consumption of Devices in Inventory report.

#### **Green IT Perspective Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Daily excess kWh for a host	Allows the average wasted power per host per day for hosts that are not shut off when they should be to be set. For a host that should be used for an 8 hour working day there should be 16 hours where it can be shut off. If the average consumption of hosts is 100W (a bit higher than most laptops but lower than desktops) then there would be 1600Wh (1.6kWh) of power associated with those 16 hours.
Cost per kWh of Electricity,	Cost per kilo watt hour of electricity.
Currency symbol	Identifies the currency used to display values, by default \$.
Tons of CO2 per kWh	Tons of CO2 generated per kilo watt hour, by default 0.000718.

Table 285 Green IT Perspective Options

### **Green IT Perspective Header**

Name	Description
Report title	Report title, e.g. Green IT Perspective Dashboard.
Description	Description of the report.
Estimated Current annual savings from nightly shutdown	Provides an indicator of the benefits to your organization of this group's compliance to the overnight shutdown initiative.
Estimated maximum annual savings	The potential savings in currency, kilowatts and CO2 if one hundred percent compliance was achieved.
Estimated potential additional annual savings	The difference between current annual savings and maximum annual savings. The values used to derive the estimated savings values are configurable.

Table 286 Green IT Perspective Report Header

#### **Green IT Perspective Details**

Name	Description
Average Compliance	The gauge provides the average compliance over the monitoring period for the organization, as a percentage of the maximum potential compliance.
Total Compliance % over time	Graphs compliance as a percentage of maximum potential compliance over the reporting period.
Last check compliance	The gauge provides a measure of workstation shutdown compliance over the last poll (by default the previous day), as a percentage of the maximum potential compliance.
Hosts and compliant hosts	Graphs total number of hosts and the number of hosts that are compliant over the reporting period.

Table 287 Green IT Perspective Details

Name	Description
Corporate Green IT Initiative	Text that the administrator can enter, for example to explain the corporate green policy.

Table 287 Green IT Perspective Details

# **Missing Nominal Device Power Consumption Report**

#### Entuity Report

#### **Missing Device Nominal Power Consumption Settings**

Centuity

Printed on: 16 Nov 2008 10:45:28 GMT View: Regional

Missing	Manufacturer	Model	Device type	sysOid
true	cisco	WS-C3550-24-EMI	Ethernet Switch	.1.3.6.1.4.1.9.1.366
true	cisco	2503	Router	.1.3.6.1.4.1.9.1.19
true	cisco	6500-SSLM	SSL Proxy	.1.3.6.1.4.1.9.1.554
true	cisco	WSX5302	Router	.1.3.6.1.4.1.9.1.168
true	cisco	7206	Router	.1.3.6.1.4.1.9.1.108
true	Microsemi	midspan_24_port_A	1070	.1.3.6.1.4.1.7428.1.1.1.7
true	Shiva Corporation	SA3450	VPN	.1.3.6.1.4.1.166.6.110
true	IBM	1XX	BladeCenter	.1.3.6.1.4.1.2.6.158.3
true	Cisco	WLC4404-100	Wireless Controller	.1.3.6.1.4.1.14179.1.1.4.3
true	cisco	1603	Router	.1.3.6.1.4.1.9.1.115
true	cisco	801	Router	.1.3.6.1.4.1.9.1.212
true	Aruba Networks Inc	Aruba6000-US)	1102	.1.3.6.1.4.1.14823.1.1.4
true	cisco	6500-SSL	SSL Proxy	.1.3.6.1.4.1.9.1.610
true	cisco	WS-C6506-E	Ethernet Switch	.1.3.6.1.4.1.9.1.282
false	Microsoft	x86	Managed Host	.1.3.6.1.4.1.311.1.1.3.1.1
false	Microsoft	x86	Managed Host	.1.3.6.1.4.1.311.1.1.3.1.2
false	net-snmp	NET-SNMPSOLARIS	Managed Host	.1.3.6.1.4.1.8072.3.2.3
false	cisco	WS-C5505	Ethernet Switch	.1.3.6.1.4.1.9.5.34
false	Microsoft	x86	Managed Host	.1.3.6.1.4.1.311.1.1.3.1.3
false	cisco	WS-C2960-24TT-L	Router	.1.3.6.1.4.1.9.1.716
false	cisco	2821	Router	.1.3.6.1.4.1.9.1.577
false	cisco	WS-C3560-24TS-E	Router	.1.3.6.1.4.1.9.1.633
false	cisco	1900i	Ethernet Switch	.1.3.6.1.4.1.9.5.31
false	cisco	C2950XL	Ethernet Switch	.1.3.6.1.4.1.9.1.359
false	cisco	2610	Router	.1.3.6.1.4.1.9.1.185
false	net-snmp	Net-SNMP Agent 5.1	Managed Host	.1.3.6.1.4.1.8072.3.2.10
false	Sun Microsystems	Ultra-5_10	Managed Host	.1.3.6.1.4.1.42.2.1.1
false	Netgear	WPN802	Generically Managed	.1.3.6.1.4.1.4526
false	cisco	2501	Router	.1.3.6.1.4.1.9.1.17
	Missing true true true true true true true true	MissingManufacturertrueciscotrueciscotrueciscotrueciscotrueciscotrueciscotrueShiva CorporationtrueBMtrueCiscotrueCiscotrueCiscotrueCiscotrueCiscotrueCiscotrueCiscotrueCiscotrueAruba Networks InctrueciscofalseMicrosoftfalseciscofalseciscofalseciscofalseciscofalseciscofalseciscofalseciscofalseciscofalseciscofalseciscofalseciscofalsesicnfalseciscofalsesicnfalsenet-snmpfalseciscofalsesicnfalsesicnfalsenet-snmpfalsesicn MicrosystemsfalseNetyfalseNetyfalsecisco	MissingManufacturerModeltrueciscoWS-C3550-24-EMItruecisco2503truecisco6500-S5LMtrueciscoWSX302truecisco7206trueMicrosemimidspan_24_port_AtrueShiva CorporationSA3450trueIBM1XXtrueCiscoWLC4404-100trueCisco801truecisco801truecisco801truecisco6500-S5Ltruecisco801truecisco801truecisco801trueciscoWS-C6506-EfalseMicrosoftx86falseMicrosoftx86falseciscoWS-C5050falsecisco2821falsecisco2821falsecisco1900ifalsecisco2250XLfalsecisco22610falsenet-smpNet-SNMP Agent 5.10falsecisco22610falseSun MicrosystemsUltra-5_10falseSun MicrosystemsWPN802falseSun MicrosystemsCiscofalseSun MicrosystemsWPN802falsecisco2501	MissingManufacturerModelDevice typetrueciscoWS-C350-24-EMIEthernet Switchtruecisco2503RoutertrueciscoWS-C350-24-EMISL ProxytrueciscoWSX302RoutertrueciscoWSX302Routertruecisco7206RoutertrueMicrosemimidspan_24_port_A1070trueShiva CorporationSA3450VPNtrueBM1XXBladeCentertrueIBM1XXBladeCentertrueciscoWLC4404-100Wireless Controllertruecisco801Routertruecisco801Routertruecisco6500-SSLSSL ProxytrueciscoWS-C6506-EEthernet SwitchfalseMicrosoftx86Managed HostfalseMicrosoftx86Managed HostfalseciscoWS-C5505Ethernet SwitchfalseciscoWS-C506-24TT-LRouterfalseciscoWS-C3560-24TT-LRouterfalseciscoWS-C3560-24TT-LRouterfalsecisco2610Routerfalsecisco2610Routerfalsecisco2610Routerfalsecisco2610Routerfalsecisco2610Routerfalsecisco2610Routerfalsenet-smpNet-SMPAgent 5.1Managed Host

Total device count	Total missing by device	Percentage missing by device	Total unique sysOids	Total missing by sysOid	Percentage missing by sysOid
51	17	33.3	29	14	48.3

Figure 109 Missing Nominal Device Power Consumption Report

#### **Missing Nominal Device Power Consumption Report**

For each supported device there must be configured a power consumption estimate (Entuity includes a default set of estimates). These values are used when calculating annual, maximum and potential saving estimates.

Entuity includes a Missing Device Power report which allows you to identify those device types for which a power consumption definition is missing.

### **Missing Nominal Device Power Consumption Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 288 Missing Nominal Device Power Consumption Report Options

### Missing Nominal Device Power Consumption Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Host.
Printed on	Date and time the report was generated.
View	View the report is run against.

Table 289 Missing Nominal Device Power Consumption Report Header

### Missing Nominal Device Power Consumption Report Details

Name	Description
Count	Number of device of that type.
Missing	Indicates whether device type has a nominal power consumption setting (false) or not (true).
Manufacturer	Manufacturer of the device.
Model	Device model identifier.
Device Type	Device type as identified by Entuity, e.g. Wireless Controller, Firewall.
sysOid	System OID Entuity uses identify the device type and manage the device.

The report also includes a summary table.

Name	Description
Total Device Count	The total number of devices in the report.
Total Missing by Device	Total number of managed devices which do not have a power consumption value.

Table 290 Missing Nominal Device Power Consumption Report Summary

Name	Description
Percentage Missing by Device	Number of devices without a power consumption value as a percentage of the total number of devices managed.
Total Unique SysOid	Total number of unique sysOids used to manage the devices included to the report.
Total Missing by SysOid	Total number of unique sysOids which do not have a power consumption value.
Percentage Missing by SysOid	Number of unique sysOids without a power consumption value as a percentage of the total number of unique sysOids managed.

Table 290 Missing Nominal Device Power Consumption Report Summary

# **Missing Nominal Module Power Consumption Report**

#### Entuity Report

#### Missing Module Nominal Power Consumption Settings

Pentuity

Printed on: 16 Nov 2008 10:46:56 GMT View: Regional

Count	Missing	Manufacturer	Model
5	true	cisco	other
3	true	cisco	wsx5530
3	true	cisco	wsx5234
3	true	cisco	wic-serial-2t
2	true	cisco	cpu-c2821-2ge
2	true	cisco	wic-serial-1t
2	true	cisco	сри-2500
1	true	cisco	wsx5203
1	true	cisco	wsx5302
1	true	cisco	wsx5225r
1	true	cisco	unknown
1	true	cisco	cpu-wsx5302
1	true	cisco	сри-800
1	true	cisco	сри-1600
1	true	cisco	wsx6ksup22ge
1	true	cisco	wsx6148rj45v
1	true	cisco	wsx6408agbic
1	true	cisco	wsSvcSsl1
1	true	cisco	wsx6066SlbSk9

Total module count	Total missing by	Percentage	Total unique	Total missing by	Percentage
	module	missing by module	module models	model	missing by model
32	32	100.0	19	19	100.0

Figure 110 Missing Module Nominal Power Consumption Report

#### Missing Nominal Module Power Consumption Report Overview

For each supported module there must be configured a power consumption estimate (Entuity includes a default set of estimates). These values are used when calculating annual, maximum and potential saving estimates.

Entuity includes a Missing Module Power report which allows you to identify those modules for which a power consumption definition is missing.

#### Missing Nominal Module Power Consumption Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.

Table 291 Missing Nominal Module Power Consumption Report Options

Name	Description
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.

Table 291 Missing Nominal Module Power Consumption Report Options

#### Missing Nominal Module Power Consumption Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Host.
Printed on	Date and time the report was generated.
View	View the report is run against.

Table 292 Missing Nominal Module Power Consumption Report Header

### Missing Nominal Module Power Consumption Report Details

Name	Description
Count	Number of modules of that type Entuity currently manages.
Missing	Indicates whether module has a nominal power consumption setting ( <b>false</b> ) or not ( <b>true</b> ).
Manufacturer	Manufacturer of the device.
Model	Device model identifier.

Table 293 Missing Nominal Device Power Consumption Report Details

The report also includes a summary table.

Name	Description
Total Module Count	The total number of modules in the report.
Total Missing by Module	Total number of managed modules which do not have a power consumption value.
Percentage Missing by Module	Number of modules without a power consumption value as a percentage of the total modules managed.
Total unique model types	The total number of module types in the report.
Total Missing by model	Total number of managed module types which do not have a power consumption value.
Percentage Missing by model	Number of models without a power consumption value as a percentage of the total number of models managed.

Table 294 Missing Nominal Module Power Consumption Report Summary

# Power Consumption by View Report

#### Entuity Report

#### Managed Device Estimated Power Consumption by View

Centuity

Printed on: 16 Nov 2008 13:54:45 GMT View: Regional

Sorted by: Device Power Consumption (descending)

Device name	Location	EYE server	Manufacturer	Device
			Mode	power* (W)
lonsoltest01	"System administrators office"	COMPRESSOR	net-snmp NET-	398
lonsoltest07	"System administrators office"	COMPRESSOR	net-snmp NET-	398
lonsoltest08	"System administrators office"	COMPRESSOR	net-snmp NET-	398
sp3	"System administrators office"	COMPRESSOR	net-snmp NET-	398
windbreak	System administrators office	COMPRESSOR	Sun Microsystems Ultra-5 10	398
c2821		COMPRESSOR	cisco 2821	280
e2821		COMPRESSOR	cisco 2821	280
10.44.1.39	testroom	COMPRESSOR	cisco WS-C3560-24TS-E	236
10.44.1.51		COMPRESSOR	Microsoft x86	225
IP129		COMPRESSOR	Microsoft x86	225
LONXPTEST03	Customer Serivces	COMPRESSOR	Microsoft x86	225
alika		COMPRESSOR	Microsoft x86	225
costner	LondonOffice	COMPRESSOR	Microsoft x86	225
entlonex02		COMPRESSOR	Microsoft x86	225
entloney01		COMPRESSOR	Microsoft x86	225
lon-dev-tst01		COMPRESSOR	Microsoft x86	225
lon-dev-tst02		COMPRESSOR	Microsoft x86	225
lon-dev-tst06		COMPRESSOR	Microsoft x86	225
lon-sup-tst01	Devonshire Square, London	COMPRESSOR	Microsoft x86	225
lonxptest02		COMPRESSOR	Microsoft x86	225
lonxptest04	Customer Services	COMPRESSOR	Microsoft x86	225

Figure 111 Power Consumption by View Report

#### Power Consumption by View Report Overview

This report identifies device models and the state of their power consumption settings for the selected view.

#### Power Consumption by View Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Sort column	From the drop down list you can select a column on which to order the report.

Table 295 Power Consumption by View Report Options

#### Power Consumption by View Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Host.
Printed on	Date and time the report was generated.
View	View the report is run against.
Sorted by	The attribute in the table on which the table is ordered.

Table 296 Power Consumption by View Report Header

#### Power Consumption by View Report Details

Name	Description
Device Name	Resolved name or IP address of the device.
Location	A text description of the physical location of the device that is contained on the device, e.g. Development Cabinet.
Entuity Server	Name of the Entuity server managing the device.

Table 297 Power Consumption by View Details

Name	Description
Manufacturer	Manufacturer name and is derived by matching the manufacturer number against the first 2500 Private Enterprise Codes compiled by the Internet Assigned Numbers Authority (http://www.iana.org/assignments/ enterprise-numbers). Where the manufacturer code is not matched then the first part of the device name is taken, usually this is the manufacturer's name.
Model	Device model.
Device Power(W)	Configured power consumption of the device in watts.

Table 297 Power Consumption by View Details

# **Power Consumption Overview**

Entuity Report

#### Managed Device Estimated Power Consumption overview

Centuity

Printed on: 16 Nov 2008 10:50:47 GMT Sorted by: View Name

View	Device count	Total power* (kW)
ccPortAggregation@New View	0	0.0
Regional	51	6.7
Regional by VTP	5	0.0
rpcCreateView	8	0.3
SSL@New View	3	0.0
VMware ESX Support	1	0.2

Figure 112 Power Consumption Overview Report

#### **Power Consumption Overview Report Overview**

This report identifies estimated power consumption by Entuity business view.

#### **Power Consumption Overview Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Sort column	From the drop down list you can select a column on which to order the report.

Table 298 Power Consumption Overview Report Options

#### Power Consumption by View Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Host.
Printed on	Date and time the report was generated.
Sorted by	The attribute in the table on which the table is ordered.

Table 299 Power Consumption Overview Report Header

# **Power Consumption Overview Report Details**

Name	Description
View	Name of the Entuity business view. Each entry is hyperlink that runs the Power Consumption by View Report against the view.
Device count	Number of devices in the view.
Total Power(kW)	Total configured power consumption, in kiloWatts of the devices in the view.

Table 300 Power Consumption Overview Details

# Server Activity History Report

Entuity Report

#### Server Activity History

 Printed on:
 2 Dec 2012 12:32:29 GMT

 View:
 Regional

 Server name:
 storm

 Days covered:
 T



Figure 113 Server Activity History Report

Centuity
#### Server Activity History Report Overview

This report provides a detailed breakdown of server performance during the reporting period. It is a useful tool when investigating server utilization.

#### Server Activity History Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Server Name	From the drop down list you can select a server on which to run the report.
Days to report	Enter the number of days the report should cover, by default seven days.

Table 301 Server Activity History Report Options

### Server Activity History Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Host.
Printed on	Date and time the report was generated.
View	View the report is run against.
Server Name	The server against which the report is run.
Days covered	Number of days covered by the report, by default seven days.

Table 302 Server Activity History Report Header

## Server Activity History Report Details

Name	Description
Management IP	the device's management IP address.
Entuity Server	Name of the Entuity server managing the device.
Network Traffic Rate (Kbytes/S)	Total network traffic for the port, measured as Kbytes per second.
CPU%	CPU utilization as a percentage of the total potential utilization for the server.

Table 303 Server Activity History Table

Name	Description
Used Memory (Mbytes)	Average used memory (Mbytes) over the reporting period.
Processes	Average number of processes running during the reporting period.
Users	Average number of users using the server during the reporting period.

Table 303 Server Activity History Table

Name	Description
Network Traffic Rate	Aggregated network traffic for all ports charted during the reporting period.
CPU%	CPU utilization for the server charted during the reporting period.
Used Memory (Mbytes)	Used memory on the server charted during the reporting period.
Process Count	Number of processes charted during the reporting period.
User Count	Number of users charted during the reporting period.

Table 304 Server Activity History Charts

## Spare Ports and Power Consumption Overview Report

Entuity Report

#### Spare Ports and Estimated Power Consumption overview

Pentuity

Printed on: 26 Nov 2009 15:35:31 GMT Sorted by: Used Port Percentage

Note that only switches and routers are included in this report

View	Device count	Port count	Used ports	Used port%	Spare ports	Spare port%	Total power* (kW)	Power* per used port (W)
Joyce@New View	12	292	160	54	132	45	3.0	18.7
Regional	45	1039	713	68	326	31	6.2	8.7
admin@New View	17	370	270	72	100	27	2.5	9.1

Figure 114 Spare Ports and Power Consumption Overview Report

#### Spare Ports and Power Consumption Overview Report Overview

This report provides an overview of spare ports and power consumption statics grouped by view. Only ports for managed switches and routers are included to the report.



The definition of a spare port in Entuity is configurable through entuity.cfg.

#### Spare Ports and Power Consumption Overview Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Sort column	From the drop down list you can select a column on which to order the report.

Table 305 Spare Ports and Power Consumption Overview Report Options

#### Spare Ports and Power Consumption Overview Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Host.
Printed on	Date and time the report was generated.
Sorted by	The attribute in the table on which the table is ordered.

Table 306 Spare Ports and Power Consumption Overview Report Header

Name	Description			
View	Entuity view to which the row's summary data applies.			
Device count	Jumber of managed devices within the view.			
Port count	Number of ports within the view.			
Used port	Number of used ports within the view.			
Used port %	Number of ports within the view Entuity identifies as in use as a percentage of the total number of ports within the view.			
Spare port	Number of spare ports within the view.			
Spare port %	Number of ports within the view Entuity identifies as spare as a percentage of the total number of ports within the view.			
Total power (kW)	Total power usage by managed objects within the view.			
Power per used port (W)	Power usage per used port within the view.			

## Spare Ports and Power Consumption Overview Report Details

Table 307 Spare Ports and Power Consumption Overview Details

## Spare Ports by Device Report

Entuity Report

#### Spare Ports by Device

Centuity

 Printed on:
 26 Nov 2009 16:06:00 GMT

 View:
 Regional

 Device:
 c2503

 Note that only switches and routers are included in this report

Port description	Days since last activity	Date of last activity	VLAN
[ BRO ] BRIO	56	1-Oct-2009	
[ BRO ] BRIO	56	1-Oct-2009	
[ BR0:1 ] BRI0:1	56	1-Oct-2009	
[ BR0:2 ] BRI0:2	56	1-Oct-2009	

Figure 115 Spare Ports by Device Report

### Spare Ports by Device Report Overview

This report provides an overview of spare ports for a selected device. Only ports for managed switches and routers are included to the report.



The definition of a spare port in Entuity is configurable through entuity.cfg.

#### Spare Ports by Device Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Device Name	From the drop down list you can select a device on which to run the report.
Sort column	From the drop down list you can select a column on which to order the report.

Table 308 Spare Ports by Device Report Options

## Spare Ports by Device Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Host.
Printed on	Date and time the report was generated.
View	View the report is run against.
Device	The device against which the report is run.

Table 309 Spare Ports by Device Report Header

## Spare Ports by Device Report Details

Name	Description
Port description	Port identity.
Days since last activity	Days since the port was last used.
Date of last activity	Date the port was last used.
VLAN	The VLANs the port is associated with.

Table 310 Spare Ports by Device Details

## Spare Ports and Power Consumption by View Report

Entuity Report

#### Spare Ports and Estimated Power Consumption by View

Centuity

Printed on: 26 Nov 2012 16:06:50 GMT View: Regional Sorted by: Device Name Note that only switches and routers are included in this report

Port Device name Manufacturer Power\* per used Spare Device Spare power\* (W) port (W) Locatio Mode count ports port% 10.44.1.62 Hewlett Packard 0 0.0 30 30.0 1 C.25.80 10.44.1.62 Hewlett Packard 0 0 30 C.25.80 10.44.1.9 cisco 26 17 65.4 30 3.3 C2950XL alcatel-6024.vendor.entuity.lab Xylan Corp. 26 0 0.0 0 0.0 "Simulator OmniStack 6024 bottom2960 cisco 26 20 76.9 0 0.0 WS-C2960-24TT-L Entuity Test Room bottom2960.entuity.local cisco 20 76.9 30 5.0 26 Entuity Test Room WS-C2960-24TT-L bottom3550 cisco 0 0.0 65 2.5 26 Entuity Test Room WS-C3550-24-EM bottom3550 cisco 26 0 0.0 65 2.5 WS-C3550-24-EM Entuity Test Room c2503 cisco 9 4 44.4 40 8.0 Entuity Test Room 2503 c2821 cisco 1 16.7 0 0.0 6 2821 c2821.entuity.local cisco 6 1 16.7 280 56.0 2821 c3560 cisco 26 24 92.3 281 140.5 Entuity Test Room WS-C3560-24TS-E c3560.entuity.local cisco 24 92.3 281 140.5 26 Entuity Test Room WS-C3560-24TS-E cisco-2651xm.vendor.entuity.lab cisco 11 9 81.8 0 0.0 "Simulator 2651XM cisco-catalyst3524xl.vendor.entuity.lab cisco 26 2 7.7 75 3.1 3524 XL "Simulator cn1700.vendor.entuity.lab New Oak Communications 7 0 0.0 0 0.0 "Simulator' V06 00.310 e2821 cisco 9 0 0.0 0 0.0 Cisco corner in the test room 2821 e2821.entuity.local cisco 9 0 0.0 280 31.1 Cisco corner in the test room 2821 eyepoller.bvt.entuity.lab cisco 26 4 15.4 30 1.4 WS-C2950G-24-E "Simulator" foundrynetiron4000.vendor.entuity.lab Foundry Networks Inc. 41 0 0.0 0 0.0 NI-XMR-1Gx20-SFP 20-

Figure 116 Spare Ports and Power Consumption by View Report

#### Spare Ports and Power Consumption by View Overview

This report provides an overview of spare ports and power consumption for devices within the selected view.

### Spare Ports and Power Consumption by View Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Sort column	From the drop down list you can select a column on which to order the report.

Table 311 Spare Ports and Power Consumption by View Report Options

## Spare Ports and Power Consumption by View Report Header

Name	Description					
Company Identifiers	Company icon and name defined through the report format.					
Report title	Report title, e.g. Shutdown Compliance by Host.					
Printed on	Date and time the report was generated.					
View	View the report is run against.					
Sorted by	The attribute in the table on which the table is ordered, e.g. Used Port Percentage.					

Table 312 Spare Ports and Power Consumption by View Report Header

## Spare Ports and Power Consumption by View Report Details

Name	Description
Device Name	Resolved name or IP address of the device.
Location	A text description of the physical location of the device that is contained on the device, e.g. Development Cabinet.

Table 313 Spare Ports and Power Consumption by View Details

Name	Description					
Manufacturer	Manufacturer name and is derived by matching the manufacturer number against the first 2500 Private Enterprise Codes compiled by the Internet Assigned Numbers Authority (http://www.iana.org/assignments/ enterprise-numbers). Where the manufacturer code is not matched then the first part of the device name is taken, usually this is the manufacturer's name.					
Model	Device model.					
Port Count	umber of ports within the view.					
Spare Ports	umber of spare ports within the view.					
Spare Port %	Number of ports within the view Entuity identifies as spare as a percentage of the total number of ports within the view.					
Device Power(W)	Configured power consumption of the device in watts.					
Power per Used Port (W)	Configured power consumption per used port for the device.					

Table 313 Spare Ports and Power Consumption by View Details

## **Underutilized Servers Report**

Entuity Report

#### Underutilized Servers

Centuity

 Printed on:
 26 Nov 2009 15:47:10 GMT

 View:
 Regional

 Sorted by:
 Average ranking

 Days covered: 7
 The second se

Server name	Management IP	Network traffic rate (Kbytes/S)	CPU%	Used memory (Mbytes)	Procs	Users	Average ranking
10.44.1.55	10.44.1.55	4	-	-	-	-	1.0
fs03.entuity.local	10.44.1.38	-	-	-	-	-	1.8
10.44.1.55	10.44.1.55	-	-	-	-	-	2.6
fs03	10.44.1.38	-	-	-	-	-	3.4
sky	10.44.1.23	-	-	-	-	-	4.2
subzero	10.44.1.10	-	9.0	257	51.0	1.0	6.6
subzero.entuity.local	10.44.1.10	-	9.0	257	51.1	1.0	7.4
lon-dev-tst01.entuity.local	10.44.1.132	74	0.7	680	39.5	1.4	8.0
storm	10.44.1.67	6	2.0	880	41.3	2.0	9.2
storm.entuity.local	10.44.1.67	6	0.3	887	41.1	2.0	9.2
bvt	10.44.1.139	98	17.7	667	86.4	3.2	11.2
lonsoltest07	10.44.1.13	36	13.2	889	72.5	2.4	12.6
lon-dev-tst06.entuity.local	10.44.1.112	32	6.0	1411	54.7	2.0	13.6
ciscomcs7835h2.vendor.entuity.lab	10.66.24.3	-	8.5	1131	1715.7	2445.9	13.8
10.44.1.80	10.44.1.80	19	20.3	1179	72.0	2.0	14.4
lonsolfs02.entuity.local	10.44.1.37	644	33.5	1206	166.0	18.6	16.6
lonsoltest08.entuity.local	10.44.1.17	32	21.8	1455	84.0	2.9	17.0
lonsoltest08	10.44.1.17	31	20.5	1655	84.3	3.0	18.2
lonsolfs02	10.44.1.37	636	39.0	1466	168.1	19.4	18.8
ciscomcs7845h.vendor.entuity.lab	10.66.25.56	877	12.2	2048	4359.0	2596.7	19.0
sunshower.entuity.local	10.44.1.71	69	17.8	2784	272.3	37.4	20.0
sunshower	10.44.1.71	57	14.9	2925	267.0	37.4	20.0

Figure 117 Underutilized Server Reports

#### **Underutilized Servers Report Overview**

Optimal utilization of servers is an important part of a successful green policy, the more servers operating at an optimal level the fewer servers that are required.

### **Underutilized Servers Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All</b> <b>Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Days to report	Enter the number of days the report should cover, by default seven days.
Sort column	From the drop down list you can select a column on which to order the report, e.g. Average ranking.

Table 314 Underutilized Servers Report Options

### **Underutilized Servers Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Shutdown Compliance by Host.
Printed on	Date and time the report was generated.
View	View the report is run against.
Sorted by	The attribute in the table on which the table is ordered, e.g. Server name, Average ranking.
Days covered	Number of days covered by the report, by default seven days.

Table 315 Underutilized Servers Report Header

### **Underutilized Servers Report Details**

Name	Description
Server name	Resolved name, or IP address, of the server.
Management IP	The device's management IP address.
Network Traffic Rate (Kbytes/S)	Total network traffic for the device, measured as Kbytes per second.
CPU%	CPU utilization as a percentage of the total potential utilization for the server.
Used Memory (Mbytes)	Average used memory (Mbytes) over the reporting period.
Procs	Average number of processes running during the reporting period.
Users	Average number of users using the server during the reporting period.
Average ranking	Indicates the average ranking of the server by percentage underutilization

Table 316 Underutilized Servers Table

# **11 Inventory Reports**

This set of Inventory reports allow you identify, for example, the devices that you are managing, where they are located, their current configuration and any configuration changes. Included to this report set are reports that only useful when you have the relevant module or integration.

## **Running Inventory Reports**

You can run Inventory reports from the web interface:

- 1) Click **Reports**. Entuity displays the Reports Home page.
- 2) Click Inventory Reports. Entuity displays the list of available reports.

😥 er	ntuity										User: admin@entlonpp Page Updated: 09:58:4	vm01 15, GMT	[Logout]
Dashboards	InSight Center	Explorer	Events	Maps	Charts	Flows	Reports	Tools	Administration	Help			P
Repor	ts												
reports > I	ventory												
Report			Schedul	e Histor	y Desc	ription							
CUCM Inve	ntory		11	<u></u>	Inven	tory of Cis	co Unified Co	mmunicat	tions Manager dev	rices			
Device Inv	entory		11	2	Devic	e Inventor	y Report sh	owing devi	ce details and mo	dules.			
Device Typ	es		11	<u> </u>	Devic	e Types							
IP Phone [	Directory		11	-	IP Ph	ones, user	s, network a	ddresses	and connections				
IP Phone L	ookup		11	<u>e</u>	Looku	p the deta	ails about an	IP Phone	by its extension n	umber			
Inventory	Change		11	-	Inven	tory Chan	ge Report sl	nowing de	vice details				
Inventory	<u>Dverview</u>		11	<u>e</u>	High I	evel overv	iew of inven	ory					
Manufactu	rers		11	-	Manu	facturers							
Models			11	-	Mode	ls							
Spanning 1	Tree Device Change	25	11	-	Devic	e changes	on the spar	ning tree					
Spanning 1	Tree Device Config		11	-	Devic	e Configura	ation for the	Spanning	Tree				
Spanning T	Free VLAN Changes		11	-	Devic	e changes	on the Spar	ning Tree					
Spanning 1	Tree VLAN Changes	for all VLANs	<b>11</b>	<u>a</u>	Devic	e changes	on the Spar	ning Tree	for all VLANs				
Spanning 1	Free VLAN Config		<b>11</b>	-	VLAN	Configurat	tion for the S	panning T	ree				
Spare Port	s by Device		11	<u>a</u>	Spare	port stati	istics per po	t					
Spare Port	s by View		<b>11</b>	-	Spare	port stati	istics per de	rice					
Schedul	ed Reports												

Figure 118 Inventory Reports

## **CUCM Inventory Report**

Entuity Report

#### **Cisco Unified Communications Manager Inventory**

Centuity

 Printed on:
 25 Nov 2009 17:01:20 GMT

 Description:
 Inventory of CUCM devices

 View:
 Regional

CUCM name	Version	Active / registered phones	Active / registered gateways	CPU %	Total memory (GB)	Used Memory %
ciscomcs7835h2.vendor.entuity.lab	6.1.1.2000-3	N/A / 1170437	N/A / 753296	9	1.96	56
ciscomcs7845h.vendor.entuity.lab	5.0.4.2000	N/A / 757404	N/A / 747681	13	2	100

Figure 119 CUCM Inventory Report

#### **CUCM Inventory Report Overview**

This report provides an inventory report on CUCMs in the specified view.

### **CUCM Inventory Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.

Table 317 CUCM Inventory Report Options

### **CUCM Inventory Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. CUCM Inventory.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 318 CUCM Inventory Report Header

## **CUCM Inventory Report Details**

Name	Description
CUCM Name	Name of the CUCM.
Version	Last valid CUCM version.
Active Phones	Currently active phones with the CUCM.
Registered Phones	Phones registered with the CUCM.
Active Gateways	The current gateway for the CUCM.
Registered Gateways	Gateways registered to the current CUCM.
Total Memory (GB)	The total memory, in gigabytes, installed to the CUCM.
Used Memory %	The CUCM's memory usage as a percentage of total device memory.

Table 319 CUCM Inventory Report

## **Device Inventory Report**

#### Entuity Report

#### **Device Inventory Report**

@ entuity

Printed on: 25 Nov 2012 17:03:04 GMT

Description: Device Inventory Report. Includes modules.

View: Regional



#### **Device Type: Wireless Controller**

#### 10.66.60.3

Model:	65	Manufact.:	Aruba Networks Inc
Version:	3.1.1.0	Serial #:	A20001381
Mngd. IP:	10.66.60.3	Managed since:	21 Oct 2009 10:05:36 GMT
Location:	Brotman Hall	Server:	COMPRESSOR
Description:	ArubaOS (MODEL: Aruba2400-US), Version 3.1.1.0 (15717)		
Ports:	35		
aruba2400.e	ntuity.lab		
Model:	65	Manufact .:	Aruba Networks Inc
Version:	3.1.1.0	Serial #:	A20001381
Mngd. IP:	10.66.60.3	Managed since:	15 Sep 2009 11:08:04 GMT
Location:	Brotman Hall	Server:	wintest03
Description:	ArubaOS (MODEL: Aruba2400-US), Version 3.1.1.0 (15717)		
Ports:	35		

#### Device Type: VPN

#### nortel-contivity1600.vendor.entuity.lab

Model:	V04_06.222"
Version:	n/a
Mngd. IP:	10.66.23.107
Location:	"Simulator"
Description:	"CES V04_06.222"
Ports:	10

Manufact.:	New Oak Communications Inc.	
Serial #:	n/a	
Managed since:	17 Nov 2009 10:42:01 GMT	
Server:	wintest03	

Figure 120 Device Inventory Report

### **Device Inventory Report Overview**

You can launch this report against one or all managed devices.

The report provides a breakdown by device on the selected Entuity server(s), specifically the:

- pie chart graphs the top ten device types of managed devices (when more than one device is reported on)
- sections in the report are grouped by device type.

Optionally you can include device modules.

### **Device Inventory Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.
Please select a device	From the drop down list you can select one or <b>All Devices</b> to run the report against.
Show Modules	Select Show Modules to include device modules to the report.

Table 320 Device Inventory Report Options

### **Device Inventory Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Device Inventory.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 321 Device Inventory Report Header

## **Device Inventory Report Details**

Name	Description
Device Type	Device as identified by Entuity, e.g. Wireless Controller, VPN, Load Balancer.
Name	System name or where not available the IP address.
Model	The device model.
Version	The device version number.

Table 322 Device Inventory Summary

Name	Description
Mngd. IP	IP address Entuity uses to poll the device.
Location	Device SysLocation, or where not available it is left blank.
Description	System description, which for a Cisco device is a parsed sysDescr with model, version and serial number.
Ports	Number of ports on the device.
Manufacturer	Manufacturer name is derived by matching the manufacturer number against the first 2500 Private Enterprise Codes compiled by the Internet Assigned Numbers Authority (http://www.iana.org/assignments/ enterprise-numbers). Where the manufacturer code is not matched then the first part of the device name is taken, usually this is the manufacturer's name.
Serial #	Device serial number.
Managed Since	Data and time the device was taken under management by the Entuity server.
Server	Entuity server managing the device.

Table 322 Device Inventory Summary

Modules table is only displayed when the device has modules and the Report Options is set to show modules.

Name	Description
Module Description	Description of the module.
Slot	Module slot number.
Model	Module model number.
Serial #	Module serial number.
SW Version	Module software version number.

Table 323 Device Module Inventory

## **Device Type Report**



Figure 121 Device Type Report

#### **Device Types Report Overview**

The device types inventory report provides a breakdown by type of the managed devices on the selected Entuity server(s).

#### **Device Types Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.

Table 324 IP Phone Directory Report Options

### **Device Types Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Device Types.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 325 Device Types Report Header

### **Device Type Report Details**

The device types inventory report provides a breakdown by type of the managed devices on the selected Entuity server(s), specifically the

- pie chart graphs the top ten types of managed devices
- each row in the table lists a device type and the number of those devices managed by Entuity.

## **IP Phone Directory Report**

#### Entuity Report

## **IP Phone Directory**

Printed on:	7 Oct 2012 14:46:01 BST
Description:	Directory of IP Phones by Last User
View:	Regional

Last user	Extension	IP address	MAC address	Switch / Port	CUCM
	82159001	10.192.67.46		N/A	ciscomcs7845h.ve
	82159004	10.192.66.61	00:17:95:92:df:a0	N/A	ciscomcs7845h.ve
	82159005	10.192.67.39		N/A	ndor.entuity.lab ciscomcs7845h.ve
	82159007	10 192 67 141		N/A	ndor.entuity.lab
	02133007	10.192.07.141		N/A	ndor.entuity.lab
	82159011	10.192.66.74		N/A	ndor.entuity.lab
	82159012	10.192.66.135		N/A	ciscomcs7845h.ve
	82159013	10.192.67.248		N/A	ciscomcs7845h.ve
	82159015	10.192.67.111		N/A	ciscomcs7845h.ve
	82159017	10.192.67.21		N/A	ndor.entuity.lab ciscomcs7845h.ve
	82159018	10 192 67 217	00:17:e0:65:b7:6a	N/A	ndor.entuity.lab
	00150010	10.102.01.217	00.11.00.00.01.00		ndor.entuity.lab
	82159019	10.192.66.157		N/A	ndor.entuity.lab
	82159020	10.192.67.41	00:17:e0:15:2d:d8	N/A	ciscomcs7845h.ve ndor.entuity.lab
	82159021	10.192.66.221		N/A	ciscomcs7845h.ve
	82159022	10.192.67.118	00:17:e0:3f:a9:2f	N/A	ciscomcs7845h.ve
	82159024	10.192.66.225		N/A	ciscomcs7845h.ve
	82159026	10,192,67,230		N/A	ndor.entuity.lab ciscomcs7845h.ve
	00450000	40 400 07 74		N/A	ndor.entuity.lab
	82159028	10.192.67.74		N/A	ndor.entuity.lab
	82159030	10.192.66.205		N/A	ciscomcs7845h.ve ndor.entuity.lab
	82159033	10.192.67.82	00:17:e0:65:b9:08	N/A	ciscomcs7845h.ve
	82159034	10.192.67.249		N/A	ciscomcs7845h.ve
	82159035	10.192.66.251	00:17:95:bd:d6:d4	N/A	ciscomcs7845h.ve
	82159036	10.9.248.99	00:17:95:cd:e0:16	N/A	ndor.entuity.lab ciscomcs7845h.ve
	92450020	10 102 67 91	00:17:00:14:10:9f	N/A	ndor.entuity.lab
	02109039	10.192.07.01	00.17.00.14.19.01	N/A	ndor.entuity.lab
	82159040	10.192.66.116		N/A	ciscomcs7845h.ve ndor.entuity.lab
	82159041	10.192.67.70		N/A	ciscomcs7845h.ve
	82159041	10.192.67.81	00:17:e0:14:19:8f	N/A	ciscomcs7845h.ve
	82159045	10.192.66.128	00:17:e0:15:2b:d3	N/A	ciscomcs7845h.ve
	82159046	10.192.66.246		N/A	ndor.entuity.lab ciscomcs7845h.ve
	821590/19	10 192 66 171	00:17:95:h1:2f:fo	N/A	ndor.entuity.lab
	00450050	10 102 60 454	55.17.50.D1.21.16	N/A	ndor.entuity.lab
	82159050	10.192.66.151		N/A	ndor.entuity.lab
	82159051	10.192.66.155		N/A	ciscomcs7845h.ve ndor.entuity.lab
	82159052	10.192.67.209	00:17:e0:15:30:cd	N/A	ciscomcs7845h.ve
	82159053	10.192.66.146		N/A	ciscomcs7845h.ve
	82159054	10.192.66.119	00:17:95:cd:de:ba	N/A	ndor.entuity.lab ciscomcs7845h.ve
	82159056	10.192.66.215		N/A	ndor.entuity.lab ciscomcs7845h.ve
	921500F7	10 102 67 127	00:17:05:64:07:06	N/A	ndor.entuity.lab
	02109007	10.192.07.127	00.17.90.00.87.80	IN/A	ndor.entuity.lab

Figure 122	IP P	hone	Directory	' Re	port
------------	------	------	-----------	------	------

@ entuity

#### **IP Phone Directory Report Overview**

The IP Phone Directory report allows viewing of CUCM phone extension details, ordered by extension number.

#### **IP Phone Directory Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.

Table 326 IP Phone Directory Report Options

#### **IP Phone Directory Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP Phone Directory.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 327 IP Phone Directory Report Header

### **IP Phone Directory Report Details**

Name	Description
Last User	Last registered user.
Extension	Extension number.
IP Address	The last known IP address of the phone.
MAC address	Physical (MAC) address of the phone.
Switch / Port	IP address of the CUCM switch / name of the port.
CUCM	Name of the CUCM.

Table 328 IP Phone Directory Report

## **IP Phone Lookup Report**

E ntuity Report						
IP Phone Details					entuity	
Printed on: 25 Nov 2009 17:06:51 GMT						
Description:	Details of an IP Phone by extension number					
View:	√iew: Regional					
Last user Extension IP address MAC address Switch / Port CUCM						CUCM
		82159001	10.192.67.46		N/A	ciscomcs7845h.ve ndor.entuity.lab

Figure 123 IP Phone Lookup Report

#### **IP Phone Lookup Report Overview**

You can use this report to find details on an IP Phone extension number.

#### **IP Phone Lookup Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.
IP Phone Extension Number	Enter the extension number on which you want to search.

Table 329 IP Phone Lookup Report Options

#### **IP Phone Lookup Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Routing Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 330 IP Phone Lookup Report Header

## IP Phone Lookup Report Details

Name	Description
Last User	Last registered user.
Extension	Extension number.
IP Address	The last known IP address of the phone.
MAC address	Physical (MAC) address of the phone.
Switch / Port	IP address of the CUCM switch / name of the port.
CUCM	Name of the CUCM.

Table 331 IP Phone Lookup Report

## **Inventory Change Report**

Entuity Report

### **Inventory Changes by Type**

@ entuity

Printed on:	26 May 2012 09:46:56 BST
Description:	Comparison of inventory changes between Thu May 24 00:00:00 BST 2012 and Sat May 26 00:00:00 BST 2012
View:	My Network
Start:	Thu May 24 00:00:00 BST 2012

End: Sat May 26 00:00:00 BST 2012



	added	deleted	modified
1104	0	0	0
BladeCente	1	0	0
Ethernet	0	0	0
Load	1	0	0
Managed	0	0	1
Router	2	0	0
Unclassifie	0	0	0
VM	1	0	0
Wireless	1	0	0

Figure 124 Inventory Change Report

#### **Inventory Change Report Overview**

Entuity provides device inventory change reports that use inventory snapshots of both root views and sub-views to identify changes in the managed network. You can run or schedule inventory snapshots through **Administration > Inventory > Inventory Snapshots**.

### **Inventory Change Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against. This determines the available snapshots.
Show changes only	Select to only include changes to the managed inventory between the two inventory snapshots.
Start Inventory	Select the starting inventory snapshot.
End Inventory	Select the second inventory snapshot for which the report identifies changes.
Breakdown by	Select by which attribute, <i>Manufacturer</i> , <i>Model</i> , <i>Type</i> , you want to order the report.

Table 332 Inventory Change Report Options

#### **Inventory Change Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Inventory Change.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Start	Time of the first inventory snapshot.
End	Time of the second inventory snapshot.

Table 333 Inventory Change Report Header

#### **Inventory Change Report Summary**

The report breakdown can be by Manufacturer, Model or Type. The first page provides an overview of the network inventory, with the summary chart and table providing a breakdown by type of the number of additions, deletions and modifications.

#### **Inventory Change Report Summary Tables**

The report breakdown can be by Manufacturer, Model or Type. The summary tables provide precis of each managed object, including its modification state which is also a hyperlink to the inventory change details.

The row background color indicates the type of change:

- white, no change
- green, an addition
- amber, a modification
- red, a deletion.

Name	Description
Device Type	Name of the device type, VPN, Load Balancer, Managed Host. When reporting on multiple device types, this report groups devices by type alphabetically ordering these device type groups.
Device Name	Resolved device name or the IP address.
IP Address	The device's management IP address.
System Name	Device description.
Mgmt Level	Indicates the level of Entuity management that the device is under, e.g. <b>Full</b> , <b>Basic</b> , <b>Ping Only</b> .
Certified	When set to <b>Yes</b> , indicates the device is fully certified by Entuity, <b>Unknown</b> the device dataset is derived by Entuity (from proliferate -g).
Modules	Number of modules associated with the device.
Ports	Number of ports associated with the device.
Modification	A hyperlink to the inventory change breakdown detail table for the object.

Table 334 Inventory Change Summary

#### **Inventory Change Details**

Tables provide a device by device breakdown of the comparison properties start and end values. The column background color indicates the type of change:

- white, no change
- green, an addition
- amber, a modification
- red, deletion.

Name	Description
Device Name	Resolved device name or the IP address.
IP Address	The device's management IP address.
Location	Derived from sysLocation.
Description	Device description.
Туре	Name of the device type, VPN, Load Balancer, Managed Host. When reporting on multiple device types, this report groups devices by type alphabetically ordering these device type groups.

Table 335 Inventory Change Details

Name	Description
Manufacturer	Device manufacturer.
Model	Device model.
Serial No	Manufacturer's serial number for the managed object, i.e. device or module.
Version	Version of the software installed to the managed object, i.e. device or module.
First Seen	Date and time the device was first taken under management.
Server on	Name of the Entuity server. When reporting on multiple servers, this report groups inventory by the managing Entuity server.
Port count	Number of ports associated with the device.
Module count	Number of modules associated with the device.

Table 335 Inventory Change Details

## **Inventory Overview Report**

Entuity Report

### **Inventory Overview**

Centuity

Printed on: 25 Nov 2012 17:04:48 GMT

Description: Overview of all devices in the inventory

View: Regional

#### Server: COMPRESSOR

#### **Ethernet Switch**

Device Name	IPAddress	System Name	Mgmt Level	Certified	Module	Ports	Hosts
10.44.1.62	10.44.1.62	HPCOL1	Full (No	Yes			
bottom2960	10.44.1.41	bottom2960.entuity.com	Full	Yes	1	28	0
bottom3550	10.44.1.12	bottom3550	Full	Yes	1	28	0
c3560	10.44.1.39	c3560.entuity.com	Full	Yes	1	28	0
lonsw01	10.44.1.5	lonsw01.entuity.local	Full	Yes	3	61	40
lonsw02	10.44.1.6	gale	Full	Yes	2	25	28
lonsw03	10.44.1.7	lonsw03.entuity.local	Full	Yes	4	62	38
s1912	10.44.1.43	s1912	Full	Yes	0	28	0
top2960	10.44.1.40	top2960.entuity.com	Full	Yes	1	34	2

#### Load Balancer

Device Name	IPAddress	System Name	Mgmt Level	Certified	Module	Ports	Hosts
10.66.13.22	10.66.13.22	bigip01.pct.entuity.com	Full	Yes	0	16	0

#### Managed Host

Device Name	IPAddress	System Name	Mgmt Level	Certified	Module	Ports	Hosts
10.44.1.55	10.44.1.55	IP129	Full (Mgmt	Yes			
bvt	10.44.1.139	bvt.entuity.local	Full	Yes	0	3	0
fs03	10.44.1.38	fs03	Full	Yes	0	2	0
lonsolfs02	10.44.1.37	lonsolfs02	Full	Yes	0	3	0
lonsoltest07	10.44.1.13	lonsoltest07	Full	Yes	0	2	0
lonsoltest08	10.44.1.17	lonsoltest08	Full	Yes	0	2	0
sky	10.44.1.23	sky	Full	Yes	0	3	0
storm	10.44.1.67	STORM	Full	Yes	0	4	0
subzero	10.44.1.10	subzero.entuity.local	Full	Yes	0	6	0
sunshower	10.44.1.71	sunshower	Full	Yes	0	8	0

#### Router

Device Name	IPAddress	System Name	Mgmt Level	Certified	Module	Ports	Hosts
c2503		c2503	Full	Yes	0	11	0
c2821	10.44.1.58	c2821.entuity.com	Full	Yes	4	218	0
e2821	10.44.1.59	e2821.entuity.com	Full	Yes	3	22	0
ioalana	10.44.1.146	COL_GDC_7513_2	Full	Yes	16	119	0
new2610	10.44.1.36	new2610	Full	Yes	3	7	0
r2610	10.44.1.35	r2610.entuity.local	Full	Yes	3	7	0
r801	192.168.244.1	r801	Full	No	1	5	0
sunrise	10.44.1.2	sunrise	Full	Yes	1	5	0

Figure 125 Inventory Overview Report

#### **Inventory Overview Report Overview**

Entuity provides device inventory reports predicated around their Entuity management status. For each device type the report includes a separate table that identifies:

#### **Inventory Overview Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.

Table 336 Inventory Overview Report Options

#### **Inventory Overview Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Inventory Overview.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 337 Inventory Overview Report Header

### **Inventory Overview Report Details**

Name	Description
Server	Name of the Entuity server. When reporting on multiple servers, this report groups inventory by the managing Entuity server.
Device Type	Name of the device type, VPN, Load Balancer, Managed Host. When reporting on multiple device types, this report groups devices by type alphabetically ordering these device type groups.
Device Name	Resolved device name or the IP address.
IP Address	The device's management IP address.
System Name	Device description.
Mgmt Level	Indicates the level of Entuity management that the device is under, e.g. Full, Basic, Ping Only.

Table 338 Inventory Overview Summary

Name	Description
Certified	When set to <b>Yes</b> , indicates the device is fully certified by Entuity, <b>Unknown</b> the device dataset is derived by Entuity (from proliferate -g).
Modules.	Number of modules associated with the device.
Ports	Number of ports associated with the device.
Host	Number of hosts associated with the device.

Table 338 Inventory Overview Summary

## **Manufacturers Report**

Entuity Report

#### Manufacturers

Printed on: 25 Nov 2009 17:07:52 GMT

Description: All current manufacturers. Graph shows top 10 number of device types across all views

View: Regional



Manufacturer	Count
Aruba Networks Inc	2
cisco	35
Codex	1
Crossbeam Systems Inc.	1
Dell Computer Corporation	1
Enterasys Networks	2
Extreme Networks	1
F5 Labs Inc.	2
Foundry Networks Inc.	1
Hewlett Packard	5
Microsoft	7
net-snmp	10
New Oak Communications Inc.	2
Nokia	2
Oki Data Corporation	1
RICOH Co. Ltd.	2
Riverstone Networks	1
Sun Microsystems	3
Trapeze Networks Inc	2
Xylan Corp.	1

Figure 126 Manufacturers Report



#### Manufacturers Report Overview

The manufacturers types inventory report provides a breakdown by manufacturer of the managed devices on the selected Entuity server(s) within the set view.

### **Manufacturers Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.

Table 339 Manufacturers Report Options

#### **Manufacturers Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Manufacturers.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 340 Manufacturers Report Header

#### **Manufacturers Report Details**

The manufacturers types inventory report provides a breakdown by manufacturer of the managed devices on the selected Entuity server(s), specifically the

- pie chart graphs the top ten manufacturers of managed devices
- each row in the table lists a manufacturer and the number of its devices managed by Entuity.

## **Models Report**

Entuity Report

#### Models

6 entuity

Printed on:	25 Nov 2009 17:08:34 GMT
Description:	All current device models. Graph shows top 10 number of device types across all views
View:	Regional



Models	Count
15101	1
1900i	1
2503	1
2610	4
2651XM	1
2821	4
3524 XL	1
6450	1
65	2
6G302-06	1
7513	1
801	1
A.03.15	1
B61e	1
Big IP Optimus	1
Big IP VIPRION	1
C.25.80	2
C1500/615C	2
C25	1
C2950XL	1
HPJ2355A	1
Hardware:7835H2	1
Hardware:7845H	1

Figure 127 Models Report

#### Models Report Overview

The models report provides a breakdown by model of the managed devices on the selected Entuity server(s) within the set view.

#### **Models Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.

Table 341 Models Report Options

#### **Models Report Header**

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Models.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 342 Manufacturers Report Header

#### **Models Report Details**

The models inventory report provides a breakdown by model of the managed devices on the selected Entuity server(s), specifically the

- pie chart graphs the top ten models of managed devices
- each row in the table lists a model and the number of its devices managed by Entuity.

## Spanning Tree Device Changes Report

#### E ntuity Report

#### **Spanning Tree Device Changes**



Printed on:	28 Nov 2009 20:45:25 GMT
Description:	Additions, Deletions and changes to the spanning tree devices
Start Date:	Sunday 22 November 2009
End Date:	Saturday 28 November 2009
View:	Regional

#### **STP Vlan Setting Changes**

VLAN	Change Count	Max Age	Hello Time	Forward Delay	Hold Time	Root Switch -> Port	Cost
Old Value :							
1	539	20	2	15	1	lonsw03 -> [ 2/2 ] TRUNK to lonsw03	19
New Value :							
1	561	20	2	15	1	lonsw03 -> [ 2/2 ] TRUNK to lonsw03	19
Deleted :							
101	2	20	2	15	1	lonsw03 -> [2/2] TRUNK to lonsw03	19

#### Vlan Connectivity Changes

Cost	Port	State	Connected to	State
Deleted :				
19	[ 2/1 ] TRUNK to lonsw02	blocking	lonsw02 -> [2/1] TRUNK to lonsw01	forwarding
Deleted :				
19	[ 2/2 ] TRUNK to lonsw03	forwarding	lonsw03 -> [2/2] TRUNK to lonsw01	forwarding

Figure 128 Spanning Tree Device Changes Report

#### Spanning Tree Device Changes Report Overview

This report allows you to identify changes in the selected device's VTP and STP settings between the two sample periods. Data for each sample was collected by **Stpman** and **Vtpman**. The comparison is between the entered start and end dates. You can select any sample from the last seven days.

#### **Spanning Tree Device Changes Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server to run the report against.

Table 343 Spanning Tree Device Changes Report Options

Name	Description
Please select a view	From the drop down list select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.
Please select a start date	Enter the start date of the reporting period.
Please select an end date	Enter the end date of the reporting period.

Table 343 Spanning Tree Device Changes Report Options

## Spanning Tree Device Changes Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Spanning Tree Device Changes.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Start Date	The date the first set of sample data was polled.
End date	The date the second set of sample data was polled.

Table 344 Spanning Tree Device Changes Header

## Spanning Tree Device Changes Report Details

This table lists STP VLAN changes, clearly identifying old, new and deleted settings,

Name	Description
VLAN	The VLAN name
Change Count	The number of Root Switch changes. This is a running total.
Max Age	The length of time, in seconds, that the switch stores a BPDU before discarding it.
Hello Time	The time interval, in seconds, between the sending of Configuration BPDUs.
Forward Delay	The time, in seconds, the switch spends in the Listening and Learning states.
Hold Time	The time interval, in seconds, between the sending of Configuration BPDUs.

Table 345 STP VLAN Settings
Name	Description
Root Switch > Port	The switch acting as the centre of the VLAN. Other switches use this as the centre of the network when calculating a set of root and designated ports during the initial convergence to create a loop free network. is the device's designated root port. For the root switch this is set to NULL as the root switch does not have a designated root port.
Cost	The cumulative root path cost, the lower the value the closer the devices are.

Table 345 STP VLAN Settings

Name	Description
Cost	The cumulative root path cost, the lower the value the closer the devices are.
Port	The port address connected to another device
State	The local device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.
Connected to	The address of the host and port
State	The target device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.

Table 346 STP Connectivity Settings

# **Spanning Tree Device Configuration Report**

#### Entuity Report

#### **Spanning Tree Device Config**

Centuity

Printed on: Sat Nov 28 21:04:30 GMT 2009 Description: Spanning Tree configuration information for selected device and date View: Regional

#### COMPRESSOR

#### lonsw03

Sample Date:	Wednesday 25 November 2009	VTP Mode:	Server
VTP Domain Name:	wipeout	VTP Pruning:	Disabled

STP Anomalies	VTP Anomalies
SNMP Poll Failure	No VTP anomalies
SNMP Poll Failure	
Connection to: 10.44.1.8	

#### **VLAN Settings**

VLAN	Change Count	Max Age	Hello Time	Forward Delay	Hold Time	Root Switch -> Port	Cost
1	1164	20	2	15	1	lonsw03 -> None	0
4	13	20	2	15	1	lonsw03 -> None	0
55	13	20	2	15	1	lonsw03 -> None	0
57	13	20	2	15	1	lonsw03 -> None	0
99	13	20	2	15	1	lonsw03 -> None	0
101	13	20	2	15	1	lonsw03 -> None	0
145	13	20	2	15	1	lonsw03 -> None	0
1003	0	0	0	0	0		0
1005	0	0	0	0	0		0

#### **Connectivity Information**

#### VLAN 1

Cost	Port	State	Connected to	State
19	[ 2/1 ] TRUNK to lonsw02	forwarding	lonsw02 -> [2/2] TRUNK to lonsw03	forwarding
19	[ 2/2 ] TRUNK to lonsw01	forwarding	lonsw01 -> [2/2] TRUNK to lonsw03	forwarding
19	[ 2/8 ] DEVMAN [LW]	forwarding	bottom2960 -> [Fa0/1]FastEthernet0/1	forwarding
		5		

#### VLAN 4

Cost	Port	State	Connected to	State
19	[ 2/1 ] TRUNK to lonsw02	forwarding	lonsw02 -> [2/2] TRUNK to lonsw03	forwarding
19	[ 2/2 ] TRUNK to lonsw01	forwarding	lonsw01 -> [2/2] TRUNK to lonsw03	forwarding

#### VLAN 55

Cost	Port	State	Connected to	State
19	[ 2/1 ] TRUNK to lonsw02	forwarding	lonsw02 -> [2/2] TRUNK to lonsw03	forwarding
19	[ 2/2 ] TRUNK to lonsw01	forwarding	lonsw01 -> [2/2] TRUNK to lonsw03	forwarding

Figure 129 Spanning Tree Device Configuration Report

### Spanning Tree Device Configuration Report Overview

This report details STP configuration for the selected device. It shows VTP settings where appropriate, SNMP errors. Configuration for the device is given and then configuration details on the ports used to connect to each VLAN.

The report is divided into three sections, header, VLAN and then repeating tables detailing any VLAN connections.

### **Spanning Tree Device Configuration Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server to run the report against.
Please select a view	From the drop down list select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.
Please select a start date	Enter the start date of the reporting period.
Show Anomalies	Select Show Anomalies to include VLAN and STP anomalies to the report.

Table 347 Spanning Tree Device Configuration Report Options

### Spanning Tree Device Configuration Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Spanning Tree Device Configuration.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Server	Entuity server managing the device.

Table 348 Spanning Tree Device Configuration Header

### Spanning Tree Device Configuration Report Details

Name	Description
Device	Name of the device reported on.

Table 349 STP VLAN Settings

Name	Description
Sample Date	is the date the device configuration data refers to. Device STP data is collected daily by stpman.
VTP Domain Name	It is the domain name. When it is blank then the domain is NULL.
VTP Mode	It can be Server, Client or Transparent. The mode the switch is configured to determines how it sources and handles VTP messages.
VTP Pruning	<ul> <li>VTP pruning status can be:</li> <li>enabled so the device only receives broadcast frames for VLANs to which it has ports assigned.</li> <li>disabled so the device receives all broadcast frames and forwards them through all of its trunk ports.</li> </ul>
STP Anomalies	Lists the STP anomalies recorded for this date.
VTP Anomalies	Lists the VRP anomalies recorded for this date.
VLAN	The VLAN name
Change Count	The number of Root Switch changes. This is a running total.
Max Age	The length of time, in seconds, that the switch stores a BPDU before discarding it.
Hello Time	The time interval, in seconds, between the sending of Configuration BPDUs.
Forward Delay	The time, in seconds, the switch spends in the Listening and Learning states.
Hold Time	The time interval, in seconds, between the sending of Configuration BPDUs.
Root Switch > Port	The switch acting as the centre of the VLAN. Other switches use this as the centre of the network when calculating a set of root and designated ports during the initial convergence to create a loop free network. is the device's designated root port. For the root switch this is set to NULL as the root switch does not have a designated root port.
Cost	The cumulative root path cost, the lower the value the closer the devices are.

Table 349 STP VLAN Settings

Name	Description
Cost	The cumulative root path cost, the lower the value the closer the devices are.
Port	The port address connected to another device
State	The local device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.
Connected to	The address of the host and port

Table 350 STP VLAN Settings

Name	Description
State	The target device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.

Table 350 STP VLAN Settings

# Spanning Tree VLAN Changes Report

# Entuity Report Spanning Tree VLAN Changes

Centuity

Printed on:	28 Nov 2009 21:47:11 GMT
Description:	Additions, Deletions and changes to the spanning
Start Date:	Sunday 22 November 2009
End Date:	Saturday 28 November 2009
View:	Regional

#### **STP Connectivity Changes**

From	State	Connected to	State	Cost
Deleted :				
lonsw01: [ 2/1 ] TRUNK to lonsw02	blocking	lonsw02: [ 2/1 ] TRUNK to lonsw01	forwarding	19
Deleted :				
lonsw01: [ 2/2 ] TRUNK to lonsw03	forwarding	lonsw03: [ 2/2 ] TRUNK to lonsw01	forwarding	19
Deleted :				
lonsw02: [ 2/1 ] TRUNK to lonsw01	forwarding	lonsw01: [ 2/1 ] TRUNK to lonsw02	blocking	19
Deleted :				
lonsw03: [ 2/2 ] TRUNK to lonsw01	forwarding	lonsw01: [ 2/2 ] TRUNK to lonsw03	forwarding	19

tree

#### **STP Setting Changes**

Switch	Root Switch -> Port	Root Cost	Change Count	Max Age	Hello Time	Hold Time	Forward Delay
Deleted :							
lonsw01	lonsw03 -> [2/2] TRUNK to lonsw01	19	2	20.0	2.0	1.0	15.0

Figure 130 Spanning Tree VLAN Changes Report

### Spanning Tree VLAN Changes Report Overview

This report allows you to identify changes in the selected VLAN's VTP and STP settings between the two sample periods. Data for each sample was collected by Stpman and Vtpman. The comparison is between the entered start and end dates. You can select any sample from the last seven days.

### Spanning Tree VLAN Changes Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.

Table 351 Spanning Tree VLAN Changes Report Options

Name	Description
Please select a view	From the drop down list select one view to run the report against.
Please select a VLAN	From the drop down list you can select one VLAN to run the report against.
Please select a start date	Enter the start date of the reporting period.
Please select an end date	Enter the end date of the reporting period.

Table 351 Spanning Tree VLAN Changes Report Options

### Spanning Tree VLAN Changes Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Routing Summary.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
VLAN	VLANs are selected through Report Options.
Start date	Start date of the reporting period.
End date	End date of the reporting period.

Table 352 Spanning Tree VLAN Changes Header

### Spanning Tree VLAN Changes Report Details

This report includes two tables; the first lists STP connectivity changes, the second VLAN changes, both clearly identify old, new and deleted settings.

Name	Description
From	The device and port address connected to another device
State	The local device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.
Connected to	The address of the host and port
State	The target device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.
Cost	The cumulative root path cost, the lower the value the closer the devices are.

Table 353 Spanning Tree VLAN Settings

This table lists STP VLAN changes, clearly identifying old, new and deleted settings.

Name	Description
Switch	Switch resolved name or IP address.
Root Switch > Port	The switch acting as the center of the VLAN. Other switches use this as the center of the network when calculating a set of root and designated ports during the initial convergence to create a loop free network. is the device's designated root port. For the root switch this is set to NULL as the root switch does not have a designated root port.
Root Cost	The cumulative root path cost, the lower the value the closer the devices are.
Change Count	The number of Root Switch changes. This is a running total.
Max Age	The length of time, in seconds, that the switch stores a BPDU before discarding it.
Forward Delay	The time, in seconds, the switch spends in the Listening and Learning states.
Hello Time	The time interval, in seconds, between the sending of Configuration BPDUs.
Hold Time	The time interval, in seconds, between the sending of Configuration BPDUs.

Table 354 Spanning Tree VLAN Settings

### Spanning Tree VLAN Changes for all VLANs Report

Entuity Report

#### Spanning Tree VLAN Changes for all VLANs

Centuity

Printed on: 28 Jan 2013 15:59:35 GMT

Description: Additions, Deletions and changes to the spanning tree for all VLANs Start Date: Tuesday 22 January 2013

End Date: Monday 28 January 2013

View: My Network

#### VLAN : 1000

#### **STP Connectivity Changes**

No Changes

#### **STP Setting Changes**

No Changes

#### VLAN wipeout: 145

#### **STP Connectivity Changes**

From	State	Connected to	State	Cost
Deleted :				
lonsw01: [ 2/1 ] TRUNK to lonsw02	blocking	lonsw02: [ 2/1 ] TRUNK to lonsw01	forwarding	19
Deleted :				
lonsw01: [ 2/2 ] TRUNK to lonsw03	forwarding	lonsw03: [ 2/2 ] TRUNK to lonsw01	forwarding	19
Deleted :				
lonsw02: [ 2/1 ] TRUNK to lonsw01	forwarding	lonsw01: [ 2/1 ] TRUNK to lonsw02	blocking	19
Deleted :				
lonsw02: [ 2/2 ] TRUNK to lonsw03	forwarding	lonsw03: [ 2/1 ] TRUNK to lonsw02	forwarding	19
Deleted :				
lonsw03: [ 2/1 ] TRUNK to lonsw02	forwarding	lonsw02: [ 2/2 ] TRUNK to lonsw03	forwarding	19
Deleted :				
lonsw03: [ 2/2 ] TRUNK to lonsw01	forwarding	lonsw01: [ 2/2 ] TRUNK to lonsw03	forwarding	19

#### **STP Setting Changes**

Switch	Root Switch -> Port	Root Cost	Change Count	Max Age	Hello Time	Hold Time	Forward Delay
Deleted :							
lonsw01	lonsw03 -> [2/2] TRUNK to lonsw01	19	0	20.0	2.0	1.0	15.0
Deleted :							
lonsw02	lonsw03 -> [2/3] TRUNK to lonsw04	19	2	20.0	2.0	1.0	15.0

#### VLAN wipeout: 1002

#### **STP Connectivity Changes**

No Changes

#### **STP Setting Changes**

No Changes

Figure 131 Spanning Tree VLAN Changes for all VLANs Report

### Spanning Tree VLAN Changes for all VLANs Report Overview

This report allows you to identify changes in VTP and STP settings between two sample periods, for all VLANs in the selected view. Data for each sample was collected by Stpman and Vtpman. The comparison is between the entered start and end dates. You can select any sample from the last seven days.

### Spanning Tree VLAN Changes for all VLANs Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a view	From the drop down list select one view to run the report against.
Please select a start date	Enter the start date of the reporting period.
Please select an end date	Enter the end date of the reporting period.

Table 355 Spanning Tree VLAN Changes for all VLANs Report Options

### Spanning Tree VLAN Changes for all VLANs Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Spanning Tree VLAN Changes for all VLANs.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Start date	Start date of the reporting period.
End date	End date of the reporting period.

Table 356 Spanning Tree VLAN Changes for all VLANs Header

### Spanning Tree VLAN Changes for all VLANs Report Details

For each VLAN within the selected view the report includes two tables; the first lists STP connectivity changes, the second VLAN changes, both clearly identify old, new and deleted settings.

Name	Description
From	The device and port address connected to another device
State	The local device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.
Connected to	The address of the host and port
State	The target device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.
Cost	The cumulative root path cost, the lower the value the closer the devices are.

Table 357 Spanning Tree VLAN Changes for all VLANs Settings

This table lists STP VLAN changes, clearly identifying old, new and deleted settings.

Name	Description
Switch	Switch resolved name or IP address.
Root Switch > Port	The switch acting as the center of the VLAN. Other switches use this as the center of the network when calculating a set of root and designated ports during the initial convergence to create a loop free network. is the device's designated root port. For the root switch this is set to NULL as the root switch does not have a designated root port.
Root Cost	The cumulative root path cost, the lower the value the closer the devices are.
Change Count	The number of Root Switch changes. This is a running total.
Max Age	The length of time, in seconds, that the switch stores a BPDU before discarding it.
Forward Delay	The time, in seconds, the switch spends in the Listening and Learning states.
Hello Time	The time interval, in seconds, between the sending of Configuration BPDUs.
Hold Time	The time interval, in seconds, between the sending of Configuration BPDUs.

Table 358 Spanning Tree VLAN Changes for all VLANs Settings

# Spanning Tree VLAN Configuration Report

E ntuity Re	eport	
Spann	ing Tree VLAN Config	entuity
Printed on:	Thu Nov 26 16:39:38 GMT 2009	
Description:	Spanning Tree VLAN configuration for selected vlan and date	
Vlan:	wipeout: 1	
View:	Regional	
~ ~ · ·		

#### COMPRESSOR

Sample Date: Friday 20 November 2009

VTP Pruning: Disabled

**VTP Switches** 

#### STP Summary for VLAN

Root Switch	lonsw03
Blocking	1
Forwarding	6
Trunk Port Count	7

#### VTP Servers

lonsw01	lonsw01
lonsw03	lonsw02
	lonsw03

#### **STP Connectivity**

From	State	Connected to	State	Cost
lonsw01: [ 2/1 ] TRUNK to lonsw02	blocking	lonsw02: [ 2/1 ] TRUNK to lonsw01	forwarding	19
lonsw01: [ 2/2 ] TRUNK to lonsw03	forwarding	lonsw03: [ 2/2 ] TRUNK to lonsw01	forwarding	19
lonsw02: [ 2/1 ] TRUNK to lonsw01	forwarding	lonsw01: [ 2/1 ] TRUNK to lonsw02	blocking	19
lonsw02: [ 2/2 ] TRUNK to lonsw03	forwarding	lonsw03: [ 2/1 ] TRUNK to lonsw02	forwarding	19
lonsw03: [ 2/1 ] TRUNK to lonsw02	forwarding	lonsw02: [ 2/2 ] TRUNK to lonsw03	forwarding	19
lonsw03: [ 2/2 ] TRUNK to lonsw01	forwarding	lonsw01: [ 2/2 ] TRUNK to lonsw03	forwarding	19
lonsw03: [ 2/8 ] DEVMAN [LW]	forwarding	bottom2960: [Fa0/1] FastEthernet0/1	forwarding	19

#### STP Settings

Switch	Root Switch -> Port	Root Cost	Change Count	Max Age	Hello Time	Hold Time	Forward Delay
lonsw01	lonsw03 -> [2/2] TRUNK to lonsw01	19	539	20.0	2.0	1.0	15.0
lonsw02	lonsw03 -> [2/3] TRUNK to lonsw04	19	14	20.0	2.0	1.0	15.0
lonsw03	lonsw03 -> none	0	1132	20.0	2.0	1.0	15.0

Figure 132 Spanning Tree VLAN Configuration Report

#### Spanning Tree VLAN Configuration Report Overview

This report details the STP settings and connectivities for the selected VLAN. Device News provides consolidated reporting for a whole collection of switches comprising a Spanning Tree, specifically the:

- VTP Server.
- Spanning Tree diameter (maximum number of hops).
- Root switch.
- Number of topology changes.
- Topology information, including port connectivity, blocking/forwarding status, and path cost.

#### Spanning Tree VLAN Configuration Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server to run the report against.
Please select a view	From the drop down list select one view to run the report against.
Please select a VLAN	From the drop down list you can select one device to run the report against.
Please select a start date	Enter the start date of the reporting period.

Table 359 Spanning Tree VLAN Configuration Report Options

### Spanning Tree VLAN Configuration Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Spanning Tree VLAN Configuration.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Server	Entuity server managing the device.

Table 360 Spanning Tree VLAN Configuration Header

### Spanning Tree VLAN Configuration Report Details

Name	Description
Sample Date	is the date the device configuration data refers to. Device STP data is collected daily by stpman.

Table 361 STP VLAN Settings

Name	Description	
VTP Pruning	<ul> <li>VTP pruning status can be:</li> <li>enabled so the device only receives broadcast frames for VLANs to which it has ports assigned.</li> <li>disabled so the device receives all broadcast frames and forwards them through all of its trunk ports.</li> </ul>	
STP Summary	<ul> <li>Root switch is the switch acting as the centre of the VLAN. Other switches use this as the centre of the network when calculating a set of root and designated ports during the initial convergence to create a loop free network.</li> <li>Trunk port count uses three measures:</li> <li>Forwarding is the number of trunk ports in the STP state Forward, capable of sending and receiving user data.</li> <li>Blocking is the number of trunk ports in the STP state Backward, receiving only BPDUs.</li> <li>Diameter is the Layer 2 network diameter, i.e. the maximum number of switch hops between any two hosts in the Layer 2 network.</li> </ul>	
VTP Servers	List of VTP servers.	
VTP Switches	Lists the STP switches.	
VTP Anomalies	Lists the VRP anomalies recorded for this date.	
VLAN	The VLAN name	
Change Count	The number of Root Switch changes. This is a running total.	
Max Age	The length of time, in seconds, that the switch stores a BPDU before discarding it.	
Hello Time	The time interval, in seconds, between the sending of Configuration BPDUs.	
Forward Delay	The time, in seconds, the switch spends in the Listening and Learning states.	
Hold Time	The time interval, in seconds, between the sending of Configuration BPDUs.	
Root Switch > Port	The switch acting as the centre of the VLAN. Other switches use this as the centre of the network when calculating a set of root and designated ports during the initial convergence to create a loop free network. is the device's designated root port. For the root switch this is set to NULL as the root switch does not have a designated root port.	
Cost	The cumulative root path cost, the lower the value the closer the devices are.	

Table 361 STP VLAN Settings

This table details STP connectivity configuration.,

Name	Description
From	The device and port address connected to another device
State	The local device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.
Connected to	The address of the host and port
State	The target device's port's STP state, i.e. Blocking, Forwarding, Designated Port, Root Port and Non-Designated Port.
Cost	The cumulative root path cost, the lower the value the closer the devices are.

Table 362 Spanning Tree VLAN Settings

#### This table lists STP VLAN configuration

Name	Description
Switch	Switch resolved name or IP address.
Root Switch > Port	The switch acting as the center of the VLAN. Other switches use this as the center of the network when calculating a set of root and designated ports during the initial convergence to create a loop free network. is the device's designated root port. For the root switch this is set to NULL as the root switch does not have a designated root port.
Root Cost	The cumulative root path cost, the lower the value the closer the devices are.
Change Count	The number of Root Switch changes. This is a running total.
Max Age	The length of time, in seconds, that the switch stores a BPDU before discarding it.
Forward Delay	The time, in seconds, the switch spends in the Listening and Learning states.
Hello Time	The time interval, in seconds, between the sending of Configuration BPDUs.
Hold Time	The time interval, in seconds, between the sending of Configuration BPDUs.

Table 363 Spanning Tree VLAN Settings

## Spare Ports by Device Report

#### Entuity Report

Spare Ports by Device

Centuity

Printed on:	26 Nov 2009 16:23:13 GMT
Description:	Spare port statistics for a selected device sorted by the time that each port has been spare
View:	Regional
Device:	c3560

Device:

Port description	Days since last activity	Date of last activity	VLAN
[Fa0/2]FastEthernet0/2	125	23-Jul-2009	1
[Fa0/3]FastEthernet0/3	125	23-Jul-2009	1
[Fa0/4]FastEthernet0/4	125	23-Jul-2009	1
[ Fa0/5 ] FastEthernet0/5	125	23-Jul-2009	1
[Fa0/6] FastEthernet0/6	125	23-Jul-2009	1
[ Fa0/7 ] FastEthernet0/7	125	23-Jul-2009	1
[ Fa0/8 ] FastEthernet0/8	125	23-Jul-2009	1
[ Fa0/9 ] FastEthernet0/9	125	23-Jul-2009	1
[Fa0/10]FastEthernet0/10	125	23-Jul-2009	1
[Fa0/11]FastEthernet0/11	125	23-Jul-2009	1
[Fa0/12]FastEthernet0/12	125	23-Jul-2009	1
[Fa0/13]FastEthernet0/13	125	23-Jul-2009	1
[Fa0/14] FastEthernet0/14	125	23-Jul-2009	1
[ Fa0/15 ] FastEthernet0/15	125	23-Jul-2009	1
[Fa0/16]FastEthernet0/16	125	23-Jul-2009	1
[Fa0/17]FastEthernet0/17	125	23-Jul-2009	1
[Fa0/18]FastEthernet0/18	125	23-Jul-2009	1
[Fa0/19]FastEthernet0/19	125	23-Jul-2009	1
[ Fa0/20 ] FastEthernet0/20	125	23-Jul-2009	1
[Fa0/21]FastEthernet0/21	125	23-Jul-2009	
[ Fa0/22 ] FastEthernet0/22	125	23-Jul-2009	1
[Fa0/23]FastEthernet0/23	125	23-Jul-2009	1
[Fa0/24]FastEthernet0/24	125	23-Jul-2009	1
[Fa0/1] FastEthernet0/1	62	25-Sep-2009	1

Figure 133 Spare Ports by Device Report

#### Spare Ports by Device Report Overview

This report identifies ports for the selected device that are currently unused and the length of time they have been in that state. From it you can determine whether a port truly is spare and available for reassignment.

The Spare Port Report:

- Includes ports that have been unused for forty days or more.
- Includes ports that have system uptime of less than forty days and are currently unused.
- Excludes ports that have been unused for less than forty days but have a system uptime of forty days or more.
- Is generated from data collected in real-time enabled through the StormWorks configuration.

### Spare Ports by Device Report Options

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.
Please select a device	From the drop down list you can select one device to run the report against.

Table 364 Spare Ports by Device Report Options

### Spare Ports by Device Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Spare Ports by Device.
Printed on	Date and time the report was generated.
Description	Description of the report.
Server	Entuity server against which the report was run.
View	View the report is run against.
Devices	Device the report is run against.

Table 365 Spare Ports by Device Report Header

### Spare Ports by Device Report Details

Name	Description
Port description	Description of the port.
Days since last activity	Number of days since the port was last active.
Date of last activity	Date the port was last active.
VLAN	Number of VLANs associated with the port.

Table 366 Spare Ports by Device Report Header

# Spare Ports by View Report

#### Entuity Report

### Spare Ports by View

Centuity

Printed on: 25 Nov 2009 17:21:42 GMT

Description: Spare port statistics per device sorted by the number of spare ports

View: Regional

Note: Only switching devices are included in this report

Device name	Location	Manufacturer / model	Physical ports	Spare ports	Spare port %
hp-4202vl72.vendor.entuity.lab	"Simulator"	Hewlett Packard / J8772A	100	80	80.0
c3560.entuity.local	Entuity Test Room	cisco / WS-C3560-24TS -E	26	24	92.3
c3560	Entuity Test Room	cisco / WS-C3560-24TS -E	26	24	92.3
top2960.entuity.local	The real top of the pile	cisco / WS-C2960-24TT -L	26	21	80.8
top2960	The real top of the pile	cisco / WS-C2960-24TT -L	26	21	80.8
bottom2960.entuity.local	Entuity Test Room	cisco / WS-C2960-24TT -L	26	20	76.9
bottom2960	Entuity Test Room	cisco / WS-C2960-24TT -L	26	20	76.9
top3550	top-of-pile in test area	cisco / WS-C3550-24- EMI	26	19	73.1
10.44.1.9		cisco / C2950XL	26	17	65.4
lonsw01.entuity.local		cisco / WS-C5505	48	13	27.1
lonsw01		cisco / WS-C5505	48	13	27.1
lonsw03.entuity.local		cisco / WS-C5505	48	11	22.9
lonsw03		cisco / WS-C5505	48	11	22.9
s1912	The fridge (brrrr)	cisco / 1900i	17	5	29.4
eyepoller.bvt.entuity.lab	"Simulator"	cisco / WS-C2950G-24- El	26	4	15.4
lonsw02.entuity.local	Development cabinet	cisco / WS-C5505	12	3	25.0
lonsw02	Development cabinet	cisco / WS-C5505	12	3	25.0
cisco-catalyst3524xl.vendor.entuity.lab	"Simulator"	cisco / 3524 XL	26	2	7.7
10.44.1.62		Hewlett Packard / C.25.80	1	0	0.0
bottom3550	Entuity Test Room	cisco / WS-C3550-24- EMI	26	0	0.0
sam2150.entuity.local		Hewlett Packard / A.03.15	1	0	0.0
foundrynetiron4000.vendor.entuity.lab		Foundry Networks Inc. / NI-XMR-1Gx20-SFP 20- port 1GbE/100FX Module	41	0	0.0
hpj2355a.vendor.entuity.lab	"Simulator"	Hewlett Packard / HPJ2355A	1	0	0.0
alcatel-6024.vendor.entuity.lab	"Simulator"	Xylan Corp. / OmniStack 6024	26	0	0.0
motorolavanguard6450.vendor.entuity.la b	"Simulator"	Codex / 6450	15	0	0.0
lucent-15101.vendor.entuity.lab	"Simulator"	Riverstone Networks / 15101	31	0	0.0
verthor-2402s.vendor.entuity.lab	"Simulator"	Enterasys Networks / VH-2402S	52	0	0.0
summit24e3.vendor.entuity.lab	"Simulator"	Extreme Networks / Summit24e3	26	0	0.0
matrix-e7-6g302-06.vendor.entuity.lab	Chancery Lane Computer Room	Enterasys Networks / 6G302-06	13	0	0.0
10 44 1 63		1 I I D I /	-	-	

Figure 134 Spare Ports by View Report

### Spare Ports by View Report Overview

This report identifies devices with switching capabilities within the selected view that have currently unused ports. The summary statistics on the device ports allow you to identify devices for further investigation, where you can determine whether a port truly is spare and available for reassignment.

This report:

- Includes ports that have been unused for forty days or more.
- Includes ports that have system uptime of less than forty days and are currently unused.
- Excludes ports that have been unused for less than forty days but have a system uptime of forty days or more.
- Is generated from data collected in real-time enabled through the StormWorks configuration.

#### **Spare Ports by View Report Options**

Report Options allow you to configure the parameters of the report, focusing it on the components in which you are most interested.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	From the drop down list select one view to run the report against.

Table 367 Spare Ports by View Report Options

### Spare Ports by View Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Spare Ports by View.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 368 Spare Ports by View Header

### Spare Ports by View Report Details

Name	Description
Name	System name or where not available the IP address.

Table 369 Spare Ports by View

Name	Description
Model	The device model.
Location	Device SysLocation, or where not available it is left blank.
Manufacturer / Model	Manufacturer name is derived by matching the manufacturer number against the first 2500 Private Enterprise Codes compiled by the Internet Assigned Numbers Authority (http://www.iana.org/assignments/ enterprise-numbers). Where the manufacturer code is not matched then the first part of the device name is taken, usually this is the manufacturer's name. Model of the device.
Physical Ports	Number of physical ports on the device.
Spare Ports	Number of spare ports on the device.
Spare Ports %	Number of spare ports on the device as a percentage of the total number of physical ports on the device.

Table 369 Spare Ports by View

# **12 Planning Reports**

Entuity provides four planning reports which network managers can use to identify areas of the network where an increasing load may impact service delivery. These reports are highly configurable, potentially different reports can have different definitions of critical states reflecting the importance of managed objects under that view.

## **Running Planning Reports**

You can run the planning report from the web interface:

- 1) Click Reports. Entuity displays the Reports Home page.
- 2) Click Planning Reports. Entuity displays the list of available reports.

R	) er	ntuity									User: admin@entlonp Page Updated: 09:58:	pvm01 [Loqout] 45, GMT
Dash	ooards	InSight Center	Explorer	Events	Maps Ch	arts Flows	Reports	Tools	Administration	Help		P
R	epor orts > P	ts Ianning										
R	port			Schedu	ule Histor	Description	ı					
De	vice CPL	I Capacity Plannin	<u>q - Heat Map</u>	11	<u></u>	Device CPU	Capacity Plan	ning repor	t with output disp	layed in h	ieat map format	
De	vice CPL	I Capacity Plannin	<u>q - Trend</u>	11	2	Device CPU trend	Capacity Plan	ning repor	t displaying CPU u	til% mea	n, 95th percentile and	
De	vice Mer	nory Capacity Pla	nning - Heat M	ap 👖	<u></u>	Device Mem	ory Capacity	Planning r	eport with output	displayed	l in heat map format	
De	vice Mer	nory Capacity Pla	nning - Trend	11	<u></u>	Device Mem and trend	ory Capacity	Planning r	eport displaying m	emory ut	il% mean, percentile	
Po	rt Bandy	vidth Capacity Pla	nning - Heat M	lap 👖	<u> </u>	Port Bandwi	dth Capacity	Planning r	eport with output	displayed	l in heat map format	
Po	rt Bandy	vidth Capacity Pla	nning - Trend	11	<u></u>	Port Bandwi trend and m	dth Capacity Iean traffic ra	Planning r te	eport displaying po	ort util%	mean, percentile,	
Po	rt Discar	ds Capacity Plann	ing - Heat Maj	2 11	<u></u>	Port Discard	s Capacity Pl	anning rep	ort with output di	splayed in	n heat map format	
Po	rt Discar	ds Capacity Plann	ing - Trend	11	<u></u>	Port Discard and trend	s Capacity Pl	anning rep	ort displaying port	discards	% mean, percentile	
	Scheduk	ed Reports										

Figure 135 Planning Reports

# Device CPU Capacity Planning Heat Map Report

Entuity Report

#### **CPU** Capacity Planning

Over the period 00:00 on Thu Oct 11 2012 - 00:00 on Thu Oct 18 2012 No prime time is set for this report Generated at 18 Oct 2012 10:25:31 BST for the My Network view

#### Capacity Planning Summary

#### Range Thresholds

100% >= x > 70% 70% >= x > 50% 50% >= x > 20% 20% >= x >= 0% Where x is the average hourly Device CPU Utilization A device is in Critical state when

- \* In Red for 10% of time or more
- \* Or in Amber for 60% of time or more
- $^{\ast}$  Or in Green for 95% of time or more

A list of all devices sorted by Mean Device CPU Util Devices in Critical State only						
Device Name	Category	Mean Device CPU Util	Peak Device CPU Util			
10.66.13.22	Critical	84.35%	97.33%			
nokia-fw.bvt.entuity.lab	Critical	82.00%	82.00%			
perf03	Critical	75.27%	94.33%			
aruba2400.entuity.lab	Critical	65.00%	65.00%			
lonsolfs02.entuity.local	Critical	58.95%	100.00%			
10.66.13.25	Critical	52.21%	52.23%			
lonsw04.entuity.local	Critical	47.68%	99.00%			
10.66.13.35	Critical	42.99%	76.75%			
c2503	Critical	40.05%	53.00%			
192.168.242.123	Critical	40.03%	53.00%			
lonsw05.entuity.local	Critical	37.19%	42.92%			
new2610	Critical	35.29%	52.92%			
192.168.248.130	Critical	35.29%	52.83%			
r2503	Critical	35.29%	53.08%			
sunshower.entuity.local	Critical	33.16%	41.46%			
10.66.60.10	Critical	24.00%	24.00%			

Figure 136 Device CPU Capacity Planning Heat Map Report



10.66.13.35																										
Date	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Avg Hour	Peak Hour
11 October	10.	43.	68.	64.	40.	13.	55.	58.	45.	18.	11.	60.	49.	66.	57.	56.	73.	66.	24.	19.	68.	76.	58.	59.	48.60	76.42
12 October	45.	40.	23.	38.	25.	48.	28.	46.	48.	27.	32.	15.	12.	14.	36.	70.	70.	76.	67.	50.	44.	11.	65.	33.	40.51	76.25
13 October	16.	19.	30.	58.	68.	55.	76.	42.	39.	18.	50.	20.	41.	44.	55.	70.	66.	39.	7.5	22.	51.	68.	71.	75.	46.41	76.75
14 October	29.	26.	27.	20.	28.	53.	74.	31.	30.	45.	20.	18.	67.	14.	12.	18.	22.	26.	41.	54.	25.	49.	35.	65.	35.06	74.67
15 October	71.	47.	6.1	30.	33.	48.	27.	19.	60.	45.	73.	69.	66.	74.	43.	52.	52.	47.	21.	13.	21.	71.	33.	10.	43.44	74.83
16 October	27.	72.	47.	23.	67.	74.	31.	34.	14.	14.	34.	45.	34.	6.3	30.	64.	15.	12.	9.0	51.	41.	67.	69.	53.	39.34	74.83
17 October	71.	52.	46.	69.	66.	21.	48.	42.	50.	10.	18.	64.	55.	40.	53.	46.	15.	29.	34.	34.	56.	53.	74.	51.	46.27	74.08
18 October	74.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74.58	74.58

Figure 137 Device CPU Capacity Planning Heat Map

### Device CPU Capacity Planning Heat Map Overview

The Device CPU Capacity Planning Heat Map report provides a management level summary of CPU utilization for the selected view. A table and device heat map clearly identify devices with CPU utilization in a critical state, the definition of a critical state is one you can configure. A critical state indicates a potential capacity problem.

The report includes hourly mean average CPU utilization, which are banded into four color coded utilization levels (Red, Amber, Green and Blue). You can set the boundaries of the three top-most ranges, and then set critical state values for these top three utilization bands. For example, for the Red band - the highest utilization - you may accept the default value of 10%; device CPU utilization must have been in the red zone for 10% or more of the reporting period for utilization to be considered as in a critical state.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Heat Map Threshold - Red (%)	Sets the threshold for mean average hourly device CPU utilization, above which utilization is considered red. The default value is 70.
Heat Map Threshold - Amber (%)	Sets lower boundary of the amber utilization level. The default value is 50, for mean average hourly device CPU utilization, the higher boundary is set by <i>Heat Map Threshold - Red (%)</i> .
Heat Map Threshold - Green (%)	Sets lower boundary of the green utilization level. The default value is 20, for mean average hourly device CPU utilization, the higher boundary is set by <i>Heat Map Threshold - Amber (%)</i> . Device CPU utilization below this range is color coded blue.

### Device CPU Capacity Planning Heat Map Options

Table 370 Device CPU Capacity Planning Report Options

Name	Description
Critical state when in red for (%) of time or more	Sets the threshold equal to or above which device CPU utilization must have been in the red zone for it to be considered as in a critical state. The default is 10%; device CPU utilization must have been in the red zone for 10% or more of the reporting period.
Critical state when in amber for (%) of time or more	Sets the threshold equal to or above which device CPU utilization must have been in the amber zone for it to be considered as in a critical state. The default is no value; the amber zone does not set the critical state of the device.
Critical state when in green for (%) of time or more	Sets the threshold equal to or above which device CPU utilization must have been in the green zone for it to be considered as in a critical state. The default is no value; the green zone does not set the critical state of the device
Only list devices in a Critical State	When selected only devices in a critical state are included to the report table.
Draw Heat Maps for TopN	Include heat maps for the specified number of devices, sorted by those with the highest mean average device CPU utilization. Heat maps are only produced for devices with critical state CPU utilization.
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 370 Device CPU Capacity Planning Report Options

### Device CPU Capacity Planning Heat Map Report Header

Report header appears at the start of the report and identifies the report type, its scope and reporting period.

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. ATM Port Utilization.
Description	Description of the report, e.g reporting period.
Prime Time	Prime Time definition, i.e. the time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
View	Entuity view against which the report was run.
Generated	Date and time the report was generated.

Table 371 Device CPU Capacity Planning Heat Map Utilization Header

Name	Description
Device Name	Resolved name or the IP address of the device
Capacity Score	A derived value that represents the current level of capacity usage for the object. Entuity sorts the table on this column.
Category	Capacity category derived from Capacity Score.
Mean Util	Mean utilization over the reporting period for the object.
Peak Util	Peak utilization over the reporting period for the object.

#### Device CPU Capacity Planning Heat Map Summary

Table 372 Device CPU Capacity Planning Inbound Heat Map Summary

#### **Device CPU Capacity Planning Heat Map**

The Heat Map displays the days in rows, the number of which is determined by the duration of the report period. The hours are displayed in columns, the number of which is definable by creating the Prime Time configuration. Each cell within the table contains the average CPU utilization value for that hour, with a color coded background indicating its level of utilization.

Name	Description
Device Name	Resolved name or the IP address of the device
Color Coded Values	Hourly sample color coded according to the Range Thresholds, detailed on the report's front page.
Avg Hour	Average hourly value returned over the date within the reporting period for the object.
Peak Hour	Highest hourly value returned over the date within the reporting period for the object.

Table 373 Device CPU Capacity Planning Heat Map Report

# **Device CPU Capacity Planning Trend Report**

Entuity Report

Device CPU Capacity Planning - Trend

6 entuity

 Description:
 Device CPUs selected by historic or predicted utilization levels

 View:
 Africa

 Sorted by:
 null

 Over the period 00:00 on Sun Jul 19 2015 - 00:00 on Sun Sep 13 2015

 No prime time is set for this report

Printed on: 14 Sep 2015 17:41:48 BST

This report will only display information for the first 20 devices.

Device name	CPU util% mean	CPU util% 95th percentile	CPU util% 6 month predicted
10.44.1.43	8.7	10.0	9.6
10.44.1.49	25.7	56.0	24.7
10.44.1.65			
10.44.1.93			
10.44.1.116			
10.44.2.140			
bottom2960	22.8	25.0	19.6
bottom3550	6.9	8.0	6.2
BRW485AB61B2649			
new2610	12.9	14.0	13.4
stack3750	48.0	57.0	70.2
top3550	13.8	15.0	12.1
vortex			
10.66.13.22	535508.6	76.7	69.5
10.66.13.25	52.3	52.3	52.2
10.66.13.27	2234930.8	3316703.5	15162932.0

Warning: 50% - 80%

Critical: > 80%

Page 1 of 1

Figure 138 Device CPU Capacity Planning Heat Map Report

### **Device CPU Capacity Planning Trend Overview**

The Device CPU Capacity Planning Trend report provides a management level summary of CPU utilization for the selected view. A trend table highlights devices with CPU utilization in a warning and critical states, the definition of critical and warning states is user configurable. A critical state indicates a potential capacity problem.

### **Device CPU Capacity Planning Trend Options**

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Sort	<ul> <li>The report can be sorted by these metrics:</li> <li>Mean Utilization</li> <li>95th Percentile utilization</li> <li>6 month projected utilization.</li> </ul>
ΤορΝ	By default limits the number of devices to the 20 reporting the highest values on the <i>Sort</i> metric.
Warning Threshold (%)	Sets the threshold for mean average hourly device CPU utilization, above which utilization is considered red. The default value is 70.
Critical Threshold (%)	Sets lower boundary of the amber utilization level. The default value is 50, for mean average hourly device CPU utilization, the higher boundary is set by <i>Heat Map Threshold - Red (%)</i> .
Only list items in Critical State	When selected only devices with CPU utilization in a critical state are included to the report. My default it is not selected.
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 374 Device CPU Capacity Planning Trend Report Options

### Device CPU Capacity Planning Trend Report Header

Report header appears at the start of the report and identifies the report type, its scope and reporting period.

Name	Description				
Company Identifiers	Company icon and name defined through the report format.				
Report title	Report title, e.g. Device CPU Capacity Planning - Trend.				
Description	Description of the report, e.g reporting period.				
Prime Time	Prime Time definition, i.e. the time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.				
View	Entuity view against which the report was run.				
Sorted by	<ul> <li>The report can be sorted by these metrics:</li> <li>Mean Utilization</li> <li>95th Percentile utilization</li> <li>6 month projected utilization.</li> </ul>				
Generated	Date and time the report was generated.				

Table 375 Device CPU Capacity Planning Trend Utilization Header

### **Device CPU Capacity Planning Trend**

Name	Description
Device Name	Resolved name or the IP address of the device. Click on the device name to open the CPU Utilization report for the device.
CPU Util% Mean	Mean CPU utilization over the reporting period for the device.
CPU Util% 95th percentile	Indicates the 95th percentile CPU utilization values over the reporting period, as a percentage of total CPU resource.
CPU Util% 6 month predicted	Predicts CPU utilization as a percentage of port speed. You can also click on the values to run the CPU Utilization Trend report within the context of the port.

Table 376 Device CPU Capacity Planning Trend

# **Device Memory Capacity Planning Heat Map Report**

Entuity Report

### Memory Capacity Planning

Centuity

Over the period 00:00 on Thu Oct 11 2012 - 00:00 on Thu Oct 18 2012 No prime time is set for this report Generated at 18 Oct 2012 10:27:42 BST for the My Network view

#### Capacity Planning Summary

### Range Thresholds

x > 70% 70% >= x >50% 50% >= x >20% 20% >= x >= 0% A device is in Critical state when \* In Red for 10% of time or more

Where x is the average hourly Device Memory Utilization

A list of all devices sorted by Mean Device Memory Used Util Devices in Critical State only					
Device Name	Category	Mean Device Memory Util	Peak Device Memory Util		
buildervm	Critical	152.50%	152.51%		
nokia-fw.bvt.entuity.lab	Critical	88.51%	88.51%		
qa-server	Critical	83.63%	85.60%		
win2k82	Critical	81.91%	90.53%		
squall	Critical	78.49%	84.18%		
remedy	Critical	76.58%	76.66%		
lonsw04.entuity.local	Critical	75.25%	76.86%		
fishtail	Critical	72.40%	74.02%		
perf03	Critical	71.59%	76.47%		
bmc2010-win	Critical	71.04%	74.28%		
top2960.entuity.local	Critical	70.63%	70.64%		
wintest09	Critical	70.62%	79.32%		
bottom2960.entuity.local	Critical	70.15%	70.56%		
perf02	Critical	65.45%	93.83%		
win2k83	Critical	37.05%	86.88%		

Figure 139 Device Memory Capacity Planning Heat Map Report

perf02																										
Date	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Avg Hour	Peak Hour
11 October 2012	17.51	17.51	17.89	17.46	17.46	17.47	17.46	17.46	17.47	17.47	17.47	22.94	14.32	14.34	15.24	17.43	52.68	71.82	74.21	76.45	78.99	78.66	79.13	93.83	36.78	93.83
12 October 2012	84.73	85.11	77.51	79.64	83.16	83.80	84.86	82.99	83.36	83.68	84.28	83.85	83.90	85.01	85.14	85.66	84.98	85.08	85.80	86.49	87.41	86.89	87.11	87.43	84.49	87.43
13 October 2012	84.24	82.14	82.34	84.09	84.33	83.44	83.57	83.26	83.28	83.29	84.07	83.94	65.53	48.10	50.49	52.14	55.84	60.07	60.13	60.20	60.34	60.40	60.50	60.50	70.68	84.33
14 October 2012	61.39	61.27	61.66	61.68	62.96	63.09	63.41	63.34	63.29	63.37	63.72	64.00	64.65	64.22	64.30	64.35	64.34	64.03	63.99	63.99	64.07	64.33	64.62	64.85	63.54	64.85
15 October 2012	65.27	65.18	65.31	65.45	65.47	65.44	66.11	65.65	65.55	65.57	65.96	66.24	66.17	66.12	66.19	66.16	66.11	66.16	66.30	66.50	66.52	66.66	66.70	66.72	65.98	66.72
16 October 2012	66.92	67.09	67.52	67.35	67.40	67.42	67.81	67.77	67.90	67.83	67.98	68.00	67.81	67.73	68.02	67.90	67.88	67.62	67.73	67.74	67.91	67.91	67.85	68.17	67.72	68.17
17 October 2012	68.17	68.21	68.33	68.43	68.37	68.44	68.79	68.91	68.76	68.70	68.83	69.10	69.00	68.99	68.99	68.86	68.88	68.87	68.99	69.15	68.88	68.96	69.00	69.03	68.78	69.15
18 October 2012	69.22																								69.22	69.22

Figure 140 Device Memory Capacity Planning Heat Map Report

#### **Device Memory Capacity Planning Heat Map Overview**

The Device Memory Capacity Planning Heat Map report provides a management level summary of memory utilization for devices in the selected view. A table and device heat map clearly identify devices with memory utilization in a critical state, the definition of a critical state is one you can configure. A critical state indicates a potential capacity problem.

The report includes hourly mean average memory utilization, which are banded into four color coded utilization levels (Red, Amber, Green and Blue). You can set the boundaries of the three top-most ranges, and then set critical state values for these top three utilization bands. For example, for the Red band - the highest utilization - you may accept the default value of 10%; device memory utilization must have been in the red zone for 10% or more of the reporting period for utilization to be considered as in a critical state.

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Heat Map Threshold - Red (%)	Sets the threshold for mean average hourly device memory utilization, above which utilization is considered red. The default value is 70.
Heat Map Threshold - Amber (%)	Sets lower boundary of the amber utilization level. The default value is 50, for mean average hourly device memory utilization, the higher boundary is set by <i>Heat Map Threshold - Red</i> (%).
Heat Map Threshold - Green (%)	Sets lower boundary of the green utilization level. The default value is 20, for mean average hourly device memory utilization, the higher boundary is set by <i>Heat Map Threshold - Amber (%)</i> . Device memory utilization below this range is color coded blue.

### **Device Memory Capacity Planning Heat Map Options**

Table 377 Port Capacity Planning - Rate Options

Name	Description
Critical state when in red for (%) of time or more	Sets the threshold equal to or above which device memory utilization must have been in the red zone for it to be considered as in a critical state. The default is 10%; device memory utilization must have been in the red zone for 10% or more of the reporting period.
Critical state when in amber for (%) of time or more	Sets the threshold equal to or above which device memory utilization must have been in the amber zone for it to be considered as in a critical state. The default is no value; the amber zone does not set the critical state of the device.
Critical state when in green for (%) of time or more	Sets the threshold equal to or above which device memory utilization must have been in the green zone for it to be considered as in a critical state. The default is no value; the green zone does not set the critical state of the device
Only list devices in a Critical State	When selected only devices in a critical state are included to the report table.
Draw Heat Maps for TopN	Include heat maps for the specified number of devices, sorted by those with the highest mean average device memory utilization. Heat maps are only produced for devices with critical state memory utilization.
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 377 Port Capacity Planning - Rate Options

### Device Memory Capacity Planning Heat Map Report Header

Report header appears at the start of the report and identifies the report type, its scope and reporting period.

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. ATM Port Utilization.
Description	Description of the report, e.g reporting period.
Prime Time	Prime Time definition, i.e. the time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
View	Entuity view against which the report was run.
Generated	Date and time the report was generated.

Table 378 Device Memory Capacity Planning Heat Map Header

Device Memory	/ Cap	acity I	Planning	Heat	Мар	Summary	1

Name	Description
Device Name	Resolved name or the IP address of the device
Capacity Score	A derived value that represents the current level of capacity usage for the object. Entuity sorts the table on this column.
Category	Capacity category derived from Capacity Score.
Mean Util	Mean utilization over the reporting period for the object.
Peak Util	Peak utilization over the reporting period for the object.

Table 379 Device Memory Capacity Planning Heat Map Report

### Device Memory Capacity Planning Heat Map

The Heat Map displays the days in rows, the number of which is determined by the duration of the report period. The hours are displayed in columns, the number of which is definable by creating the Prime Time configuration. Each cell within the table contains the average memory utilization value for that hour, with a color coded background indicating its level of utilization.

Name	Description
Device Name	Resolved name or the IP address of the device
Color Coded Values	Hourly sample color coded according to the Range Thresholds, detailed on the report's front page.
Avg Hour	Average hourly value returned over the date within the reporting period for the object.
Peak Hour	Highest hourly value returned over the date within the reporting period for the object.

Table 380 Device Memory Capacity Planning Heat Map Report

# **Device Memory Capacity Planning Trend Report**

Entuity Report

#### **Device Memory Capacity Planning - Trend**

Centuity

 Description:
 Device Memory selected by historic or predicted utilization levels

 View:
 My Network (admin)

 Sorted by:
 6 months projected Memory utilization

 Over the period 00:00 on Sun Aug 02 2015 - 00:00 on Sun Sep 27 2015

 No prime time is set for this report

Printed on: 2 Oct 2015 13:59:01 BST

This report will only display information for the first 20 devices.

Device name	Memory util% mean	Memory util% 95th percentile	Memory util% 6 month predicted
stack3750	66.4	73.5	225.4
entlonsw03	72.1	77.0	146.9
gns2	47.3	47.5	137.6
dual-nic-server	85.1	95.6	123.5
milkyway	105.1	105.1	105.2
10.66.13.27	97.9	97.9	98.2
buildervm	102.4	102.5	84.3
10.66.13.25	95.5	100.0	82.5
top2960	70.8	71.9	81.8
venus	68.5	69.7	76.1
10.44.1.93	58.6	59.7	76.0
entlonsw01	46.5	48.4	74.7
bottom2960	69.6	69.8	72.9
aruba6000.bvt.entuity.lab	71.1	71.1	71.1
entlonsw02	43.1	44.8	68.3
10.44.2.140	59.4	59.7	62.5
madrid-switchb	39.9	40.7	53.1
madrid-eye-server	47.8	48.9	52.3
madrid-switch	39.0	39.8	50.7
e2821.entuity.local	34.1	35.1	49.3

Warning: 50% - 80%

Critical: > 80%

Page 1 of 1

Figure 141 Device Memory Capacity Planning Heat Map Report

### **Device Memory Capacity Planning Trend Overview**

The Device Memory Capacity Planning Trend report provides a management level summary of memory utilization for the selected view. A trend table highlights devices with memory utilization in warning and critical states, the definition of critical and warning states is user configurable. A critical state indicates a potential capacity problem.

### **Device Memory Capacity Planning Trend Options**

Name	Description
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Sort	<ul> <li>The report can be sorted by these metrics:</li> <li>Mean Utilization</li> <li>95th Percentile utilization</li> <li>6 month projected utilization.</li> </ul>
ΤορΝ	By default limits the number of devices to the 20 reporting the highest values on the <i>Sort</i> metric.
Warning Threshold (%)	Sets the threshold for mean average hourly device Memory utilization, above which utilization is considered red. The default value is 50.
Critical Threshold (%)	Sets lower boundary of the amber utilization level. The default value is 80, for mean average hourly device memory utilization.
Only list items in Critical State	When selected only devices with memory utilization in a critical state are included to the report. My default it is not selected.
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 381 Device Memory Capacity Planning Trend Report Options

#### **Device Memory Capacity Planning Trend Report Header**

Report header appears at the start of the report and identifies the report type, its scope and reporting period.

Name	Description			
Company Identifiers	Company icon and name defined through the report format.			
Report title	Report title, e.g. Device Memory Capacity Planning - Trend.			
Description	Description of the report, e.g reporting period.			
Prime Time	Prime Time definition, i.e. the time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.			
View	Entuity view against which the report was run.			
Sorted by	<ul> <li>The report can be sorted by these metrics:</li> <li>Mean Utilization</li> <li>95th Percentile utilization</li> <li>6 month projected utilization.</li> </ul>			
Generated	Date and time the report was generated.			

Table 382 Device Memory Capacity Planning Trend Utilization Header

### Device Memory Capacity Planning Trend

Name	Description								
Device Name	Resolved name or the IP address of the device. Click on the device name to open the Memory Utilization report for the device.								
Memory Util% Mean	Mean Memory utilization over the reporting period for the device.								
Memory Util% 95th percentile	Indicates the 95th percentile memory utilization values over the reporting period, as a percentage of total memory resource.								
Memory Util% 6 month predicted	Predicts memory utilization as a percentage of total memory resource. You can also click on the values to run the Memory Utilization Trend report within the context of the device.								

Table 383 Device Memory Capacity Planning Trend

# Port Bandwidth Capacity Planning Heat Map Report

Entuity Report

#### Port Bandwidth Capacity Planning

Centuity

Peak Hou

91.04

54.45

54.59

50.74

50.78

50.86

50.63

22:00 23: Avg Hour 54.44

Over the period 00:00 on Thu Oct 11 2012 - 00:00 on Thu Oct 18 2012 No prime time is set for this report Generated at 18 Oct 2012 10:32:03 BST for the My Network view

#### Capacity Planning Summary

#### Range Thresholds

100% >= x > 70% 70% >= x >50% 50% >= x >20% 20% >= x >= 0%

A device is in Critical state when \* In Red for 1% of time or more

Where x is the average hourly Port Bandwidth Inbound Utilization

A list of all devices sorted by Mean Port Bandwidth Inbound Util Devices in Critical State only														
Device Name	Interface Description	Category	Mean Port Bandwidth Util (In / Out)	Peak Port Bandwidth Util (In / Out)										
eyepoller.bvt.entuity.l ab	[Fa0/7]FastEthernet0/7	Critical	51.24% / 51.24%	91.04% / 90.42%										
Inrouter	[Fa0/0] :p=CW:i=2C00249950:c=E ntuity Limited:o=SO8-	Critical	27.44% / 7.31%	79.07% / 75.74%										
c2821.entuity.local	[ Se0/1/0 ] Serial0/1/0	Critical	5.41% / 4.40%	98.44% / 6.18%										

eyepoller.bvt.entuity.lab [Fa0/7]FastEthernet0/7 Inbound																						
Date	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00
11 October 2012	50.35	54.36	91.04	47.97	50.51	50.47	50.53	50.53	50.49	50.46	50.44	50.43	50.44	50.30	50.38	50.38	50.44	65.65	88.60	50.28	50.61	50.61
12 October 2012	50.40	54.45	49.86	50.73	50.68	50.71	50.58	50.60	50.65	50.64	50.63	50.64	50.70	50.60	50.67	50.69	50.58	50.74	50.64	50.64	50.69	50.77
13 October 2012	50.52	54.59	49.78	50.74	50.74	50.69	50.86	50.75	50.85	50.81	50.75	50.78	50.69	50.74	50.81	50.76	50.79	50.76	50.79	50.72	50.66	50.64
14 October 2012	50.62	50.65	50.65	50.61	50.61	50.61	50.64	50.67	50.58	50.63	50.63	50.74	50.63	50.63	50.62	50.68	50.71	50.54	50.65	50.57	50.64	50.61

	15 October 2012	50.57	50.61	50.53	50.51	50.58	50.72	50.54	50.57	50.65	50.53	50.53	50.54	50.57	50.54	50.61	50.57	50.57	50.53	50.51	50.49	50.50	50.43	50.50	50.50	50.55	50.72
ĺ	16 October 2012	50.49	54.50	49.79	50.44	50.49	50.51	50.60	50.50	50.62	50.54	50.74	50.56	50.67	50.67	50.64	50.60	50.64	50.66	50.63	50.51	50.54	50.50	50.46	50.50	50.70	54.50
	17 October 2012	50.46	54.45	49.68	50.73	50.61	50.62	50.56	50.51	50.51	50.55	50.60	50.69	50.63	50.57	50.62	50.53	50.57	50.62	50.50	50.50	50.74	50.68	50.64	50.69	50.72	54.45
	18 October 2012	50.74			-		•			-		•			-					-			-			50.74	50.74
I	Inrouter [ Fa0/0 ] :p=CW:i=2C00249950:c=Entuity Limited:o=SO8-9167: Inbound																										
	inouter [radio].p-CW.i-2C00249350.C-Entury Entitled.0-500-9107. Inbound																										
l	Date	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Avg Hour	Peak Hour
	11 October 2012	24.20	25.95	23.10	23.87	21.51	22.25	23.59	20.95	21.31	28.54	30.04	26.33	33.59	41.13	78.04	78.67	33.50	45.74	24.29	22.01	53.89	42.71	21.82	21.90	32.87	78.67
	12 October 2012	24.12	22.24	21.85	21.33	21.40	26.82	21.30	21.31	21.56	24.78	30.49	34.54	74.83	79.07	54.03	25.84	29.21	32.12	24.45	22.52	21.76	22.52	22.67	21.31	30.09	79.07
	13 October 2012	21.86	24.37	24.38	21.80	22.05	22.69	21.26	21.57	21.34	26.70	21.33	21.34	21.96	22.07	23.14	21.55	21.55	26.61	21.29	22.15	21.62	21.52	22.81	21.88	22.45	26.70
	14 October 2012	22.34	26.90	21.54	21.60	21.15	21.33	21.28	21.32	21.30	26.58	21.45	21.28	21.31	26.85	21.86	22.32	21.45	21.30	21.08	21.16	21.31	26.22	21.32	21.31	22.32	26.90
	15 October 2012	22.48	22.33	22.39	21.09	21.16	26.42	21.27	21.30	21.93	23.06	27.06	25.49	28.84	38.39	34.00	35.90	26.29	26.33	24.67	22.88	23.36	23.80	22.30	21.61	25.18	38.39
	16 October 2012	22.18	22.19	22.27	21.41	21.58	22.17	21.97	21.35	21.72	23.87	35.04	59.35	36.29	33.09	32.63	50.73	38.25	29.28	26.92	22.77	22.03	22.90	21.95	21.94	28.08	59.35
	17 October 2012	22.80	27.91	25.42	23.41	23.38	23.83	23.36	23.34	23.37	26.02	29.80	44.11	50.19	48.33	42.13	39.59	43.08	53.28	42.86	26.78	22.23	23.04	21.80	21.68	31.32	53.28
	18 October 2012	22.53			-															-						22.53	22.53

13 October 2012	21.86	24.37	24.38	21.80	22.05	22.69	21.26	21.57	21.34	26.70	21.33	21.34	21.96	22.07	23.14	21.55	21.55	26.61	21.29	22.15	21.62	21.52	22.81	21.88	22.45	26.7
14 October 2012	22.34	26.90	21.54	21.60	21.15	21.33	21.28	21.32	21.30	26.58	21.45	21.28	21.31	26.85	21.86	22.32	21.45	21.30	21.08	21.16	21.31	26.22	21.32	21.31	22.32	26.9
15 October 2012	22.48	22.33	22.39	21.09	21.16	26.42	21.27	21.30	21.93	23.06	27.06	25.49	28.84	38.39	34.00	35.90	26.29	26.33	24.67	22.88	23.36	23.80	22.30	21.61	25.18	38.3
16 October 2012	22.18	22.19	22.27	21.41	21.58	22.17	21.97	21.35	21.72	23.87	35.04	59.35	36.29	33.09	32.63	50.73	38.25	29.28	26.92	22.77	22.03	22.90	21.95	21.94	28.08	59.3
17 October 2012	22.80	27.91	25.42	23.41	23.38	23.83	23.36	23.34	23.37	26.02	29.80	44.11	50.19	48.33	42.13	39.59	43.08	53.28	42.86	26.78	22.23	23.04	21.80	21.68	31.32	53.2
18 October 2012	22.53	· .		-				-	-				-						-					-	22.53	22.5

Figure 142 Port Bandwidth Capacity Planning Heat Map Report
#### Port Bandwidth Capacity Planning Heat Map Overview

The Port Bandwidth Capacity Planning Heat Map report provides insight into inbound and outbound utilization and throughput rate over the reporting period.

### Port Bandwidth Capacity Planning Heat Map Options

Name	Description								
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.								
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.								
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.								
Heat Map Threshold - Red (%)	Sets the threshold for mean average hourly device port utilization, above which utilization is considered red. The default value is 70.								
Heat Map Threshold - Amber (%)	Sets lower boundary of the amber utilization level. The default value is 50, for mean average hourly port utilization, the higher boundary is set by <i>Heat Map Threshold - Red (%)</i> .								
Heat Map Threshold - Green (%)	Sets lower boundary of the green utilization level. The default value is 20, for mean average hourly port utilization, the higher boundary is set by <i>Heat Map Threshold - Amber (%).</i> Port utilization below this range is color coded blue.								
Critical state when in red for (%) of time or more	Sets the threshold equal to or above which port utilization must have been in the red zone for it to be considered as in a critical state. The default is 10%; port utilization must have been in the red zone for 10% or more of the reporting period.								
Critical state when in amber for (%) of time or more	Sets the threshold equal to or above which port utilization must have been in the amber zone for it to be considered as in a critical state. The default is no value; the amber zone does not set the critical state of the device.								
Critical state when in green for (%) of time or more	Sets the threshold equal to or above which port utilization must have been in the green zone for it to be considered as in a critical state. The default is no value; the green zone does not set the critical state of the device								
Only list items in a Critical State	When selected only devices in a critical state are included to the report table.								
Draw Heat Maps for TopN	Include heat maps for the specified number of ports, sorted by those with the highest mean average device CPU utilization. Heat maps are only produced for ports with critical state port utilization.								
Display utilization in Heat Maps	Select the type of utilization to chart on the heat maps, i.e. <b>inbound</b> , <b>outbound</b> , <b>combined</b> .								
Exclude ports that are Admin Down	Select to exclude ports that are set to admin down.								
Exclude Virtual Ports	Select to exclude ports Entuity identifies as virtual ports.								

Table 384 Port Capacity Planning - Rate Options

Name	Description
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 384 Port Capacity Planning - Rate Options

#### Port Bandwidth Capacity Planning Heat Map Report Header

Report header appears at the start of the report and identifies the report type, its scope and reporting period.

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. ATM Port Utilization.
Description	Description of the report, e.g reporting period.
Prime Time	Prime Time definition, i.e. the time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
View	Entuity view against which the report was run.
Generated	Date and time the report was generated.

Table 385 Port Bandwidth Capacity Planning Heat Map Header

## Port Bandwidth Capacity Planning Heat Map Summary

Name	Description
Device Name	Resolved name or the IP address of the device
Capacity Score	A derived value that represents the current level of capacity usage for the object. Entuity sorts the table on this column.
Category	Capacity category derived from Capacity Score.
Mean Util	Mean utilization over the reporting period for the object.
Peak Util	Peak utilization over the reporting period for the object.

Table 386 Port Bandwidth Capacity Planning Heat Map Report

#### Port Bandwidth Capacity Planning Heat Map

The Heat Map displays the days in rows, the number of which is determined by the duration of the report period. The hours are displayed in columns, the number of which is definable by creating the Prime Time configuration. Each cell within the table contains the average utilization value for that hour, with a color coded background indicating its level of utilization.

Name	Description
Device Name	Resolved name or the IP address of the device
Color Coded Values	Hourly sample color coded according to the Range Thresholds, detailed on the report's front page.
Avg Hour	Average hourly value returned over the date within the reporting period for the object.
Peak Hour	Highest hourly value returned over the date within the reporting period for the object.

Table 387 Port Bandwidth Capacity Planning Heat Map Report

## Port Bandwidth Capacity Planning Trend Report

Entuity Report

#### Port Capacity Planning

 Description:
 Ports selected by historic or predicted utilization levels

 View:
 My Network (admin)

 Sorted by:
 Max of 6 month projected in/outbound

 Over the period 00:00 on Sun Aug 02 2015 - 00:00 on Sun Sep 27 2015

 No prime time is set for this report

Printed on: 2 Oct 2015 14:29:52 BST

8 entuity

My Network (admin) contains 453 non-virtual ports that are operationally up. This report will only display information for the first 20 ports.

Device name	Port description	In/out util% mean	In/out rate (Mbps) mean	In/out util% 95th percentil	In/out util% 6 month predicted	
stack3750	[Fa2/0/11]FastEthernet2/0/11	13.2 / 2.7	13.17 / 2.71	27.5 / 3.7	<u>150.3</u> / <u>8.8</u>	
stack3750	[Fa2/0/22]FastEthernet2/0/22	1.0 / 16.8	1.03 / 16.79	2.1 / 35.0	<u>8.8</u> / <u>118.6</u>	
stack3750	[Fa2/0/9]FastEthernet2/0/9	5.7 / 0.5	5.67 / 0.53	10.4 / 0.8	<u>30.9</u> / <u>3.2</u>	
entlonsw03	[ Gi1/0/1 ] GigabitEthernet1/0/1	1.4 / 1.6	1.38 / 1.59	1.6 / 1.8	<u>2.7</u> / <u>3.4</u>	
bottom3550	[Fa0/9]FastEthernet0/9	0.3 / 0.6	0.32 / 0.60	0.4 / 0.8	<u>1.4 / 1.7</u>	
bottom2960	[Fa0/24] FastEthernet0/24	0.6 / 0.3	0.60 / 0.32	0.8 / 0.4	<u>1.7 / 1.4</u>	
c3560	[Fa0/2] FastEthernet0/2	0.7 / 0.4	0.69 / 0.43	0.7 / 0.5	<u>0.7</u> / <u>1.6</u>	
r2610	[ Se0/0 ] to r2503 se1	0.9 / 0.7	0.01 / 0.01	1.0 / 0.9	<u>1.2 / 1.0</u>	
e2821.entuity.local	[ Se0/0/0 ] Serial0/0/0	1.5 / 1.4	0.12 / 0.11	1.9 / 1.7	<u>1.2 / 1.2</u>	
entlonsw03	[ Gi1/0/13 ] GigabitEthernet1/0/13	0.5 / 0.4	4.56 / 4.21	0.5 / 0.5	<u>1.2 / 1.0</u>	
stack3750	[Fa1/0/19] FastEthernet1/0/19	0.0 / 0.1	0.04 / 0.07	0.1 / 0.1	<u>0.4</u> / <u>0.8</u>	
stack3750	[Fa2/0/1]FastEthernet2/0/1	0.9 / 0.7	0.95 / 0.70	0.8 / 0.5	<u>0.8</u> / <u>0.7</u>	
c3560	[Fa0/1]FastEthernet0/1	0.7 / 0.8	0.74 / 0.82	0.8 / 1.0	<u>0.7</u> / <u>0.3</u>	
bottom2960	[Fa0/1]FastEthernet0/1	0.5 / 0.7	0.46 / 0.71	0.5 / 0.7	<u>0.7</u> / <u>0.7</u>	
entlonsw03	[ Gi1/0/12 ] GigabitEthernet1/0/12	0.4 / 0.3	4.23 / 2.96	1.2 / 0.5	<u>0.6</u> / <u>0.5</u>	
e2821.entuity.local	[ Gi0/0 ] to 10.44 lan	0.5 / 0.5	0.49 / 0.49	0.5 / 0.5	<u>0.5</u> / <u>0.5</u>	
10.44.1.49	[ bond0 ] bond0	0.4 / 0.0	0.04 / 0.00	0.7 / 0.0	<u>0.5</u> / <u>0.1</u>	
bottom2960	[Fa0/17] FastEthernet0/17	0.5 / 0.5	0.49 / 0.50	0.6 / 0.6	<u>0.4</u> / <u>0.5</u>	
entlonsw03	[Gi1/0/21] GigabitEthernet1/0/21	0.2 / 0.2	1.57 / 2.11	0.2 / 0.3	<u>0.3</u> / <u>0.4</u>	
stack3750	[Fa1/0/24] FastEthernet1/0/24	0.0 / 0.0	0.02 / 0.05	0.0 / 0.1	<u>0.1 / 0.4</u>	

Warning: 50% - 80%

Critical: > 80%

Page 1 of 1

Figure 143 Port Bandwidth Capacity Planning Heat Map Report

#### Port Bandwidth Capacity Planning Trend Overview

The Port Bandwidth Capacity Planning Trend report provides a management level summary of port utilization for the selected view. A trend table highlights devices with utilization in warning and critical states, the definition of critical and warning states is user configurable. A critical state indicates a potential capacity problem.

## Port Bandwidth Capacity Planning Trend Options

Name	Description									
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.									
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.									
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.									
Sort by	The report can be sorted by these metrics: Mean inbound									
	Mean outbound									
	95th Percentile inbound									
	95th Percentile outbound									
	6 month projected inbound.									
	6 month projected outbound.									
	Max of mean in/outbound									
	Max of 95th Percentile in/outbound									
	Max of 6 month projected in/outbound.									
TopN	By default limits the number of devices to the 20 reporting the highest values on the <i>Sort</i> metric.									
Warning Threshold (%)	Sets the threshold for mean average hourly port bandwidth utilization, above which utilization is considered in a warning state when it is also equal to or below the critical threshold. The default value is 50.									
Critical Threshold (%)	Sets the threshold for mean average hourly port bandwidth utilization, above which utilization is considered in a critical state. The default value is 80.									
Only list devices in a Critical State	When selected only devices in a critical state are included to the report. My default it is not selected.									
Report period	Period over which the report applies, up to seven days. When you select:									
	Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.									
	Range, you can enter start and end dates and times.									

Table 388 Port Bandwidth Capacity Planning Trend Report Options

Name	Description
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 388 Port Bandwidth Capacity Planning Trend Report Options

#### Port Bandwidth Capacity Planning Trend Report Header

Report header appears at the start of the report and identifies the report type, its scope and reporting period.

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port BANDWIDTH Capacity Planning - Trend.
Description	Description of the report, e.g reporting period.
Prime Time	Prime Time definition, i.e. the time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
View	Entuity view against which the report was run.
Generated	Date and time the report was generated.

Table 389 Port Bandwidth Capacity Planning Trend Utilization Header

## Port Bandwidth Capacity Planning Trend

Name	Description
Device Name	Resolved name or the IP address of the device.
Port Description	Description of the port is also a hyperlink to the Port Utilization Details Report.
In/out Util% mean	Mean inbound and outbound port utilization over the reporting period for the port.
In/out (Mbps) Rate mean	Rate of inbound and outbound traffic over the reporting period for the port.
In/out Util% 95th percentile	Indicates the 95th percentile of inbound and outbound utilization values over the reporting period, as a percentage of respectively inbound and outbound resource.
In/out Util% 6 month predicted	Predicts inbound and outbound port utilization in 6 months time, as a percentage of respectively inbound and outbound capacity. You can also click on the values to run the Port Utilization Trend report within the context of the port.

Table 390 Port Bandwidth Capacity Planning Trend

## Port Discards Capacity Planning Heat Map Report

Entuity Report

#### Port Discards Capacity Planning - Heat Map

8 entuity

Over the period 00:00 on Fri Sep 25 2015 - 00:00 on Fri Oct 02 2015 No prime time is set for this report Generated at 2 Oct 2015 15:26:44 BST for the Africa view

#### **Capacity Planning Summary**

#### Range Thresholds

100% >= x > 70% 70% >= x >50% 50% >= x >20% 20% >= x >= 0% A device is in Critical state when \* In Red for 10.00% of time or more

Where x is the average hourly Port Discards Combined

A list of all devices sorted by Mean Port Discards Combined												
Device Name	Interface Description	Category	Mean Port Discards Util (In / Out)	Peak Port Discards Util (In / Out)								
10.44.2.140	[ 00001 ] Ethernet	Non-Critical	0.00% / 0.00%	0.00% / 0.00%								
bottom2960	[ Fa0/8 ] FastEthernet0/8	Non-Critical	0.00% / 0.00%	0.00% / 0.00%								
bottom2960	[Fa0/11] FastEthernet0/11	Non-Critical	0.00% / 0.00%	0.00% / 0.00%								

10.44.2.140	0.44.2.140 [ 00001 ] Ethernet Combined																									
Date	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Avg Hour	Peak Hour
25 September 2015			-	-					-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26 September 2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27 September 2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28 September 2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29 September 2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30 September 2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01 October 2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
02 October 2015	0.00			-					-										-						0.00	0.00
bottom296	0 [	Fa0	/8]	Fas	tEth	nern	et0	/8 C	om	bine	d															
Date	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Avg Hour	Peak Hour
25 September 2015										0.00															0.00	0.00
bottom296	0 [	Fa0	/11	] Fa	stE	ther	net	0/11	Co	mbi	nec	1														
Date	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Avg Hour	Peak Hour
25 September 2015								-		0.00				-				-						-	0.00	0.00

#### Figure 144 Port Discards Capacity Planning Heat Map Report

#### Port Discards Capacity Planning Heat Map Overview

The Port Discards Capacity Planning Heat Map report provides insight into inbound and outbound utilization and throughput rate over the reporting period.

Port Discard	ls Capacit	v Planning	Heat Ma	p Options
		,		

Name	Description					
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.					
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.					
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.					
Heat Map Threshold - Red (%)	Sets the threshold for mean average hourly port discards, above which discards is considered red. The default value is 70.					
Heat Map Threshold - Amber (%)	Sets lower boundary of the amber discards level. The default value is 50, for mean average hourly discards, the higher boundary is set by <i>Heat Map Threshold - Red (%).</i>					
Heat Map Threshold - Green (%)	Sets lower boundary of the green utilization level. The default value is 20, for mean average hourly port discards, the higher boundary is set by <i>Heat Map Threshold - Amber (%)</i> . Port discards below this range is color coded blue.					
Critical state when in red for (%) of time or more	Sets the threshold equal to or above which port discards must have been in the red zone for it to be considered as in a critical state. The default is 10%; port discards must have been in the red zone for 10% or more of the reporting period.					
Critical state when in amber for (%) of time or more	Sets the threshold equal to or above which port discards must have been in the amber zone for it to be considered as in a critical state. The default is no value; the amber zone does not set the critical state of the device.					
Critical state when in green for (%) of time or more	Sets the threshold equal to or above which port discards must have been in the green zone for it to be considered as in a critical state. The default is no value; the green zone does not set the critical state of the device					
Only list items in a Critical State	When selected only devices in a critical state are included to the report table.					
Draw Heat Maps for TopN	Include heat maps for the specified number of ports, sorted by those with the highest mean average port discards. Heat maps are only produced for ports with critical level of discards.					
Display discards in Heat Maps	Select the type of discards to chart on the heat maps, i.e. <b>inbound</b> , <b>outbound</b> , <b>combined</b> .					
Exclude ports that are Admin Down	Select to exclude ports that are set to admin down.					
Exclude Virtual Ports	Select to exclude ports Entuity identifies as virtual ports.					
Report period	Period over which the report applies, up to seven days. When you select:					
	Recent, you specify time period in relation to the time the report is run o g one hour before the report time.					
	<b>Range</b> you can enter start and end dates and times					
1	- mange, you our ontor otart and one dates and times.					

Table 391 Port Capacity Planning - Rate Options

Name	Description
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 391 Port Capacity Planning - Rate Options

#### Port Discards Capacity Planning Heat Map Report Header

Report header appears at the start of the report and identifies the report type, its scope and reporting period.

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. ATM Port Utilization.
Description	Description of the report, e.g reporting period.
Prime Time	Prime Time definition, i.e. the time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
View	Entuity view against which the report was run.
Generated	Date and time the report was generated.

Table 392 Port Discards Capacity Planning Heat Map Header

#### Port Discards Capacity Planning Heat Map Summary

Name	Description
Device Name	Resolved name or the IP address of the device
Interface Description	Description of the port.
Category	Capacity category derived from Capacity Score.
Mean Port Discards Util (In/Out)	Mean average discards over the reporting period for all ports on the device.
Peak Port Discards Util (In/Out)	Peak discards over the reporting period for all ports on the device.

Table 393 Port Discards Capacity Planning Heat Map Report

#### Port Discards Capacity Planning Heat Map

The Heat Map displays the days in rows, the number of which is determined by the duration of the report period. The hours are displayed in columns, the number of which is definable by creating the Prime Time configuration. Each cell within the table contains the average utilization value for that hour, with a color coded background indicating its level of utilization.

Name	Description
Device Name	Resolved name or the IP address of the device

Table 394 Port Discards Capacity Planning Heat Map Report

Name	Description
Color Coded Values	Hourly sample color coded according to the Range Thresholds, detailed on the report's front page.
Avg Hour	Average hourly value returned over the date within the reporting period for the object.
Peak Hour	Highest hourly value returned over the date within the reporting period for the object.

Table 394 Port Discards Capacity Planning Heat Map Report

## Port Discards Capacity Planning Trend Report

Entuity Report

#### Port Discards Capacity Planning

 Description:
 Ports selected by historic or predicted port discard levels

 WIPView:
 My Network (admin)

 Sorted by:
 Max of 6 month projected in/outbound

 Over the period 00:00 on Sun Aug 02 2015 - 00:00 on Sun Sep 27 2015

 No prime time is set for this report

Printed on: 2 Oct 2015 15:44:41 BST

8 entuity

My Network (admin) contains 453 non-virtual ports that are operationally up. This report will only display information for the first 20 ports.

Device name	Port description	In/out discards% mean	In/out discards% 95th percentil	In/out discards% 6 month predicted	
10.44.1.49	[eth1]eth1	100.0 / 0.0	100.0 / 0.0	<u>100.0</u> / <u>0.0</u>	
stack3750	[Fa2/0/22]FastEthernet2/0/22	0.0 / 0.0	0.0 / 0.1	<u>0.0</u> / <u>0.1</u>	
new2610	[Fa0/1] FastEthernet0/1	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
idrac-galaxy	[ bond0 ] bond0	0.0 / 0.0	0.1 / 0.0	<u>0.0</u> / <u>0.0</u>	
stack3750	[Fa2/0/1]FastEthernet2/0/1	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
new2610	[Fa0/0] FastEthernet0/0	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
10.44.1.43	[Fa0/1] FastEthernet0/1	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
10.44.1.43	[Fa0/0] FastEthernet0/0	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
e2821.entuity.local	[ Se0/0/0 ] Serial0/0/0	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
stack3750	[Fa2/0/11]FastEthernet2/0/11	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
10.44.1.49	[eth0]eth0	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
10.44.1.49	[bond0]bond0	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
10.44.1.65	[00002]lance	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
10.44.1.93	[00001] Ethernet	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
10.44.1.116	[bond0]bond0	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
10.44.2.140	[00001] Ethernet	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
10.44.1.252	[1]1	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
apcr1	[00002]lance	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
apcr2	[00002]lance	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	
apcr3	[00002]lance	0.0 / 0.0	0.0 / 0.0	<u>0.0</u> / <u>0.0</u>	

Warning: 50% - 80%

Critical: > 80%

Page 1 of 1

Figure 145 Port Discards Capacity Planning Heat Map Report

#### Port Discards Capacity Planning Trend Overview

The Port Discards Capacity Planning Trend report provides a management level summary of port discards for the selected view. A trend table highlights ports with discards in warning and critical states, the definition of critical and warning states is user configurable. A critical state indicates a potential capacity problem.

## Port Discards Capacity Planning Trend Options

Name	Description					
Please select a server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.					
Output Format	Select the output format from HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS, XLSX.					
Please select a view	ntuity view against which the report is to be run. From the drop down list ou can select one view to run the report against.					
Sort by	The report can be sorted by these metrics:  Mean inbound  Mean outbound					
	<ul> <li>95th Percentile inbound</li> <li>95th Percentile outbound</li> <li>6 month projected inbound.</li> </ul>					
	<ul> <li>6 month projected outbound.</li> <li>Max of mean in/outbound</li> <li>Max of 95th Percentile in/outbound</li> </ul>					
	Max of 6 month projected in/outbound.					
ΤορΝ	By default limits the number of devices to the 20 reporting the highest values on the <i>Sort</i> metric.					
Warning Threshold (%)	Sets the threshold for mean average hourly port discards, above which the port is considered in a warning state when it is also equal to or below the critical threshold. The default value is 50.					
Critical Threshold (%)	Sets the threshold for mean average hourly port discards, above which the port is considered in a critical state. The default value is 80.					
Only list items in a Critical State	When selected only devices with ports in a critical state are included to the report. By default it is selected.					
Report period	<ul> <li>Period over which the report applies, up to seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Bange, you can enter start and end dates and times</li> </ul>					
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.					

Table 395 Port Discards Capacity Planning Trend Report Options

#### Port Discards Capacity Planning Trend Report Header

Report header appears at the start of the report and identifies the report type, its scope and reporting period.

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Port Discards Capacity Planning - Trend.
Description	Description of the report, e.g reporting period.
Prime Time	Prime Time definition, i.e. the time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
View	Entuity view against which the report was run.
Generated	Date and time the report was generated.

Table 396 Port Discards Capacity Planning Trend Utilization Header

#### Port Discards Capacity Planning Trend

Name	Description
Device Name	Resolved name or the IP address of the device.
Port Description	Description of the port is also a hyperlink to the Port Discards Details Report.
In/out discards% mean	Mean inbound and outbound port discards over the reporting period for the port.
In/out discards% 95th percentile	Indicates the 95th percentile of inbound and outbound discards values over the reporting period, as a percentage of respectively inbound and outbound resource.
In/out discards% 6 month predicted	Predicts inbound and outbound port discards in 6 months time, as a percentage of respectively inbound and outbound capacity. You can also click on the values to run the Port Discard Trend report within the context of the port.

Table 397 Port Discards Capacity Planning Trend

## **13 Services Reports**

Entuity's Service Delivery Perspective<sup>™</sup> is an InSight Center report for managing the discipline of service delivery. These reports allow you manage Entuity service and subservice configuration through inventory reporting and maintain high levels of service delivery through availability and event tracking reporting.

## **Running Services Reports**

You can run Services reports from the web interface:

- 1) Click Reports. Entuity displays the Reports Home page.
- 2) Click Services Reports. Entuity displays the list of available reports.



Figure 146 Services Reports

## Service Availability Report

#### **Entuity Report**

#### Service Availability

 Printed on:
 26 Nov 2009 21:21:48 GMT

 Description:
 History of the availability of selected services

 View:
 Regional

 Over the period 21:00 on Wed Nov 25 2009 - 21:00 on Thu Nov 26 2009

#### Service name: VOIP

EYE server: wintest03

- Time in the 'Up' state: 20h 45m 11s (86.47%)
- Time in the 'Down' state: 3h 14m 49s (13.53%)

Time in the 'Unknown' state: 0s (0%)



Centuity

20:00	22:00	00:00	0 02:00	04:00	06:00	08:00	10:00	12:0	0 14:0	0 16:00	18:00	20:00	22:00
Start		End		1	Duration		us	Cause					
Wed Nov 25 21:0 2009	00:00 GMT	Thu	I Nov 26 14:38	56 GMT 2009		17h 38m 56s	Up						
Thu Nov 26 14:3	8:56 GMT 200	09 Thu	I Nov 26 14:39	:05 GMT 2009		99	Dow	/n	Down: (e28	21.entuity.loc	al:Ping)		
Thu Nov 26 14:3	9:05 GMT 200	09 Thu	I Nov 26 14:56	28 GMT 2009		17m 23s	Dow	/n	Down: (e28 e2821.entu	21.entuity.loc ity.local:Ping)	al:Telnet,		
Thu Nov 26 14:5	6:28 GMT 200	09 Thu	Nov 26 15:03	45 GMT 2009		7m 17s	Dow	/n	Down: (e28	21.entuity.loc	al:Telnet)		
Thu Nov 26 15:0	3:45 GMT 200	9 Thu	Nov 26 15:26	28 GMT 2009		22m 43s	Up						
Thu Nov 26 15:2	6:28 GMT 200	9 Thu	I Nov 26 15:46	28 GMT 2009		20m 0s	Dow	/n	Down: (e28	21.entuity.loc	al:Ping)		
Thu Nov 26 15:4	6:28 GMT 200	9 Thu	Nov 26 16:16	27 GMT 2009		29m 59s	Up	1					
Thu Nov 26 16:1	6:27 GMT 200	9 Thu	Nov 26 17:26	27 GMT 2009		1h 10m 0s	Dow	/n	Down: (e28	21.entuity.loc	al:Ping)		
Thu Nov 26 17:2	6:27 GMT 200	9 Thu	Nov 26 17:56	27 GMT 2009		30m 0s	Up	1					
Thu Nov 26 17:5	6:27 GMT 200	9 Thu	I Nov 26 18:16	28 GMT 2009		20m 1s	Dow	/n	Down: (e28	21.entuity.loc	al:Ping)		
Thu Nov 26 18:1	6:28 GMT 200	9 Thu	Nov 26 18:46	28 GMT 2009		30m 0s	Up	1					
Thu Nov 26 18:4	6:28 GMT 200	9 Thu	I Nov 26 19:06	28 GMT 2009		20m 0s	Dow	/n	Down: (e28	21.entuity.loc	al:Ping)		
Thu Nov 26 19:0	6:28 GMT 200	9 Thu	I Nov 26 19:36	28 GMT 2009		30m 0s	Up	1					
Thu Nov 26 19:3	6:28 GMT 200	9 Thu	Nov 26 19:56	27 GMT 2009		19m 59s	Dow	/n	Down: (e28	21.entuity.loc	al:Ping)		
Thu Nov 26 19:5	6:27 GMT 200	9 Thu	I Nov 26 20:26	28 GMT 2009		30m 1s	Up						
Thu Nov 26 20:2	6:28 GMT 200	9 Thu	Nov 26 20:46	28 GMT 2009		20m 0s	Dow	/n	Down: (e28	21.entuity.loc	al:Ping)		
Thu Nov 26 20:4	6:28 GMT 200	9 Thu	I Nov 26 21:00	:00 GMT 2009		13m 32s	Up						





#### Service Availability Report Overview

This report represents the availability of Entuity services. For each service it details the managing Entuity server, and represents the state of the service, when and the proportion of time the service state was up, down and unknown.

## Service Availability Report Options

Name	Description
Please select an Entuity Server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one server, or <b>All Servers</b> , to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a service	Entuity service against which the report is to be run. From the drop down list you can select one service, or <b>All Services</b> , to run the report against.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>From you can enter start and end date and time.</li> </ul>

Table 398 Service Availability Report Header

#### Service Availability Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Service Availability.
Printed on	Date and time the report was generated.
Description	Description of the report and the reporting period.
View	Entuity view against which the report was run.
Over the Period	Period over which the report applies.

Table 399 Device Memory Utilization TopN Frame Report Header

#### Service Availability Report Details

#### Each sector within the report details the availability of a service.

Name	Description
Service Identifiers	Name of the service, the Entuity server managing the service and whether events are enabled.
Service Status	Time and percentage of the report period the service was in each of the three states, Up, Down and Unknown. These values are graphed both chronologically over the reporting period and represented as proportions of the reporting period through a pie chart.
Start	The time of the start of service status change, or the start of the reporting period.

Table 400 Service Availability Report Details

Name	Description
End	The time of the end of service status change, or the end of the reporting period.
Duration	Date and time the event was raised.
Status	Indicates the status of the service, e.g. Up, Down, Unknown.
Cause	Details of the cause of the service status, e.g. the name of the service, its status and the cause of its failure (when the status is down).

Table 400 Service Availability Report Details

## Service Delivery Summary Report

Entuity Report

#### Service Delivery Summary

Pentuity

 Printed on:
 25 Nov 2009 17:26:33 GMT

 Description:
 Overview of the combined availability of all the services in a view

 View:
 Regional

 Over the period 00:00 on Sun Oct 25 2009 - 00:00 on Wed Nov 25 2009





Figure 148 Service Delivery Summary Report

#### Service Delivery Summary Report Overview

The Service Delivery Summary aggregates the behavior of all the services in a chosen view and displays, by default, a summary of the previous thirty-one days.

#### Service Delivery Summary Report Options

Name	Description
Please select an Entuity Server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a View	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Report Period	<ul> <li>Period over which the report applies. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>From you can enter start and end date and time.</li> </ul>

Table 401 Service Delivery Summary Report Header

## Service Delivery Summary Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Service Availability.
Printed on	Date and time the report was generated.
Description	Description of the report and the reporting period.
View	Entuity view against which the report was run.
Over the Period	Period over which the report applies.

Table 402 Service Delivery Summary Report Header

#### Service Delivery Summary Report Details

Name	Description
Aggregate Daily Services Status	Aggregates the daily service status within the All Objects view for, by default, the previous thirty-one days.
Number of services that were available for% of day	Entuity identifies the level of availability for each service on each day of the reporting period. This perspective groups these services by percentage of availability into one of five groups, e.g. below 50%, 50%-70%, and represents them through a stack chart.

Table 403 Service Delivery Summary Details

## Service Event History Report

#### Entuity Report

#### Services Event Audit Log

Printed on: 17 Nov 2009 16:11:50 EST

Description: Chronologically ordered listing of individual services events

View: Regional

Over the period 00:00 on Sat Nov 07 2009 - 00:00 on Tue Nov 17 2009

Event type	Source	Time	Status	Details
Service Down	JD2	09/11/09 10:27	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD4-sub-sub	09/11/09 10:27	Closed	Status=Down, cause : Down: (BOSTON-ROUTER, 192.168.141.2)
Service Down	JD3-sub	09/11/09 10:27	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	09/11/09 20:13	Closed	Status=Down, cause : Down: (JD3-sub) Unknown: (c2821:London to NY Jitter)
Service Down	JD2	09/11/09 20:16	Closed	Status=Down, cause : Down: (JD3-sub) Unknown: (c2821:London to NY Jitter)
Service Down	JD3-sub	09/11/09 20:50	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	09/11/09 20:50	Closed	Status=Down, cause : Down: (JD3-sub) Unknown: (c2821:London to NY Jitter)
Service Down	JD3-sub	09/11/09 20:53	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	09/11/09 20:53	Closed	Status=Down, cause : Down: (JD3-sub) Unknown: (c2821:London to NY Jitter)
Service Down	JD3-sub	10/11/09 05:33	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	10/11/09 05:33	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD2	10/11/09 05:36	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD3-sub	10/11/09 05:36	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD3-sub	10/11/09 05:39	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	10/11/09 05:39	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD2	10/11/09 05:42	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD3-sub	10/11/09 05:42	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	10/11/09 06:47	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD3-sub	10/11/09 06:47	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD3-sub	10/11/09 06:49	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	10/11/09 06:49	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD2	10/11/09 08:02	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD3-sub	10/11/09 08:02	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0. CHICAGO-ROUTER: [ Se0 ] Serial0.
Service Down	JD3-sub	10/11/09 08:05	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	10/11/09 08:05	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD2	10/11/09 09:19	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD3-sub	10/11/09 09:19	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD3-sub	10/11/09 09:21	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	10/11/09 09:21	Closed	Status=Down, cause : Down: (JD3-sub)
Service Down	JD3-sub	10/11/09 18:31	Closed	Status=Down, cause : Down: (BOSTON-ROUTER: [ Et0 ] Ethernet0, BOSTON-ROUTER: [ Se0 ] Serial0, CHICAGO-ROUTER: [ Se0 ] Serial0,
Service Down	JD2	10/11/09 18:31	Closed	Status=Down, cause : Down: (JD3-sub)

Figure 149 Service Event History Report

#### Service Event History Report Overview

Service Event History Report, presents for the selected view all service related events for the time period. You can use this report when performing an audit of service performance.

#### Service Event History Report Options

Name	Description
Server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a View	From the drop down list you can select one view to run the report against.
Maximum displayed events	Maximum number of events to include to the report, default 1000.
Report period	Period over which the report applies. When you select:
	Recent, you specify time period in relation to the time the report is
	run, e.g. one hour before the report time.
	Range, you can enter start and end dates and times.

Table 404 Service Event History Report Options

#### Service Event History Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Device Reachability.
Printed on	Date and time the report was generated.
Description	Description of the report.
Servers	Number of servers in the view.
View	Entuity view against which the report was run.
Over the period	Identifies the reporting period.

Table 405 Service Event History Report Header

#### Service Event History Report Details

Name	Description
Event Type	The type of service event, e.g Service Down.
Source	The source of the event.
Time	Date and time the event was raised.
Status	Indicates the current status of the event, e.g. Open, Closed.

Table 406 Service Event History Report Details

Name	Description
Details	Details of the event, e.g. the status of the service and the cause of its failure.

Table 406 Service Event History Report Details

## **Service Inventory Report**

E ntuity Rep	port					
Service I	Service Inventory					
Printed on:	26 Nov 2009 19:27:37 GMT					
Description:	Configuration of individual services and sub-services					
View:	Regional					
VOIP on wir	test03 (Raises events)					
Created Mo	n Oct 19 14:29:58 BST 2009					
Componen	ts: (And)					
Device:	bottom3550					
Device:	c2821.entuity.local					
IP SLA E	cho: Ping					
Email on wi	ntest03 (Raises events)					
Created Mo	n Oct 19 15:44:14 BST 2009					
Componen	ts: (Or)					
Device:	Device: c2821.entuity.local					
Application: telnet on 10.44.1.5 on lonsw01.entuity.local						
Email on CO	MPRESSOR (Raises events)					
Created Wed Oct 21 14:44:18 BST 2009						
Componen	Components: (And)					

Figure 150 Service Inventory Report

#### Service Inventory Report Overview

This report provides an inventory of each service within the specified ambit of the report. It is useful when maintaining the Entuity services you have configured and tracking their location. For each reported service, a section in the report lists which Entuity server monitors it, when it was created, the logic applied when raising events and the managed objects that comprise the service.

#### **Service Inventory Report Options**

Name	Description
Server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
View	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Service	From the drop down list Entuity displays the available services. You can run the report against one or <b>All</b> services.

Table 407 Service Inventory Report Options

## Service Inventory Report Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. Service Inventory.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report is applied.

Table 408 Service Inventory Report Header

#### Service Inventory Report

Name	Description
Service Identifiers	Name of the service, the Entuity server managing the service and whether events are enabled.
Created	Date and time Entuity created the service.
Components	Identifies the logical operator applied to the status of the components with in the service. Also listed is the type of each component, e.g. device, application, and its identifier.

Table 409 Service Inventory Report

## Service Delivery Perspective



#### **"**Service Delivery Perspective (TM)

#### Report Guide

#### 1. Service Delivery Summary Report This redisplays the information in the Service D a form suitable for printing.

#### 2. Service Availability Report

This report displays the various states (Up/D service can have and the periods of time the each state. The report can either include nominated view or focus on one service by nan a multi-server mode all the services with the sa view are shown sepatately. For each service t in each state is displayed along with a grag tabular textual list of states and the corrresport that state.

#### 3. Service Event History Report

This report displays the history of service relate

#### 4. Service Inventory Report

This report lists all the services in the selected settings and component memberships.

The Services module within Entuity enables enterprises to map network infrastructure components, IP services, and traffic quality measurements directly to user-defined services that have direct and transparent impact on services and operations. Services can be modeled in Entuity to include the many network components

Figure 151 Service Delivery Perspective

#### Service Delivery Perspective Overview

The Entuity Services module enables you to map network infrastructure components, IP services, and traffic quality measurements directly to user-defined services that have direct and transparent impact on business services and operations. Services can be modelled in Entuity to include the many network components including devices, ports, applications and IP SLA tests for reachability and correct operation. Including all the dependent infrastructure components and IP services, Entuity automates monitoring of the business value of networks directly to minimize any guesswork and manually assessing the impact of network misbehavior on businesses.

Information about availability of key services such as email, data center connectivity, VoIP services and resilient links to satellite offices and the Internet allows IT and business managers to quickly assess the quality of services that the IT is providing to its business users.

The Service Delivery Perspective aggregates the behavior of all the services in a chosen view and displays, by default, a summary of the previous thirty-one days.

#### **Service Delivery Perspective Options**

When you call this perspective from the web UI, by selecting **InSight Center > Service Delivery Perspective** or **Reports > View Reports > Services > Service Delivery Perspective** you can use the Report Options to amend the perspective defaults.

Name	Description				
Server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.				
Please select a View	From the drop down list you can select one view to run the report against.				
Maximum displayed events	Maximum number of events to include to the report, default 1000.				
Report period	Period over which the report applies. When you select:				
	<ul> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>				

Table 410 Service Event History Report Options

#### **Service Delivery Perspective Details**

Name	Description
Aggregate Daily Services Status	Aggregates the daily service status within the selected view for, by default, the previous thirty-one days.
Number of services that were available for% of day	Entuity identifies the level of availability for each service on each day of the reporting period. This perspective groups these services by percentage of availability into one of five groups, e.g. below 50%, 50%-70%, and represents them through a stack chart.

Table 411 Service Delivery Perspective Details

# **14 User Defined Perspective**

You can create and configure your own custom perspectives for ultimate versatility, showing and graphing the metrics in which you are interested and linking to the reports you consider appropriate. Contact your Entuity representative when you want to develop a perspective.

## **Accessing User Defined Reports**

You can access User Defined reports from the web interface:

- 1) Click **Reports**. Entuity displays the Reports Home page.
- 2) Click User Defined. Entuity displays the list of available reports.

8 er	ntuity										User: admin@entlonppvm01 [Logout] Page Updated: 09:58:45, GMT
Dashboards	InSight Center	Explorer	Events	Maps	Charts	Flows	Reports	Tools	Administration	Help	P
Report reports > U Report User Defin Repor	ts IserDefined ed Perspective	Schedule I	History De e Bla Leports	scription nk templat	te for a us	er defined	perspective				

Figure 152 User Defined Perspective

Entuity includes a template as a place holder for your own perspective.



Figure 153 User Defined Perspective Template

# **15 Virtualization Reports**

This set of reports provides access to the data available through Entuity's management of virtualization machines.

## **Running Virtualization Reports**

You can run these reports from the web interface:

- 1) Click **Reports**. Entuity displays the Reports Home page.
- 2) Click Virtualization Reports. Entuity displays the list of available reports.

8 er	ntuity									User: admin@entlonp Page Updated: 16:58	pvm01 <u>[Loqout]</u> :01, BST
Dashboards	InSight Center	Explorer	Events	Maps	Charts	Flows	Reports	Administration	Help		P
Reports > )	rts /irtualization										
Report			Schedule	Histor	y Descr	ription					
Hyperviso	r and Virtual Machin	e Inventory	11	<u></u>	Inven	tory of hy	pervisors ea	ch with a list of co	nfigured virtual ma	chines	
Impact of	Virtualization on Ac	cess Switches	<b>11</b>	2	Switch switch	n resource nes over ti	e utilization c ime	ompared to chang	ges in virtual/physic	al host traffic on	
Switch Tra	affic by Virtual/Physi	cal Mix	11	<u></u>	Traffic	through	switches bas	ed on the virtual/	physical host conne	ections	
Switches	with Connected Hyp	ervisors	11	2	Summ	nary of sw	itches and th	neir connected virt	tualized infrastruct	ire	
Virtual/Ph	vsical Host Traffic M	ix Over Time	11	<u></u>	Daily t	traffic for o	connected vi	rtual/physical host	s over time		
Virtual/Ph	ysical Host Traffic M	ix by View	11	-	Switch	h traffic fo	r connected	virtual/physical ho	osts listed by view		
Virtualizat	ion Perspective		11	<u></u>	Daily t	traffic for o	connected vi	rtual/physical host	ts over time		
Virtualizat	ion Traffic Trends		11	2	Trend	ls of switcl	h traffic, reso	ource utilization ar	nd connected virtua	lized infrastructure	
vSwitch In	iventory		11	<u> </u>	Inven	tory of vSi	witches				
Schedu	ed Reports										

Figure 154 Virtualization Reports

## Hypervisor and Virtual Machine Inventory Report

#### Entuity Report Connected Hypervisors by vendor

Centuity

19 Jun 2011 17:25:08 BST
Summary of switches and their connected virtualized infrastructure
Regional
Total Hypervisors

	Switch	Location	Physical	# Connected Hypervisors			
	Switch	Eocation	Ports	VMware	Oracle	Hyper-V	
c290	00		12	0	1	0	
lons	w01		49	1	0	0	
lons	w02	Development cabinet	12	1	0	0	

Figure 155 Hypervisor and Virtual Machine Inventory Report

#### Hypervisor and Virtual Machine Inventory Overview

Inventory of hypervisors each with a list of configured virtual machines

#### Hypervisor and Virtual Machine Inventory Options

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a hypervisor	Select the hypervisor on which you want to run the report, which can be All Hypervisors or a particular hypervisor.

Table 412 Hypervisor and Virtual Machine Inventory Options

#### Hypervisor and Virtual Machine Inventory Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Echo.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 413 Hypervisor and Virtual Machine Inventory Header

### Hypervisor and Virtual Machine Inventory

Details of each hypervisor are included to the report on a separate page. VMs on Oracle hypervisors that are down Entuity groups together as Unassigned.

Name	Description
Hypervisor Details	
Name	Hypervisor name.
Platform	VM Platform
Product	Full name of the virtualization product, which may include its name, version and build number.
Version	Version number of the virtualization product.
Memory	Total memory available to the hypervisor.
Build	Build number of the virtualization product.
CPUs	Total number of CPUs available to the hypervisor.
VM Count	Current number of virtual machines on the hypervisor.
Virtual Machine Details	
VM Name	Virtual Machine Name.
Memory (MB)	Total memory assigned to the VM.
Guest OS	Details of the operating system running on the VM.
Configuration File	Primary configuration file for the virtual machine.

Table 414 Hypervisor and Virtual Machine Inventory Summary

## Impact of Virtualization on Access Switches Report

Entuity Report









#### Impact of Virtualization on Access Switches Overview

For each switch, four charts plot its number of hypervisors (by vendor), number of virtual machines, physical and virtual traffic and resource utilization. All charts use the same time-frame, allowing you to correlate changes across all charts.

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a device	Select the device on which you want to run the report, which can be All Devices or a particular hypervisor.
Report period	Period over which the report applies, by default seven days. When you select:
	Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.
	<b>Range</b> , you can enter start and end dates and times.
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

#### Impact of Virtualization on Access Switches Options

Table 415 Impact of Virtualization on Access Switches Options

#### Impact of Virtualization on Access Switches Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Echo.
Printed on	Date and time the report was generated.
Description	Description of the report.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
View	Entuity view against which the report was run.

Table 416 Impact of Virtualization on Access Switches Header

#### Impact of Virtualization on Access Switches

#### Details of each switch are included to the report on a separate page.

Name	Description
Switch	Name of switch.
Number of connected hypervisors over time	

Table 417 Impact of Virtualization on Access Switches Summary

Name	Description
Number of connected hypervisors over time	Stack chart provides a daily breakdown of the total number of hypervisors linked to the switch.
Number of connected VMs over time	Stack chart provides a daily breakdown of the total number of VMs, by type, linked to the switch.
Traffic breakdown over time	Stack chart provides a daily breakdown of traffic over the report period, graphing Inbound Virtual Traffic, Outbound Virtual Traffic, Inbound Physical Traffic and Outbound Physical Traffic.
Aggregate Switch Resource Utilization	Line chart graphs switch CPU Utilization and memory usage over the reporting period.

Table 417 Impact of Virtualization on Access Switches Summary

## Switch Traffic by Virtual/Physical Mix Report

Switch Traffic by Virtual/Physical Mix



Printed on: 28 Jun 2011 00:01:37 BST

Description: Traffic through switches based on the virtual/physical host connections Over the period 00:00 on Mon Jun 27 2011 - 00:00 on Tue Jun 28 2011 No prime time is set for this report Regional

View:

Entuity Report

Sorted by: Switch name

Qualitati	1	Physical	VM Traffic	Physical Host Traffic VM Traffic % of Total	
Switch	Location	Ports	(In/Out Bytes)	(In/Out Bytes)	(In / Out)
10.44.2.98	**JFS1B-AT46**	169	0/0	0/0	0.0 / 0.0
10.66.25.121	Simulator	27	0/0	368.1G /365.2G	0.0 / 0.0
bottom2960	Server Room - Far Cabinet	26	0/0	3.2M /362.7M	0.0 / 0.0
bottom3550	Entuity Test Room	26	0/0	0/0	0.0 / 0.0
c2950		24	0/0	88.3M /1.5G	0.0 / 0.0
c3560	Entuity Test Room	26	0/0	0/0	0.0 / 0.0
HPCOL1		1	0/0	0/0	0.0 / 0.0
lonsw01		48	2.9G /2.3G	45.4G /54.3G	6.0 /4.1
lonsw02	Development cabinet	12	2.6G /2.9G	3.9G /4.8G	39.8 / 37.1
lonsw03		48	0/0	18.2G /21.4G	0.0 / 0.0
lonsw04	Hot House	15	0/0	0/0	0.0 / 0.0
lonsw05	Server Room - Server Rack	26	0/0	18.3G /23G	0.0 / 0.0
radium	Escritorio Central - 15 andas	91	0/0	0/0	0.0 / 0.0
top3550	Server Room - Far Cabinet	26	0/0	0/0	0.0 /0.0

Figure 157 Switch Traffic by Virtual/Physical Mix Report

#### Switch Traffic by Virtual/Physical Mix Overview

Table of per-switch traffic volume totals through switches based on the virtual/physical host connections.

#### Switch Traffic by Virtual/Physical Mix Options

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a sort option	Select the column on which you want to sort the results.

Table 418 Hypervisor and Virtual Machine Inventory Options

Name	Description
Report period	<ul> <li>Period over which the report applies, by default the previous twenty-four hours. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 418 Hypervisor and Virtual Machine Inventory Options

#### Switch Traffic by Virtual/Physical Mix Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Echo.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Sorted by	Column on which the results are sorted.

Table 419 Switch Traffic by Virtual/Physical Mix Header

#### Switch Traffic by Virtual/Physical Mix

Each row in the table provides a breakdown of virtual and physical traffic.

Name	Description
Switch	Name or IP address Entuity uses to manage the device.
Location	Description of device location.
Physical Ports	Number of physical ports on the switch.
VM Traffic (In/Out Bytes)	Inbound and outbound virtual traffic handled by the switch over the reporting period.
Physical Host Traffic (In/Out Bytes)	Inbound and outbound physical traffic handled by the switch over the reporting period.
VM Traffic % of Total (In / Out)	Inbound and outbound virtual traffic handled by the switch over the reporting period, as a percentage of its total traffic throughput.

Table 420 Switches with Connected Hypervisors Summary
## Switches with Connected Hypervisors Report

# Entuity Report Switches with Connected Hypervisors Printed on: 27 Jun 2011 21:51:13 BST Description: Summary of switches and their connected virtualized infrastructure View: Regional

Sorted by: Total Hypervisors

	Switch	Location	Physical	# Connected Hypervisors		
			Ports	VMware	Oracle	Hyper-V
lonsw01			48	1	0	0
lonsw02		Development cabinet	12	1	0	0
c2900			12	0	1	0
lonsw01			48	1	0	0

Figure 158 Switches with Connected Hypervisors Report

#### Switches with Connected Hypervisors Overview

Summary of switches, their physical port counts and their connected virtualized infrastructure.

#### Switches with Connected Hypervisors Options

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a sort option	Select the column on which you want to sort the results.

Table 421 Switches with Connected Hypervisors Options

#### Switches with Connected Hypervisors Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Echo.
Printed on	Date and time the report was generated.
Description	Description of the report.

Table 422 Switches with Connected Hypervisors Header

Centuity

Name	Description
View	Entuity view against which the report was run.
Over the period	Start and end dates and times over which the report is run.
Sorted by	Column on which the results are sorted.

Table 422 Switches with Connected Hypervisors Header

#### Switches with Connected Hypervisors

Name	Description
Switch	Name or IP address Entuity uses to manage the device.
Location	Description of device location.
Physical Ports	Number of physical ports on the switch.
VMware	Number of VMware hypervisors connected to the switch.
Oracle	Number of Oracle VM hypervisors connected to the switch
Hyper-V	Number of Hyper-V hypervisors connected to the switch

Table 423 Switches with Connected Hypervisors Summary

# Virtual/Physical Host Traffic Mix by View Report

Entuity Report Virtual/Physical Host Traffic Mix by View Description: Switch traffic for connected virtual/physical hosts listed by view Over the period 00:00 on Mon Jun 20 2011 - 00:00 on Mon Jun 27 2011



No prime time is set for this report Sorted by: View

Printed on: 27 Jun 2011 23:44:36 BST

View	Manu	Connected Hypervisors	VMs	VM Traffic	Physical Host Traffic VM Traffic % of T	
	view			(In/Out bytes)	(In/Out bytes)	(In / Out)
Big View		2	35	81.6G /82.1G	1.5T /1.8T	5.1 /4.4
Regional		4	82	94.9G /95.2G	2.7T /3.1T	3.4 / 3.0

Figure 159 Virtual/Physical Host Traffic Mix by View Report

#### Virtual/Physical Host Traffic Mix by View Overview

Table of per-view traffic volume totals through switches based on the virtual/physical host connections. Note that only views with connected hypervisors are included.

#### Virtual/Physical Host Traffic Mix by View Options

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a sort option	Select the column on which you want to sort the results.
Report period	<ul> <li>Period over which the report applies, by default seven days. When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 424 Hypervisor and Virtual Machine Inventory Options

#### Virtual/Physical Host Traffic Mix by View Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.

Table 425 Virtual/Physical Host Traffic Mix by View Header

Name	Description
Report title	Report title, e.g. IP SLA Echo.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 425 Virtual/Physical Host Traffic Mix by View Header

## Virtual/Physical Host Traffic Mix by View

Name	Description
View	Name of the view.
Connected Hypervisors	Number of connected hypervisors.
VMs	Number of VMs on the hypervisors.
VM Traffic (In/Out Bytes)	Inbound and outbound virtual traffic handled by the switches in the view over the reporting period.
Physical Host Traffic (In/Out Bytes)	Inbound and outbound physical traffic handled by the switches in the view over the reporting period.
VM Traffic % of Total (In / Out)	Inbound and outbound virtual traffic handled by the switches in the view over the reporting period, as a percentage of its total traffic throughput.

Table 426 Virtual/Physical Host Traffic Mix by View Summary

# Virtualization Perspective Report

#### Virtualization Perspective (TM)





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Figure 160 Virtualization Perspective Report

#### **Virtualization Perspective Overview**

Entuity currently manages VMware ESXi, Oracle VM and Microsoft Hyper-V servers, accessing platform and VM information through their native APIs. Entuity correlates this information with the inventory, topology and performance data it collects from the physical network. This perspective, and its related suite of reports, allows users to understand how a virtualized infrastructure affects their network. For example, virtualization reports identify how virtualized resources are distributed throughout the network, how their numbers evolve over time, and how they affect the traffic and performance figures of physical network devices and the links between them.

Report Guide

virtual machine

1. Switches with Connected Hypervisors

connected virtualized infrastructure.
2. Hypervisor and Virtual Machine Inventory 
Inventory of hypervisors each with a list of configured

4. Switch Traffic by Virtual/Physical Mix

5. Virtual/Physical Host Traffic Mix by View →□ Table of per-view traffic volume totals through switchess based on the virtual/physical host connections. Note that only views with connected hypervisors are included.

6. Virtual/Physical Host Traffic Mix Over Time

7. Virtualization Traffic Trends

3. Impact of Virtualization on Access Switches

Summary of switches, their physical port counts and their

For each switch, four charts plot its number of hypervisors (by vendor), number of virtual machines, physical and virtual traffic and resource utilization. All charts use the

same time-frame, allowing you to correlate changes across all charts.

Table of per-switch traffic volume totals through switches based on the virtual/physical host connections.

Daily traffic for connected virtual/physical hosts over time. This redisplays the information in the Virtualization Perspective in a form suitable for printing.

 $\rightarrow$ 

#### **Virtualization Perspective Options**

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.

Table 427 Hypervisor and Virtual Machine Inventory Options

Name	Description	
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.	
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.	
Report period	Period over which the report applies, up to 31 days. The default is one month. When you select:	
	Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.	
	Range, you can enter start and end dates and times.	
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.	

Table 427 Hypervisor and Virtual Machine Inventory Options

#### Virtualization Perspective Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Echo.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 428 Virtualization Perspective Header

#### **Virtualization Perspective**

Virtualization Perspective includes access to seven virtualization reports through links in the report Guide panel. The Virtual/Physical Host Traffic Mix chart is available in a print friendly format as the Virtual/Physical Host Traffic Mix Over Time report.

Name	Description
Number of Hypervisors and VMs over time	A daily breakdown of hypervisors and virtual machines.
VM Traffic (Mbps) vs Total Traffic (Mbps) over time	Charts inbound and outbound VM traffic (Mbps), alongside total inbound and outbound traffic (Mbps) over the reporting period.

Table 429 Virtual/Physical Host Traffic Mix Summary

# Virtualization Traffic Trends Report

#### Entuity Report Virtualization Traffic Trends



 Description:
 Trends of switch traffic, resource utilization and connected virtualized infrastructure

 Over the period 23:00 on Sun Jun 26 2011 - 23:00 on Mon Jun 27 2011

 No prime time is set for this report
 Printed on: 27 Jun 2011 23:51:21 BST

 View:
 Regional

Sorted by: Switch name

Percentage change compared to the previous report p			ious report pe	riod		
Switch	Traffic (In/Out)	Switch CPU	Switch memory	# Connected Hypervisors	# Connected VMs	# Connected Physical Servers
10.44.2.98	0.0 / 0.0	0.0	0.0	0.0	0.0	0.0
10.66.25.121	-2.1 / 1.0	0.0	0.0	0.0	0.0	0.0
bottom2960	-10.4 / 3.5	-0.5	0.0	0.0	0.0	0.0
bottom3550	0.0 / 0.0	-4.2	0.1	0.0	0.0	0.0
c2950	-60.1 /-0.6	-3.1	0.0	0.0	0.0	0.0
c3560	0.0 / 0.0	-1.4	-0.0	0.0	0.0	0.0
HPCOL1	0.0 / 0.0	0.0	0.0	0.0	0.0	0.0
lonsw01	22.0 / 102.2	0.0	0.0	0.0	0.0	0.0
lonsw02	-0.5 /-1.7	0.0	0.0	0.0	0.0	0.0
lonsw03	-28.5 /-47.1	0.0	0.0	0.0	0.0	0.0
lonsw04	0.0 / 0.0	0.0	0.0	0.0	0.0	0.0
lonsw05	0.3 / 1.3	-2.9	0.0	0.0	0.0	0.0
radium	0.0 / 0.0	0.0	0.0	0.0	0.0	0.0
top3550	0.0 / 0.0	-2.0	0.0	0.0	0.0	0.0

Figure 161 Virtualization Traffic Trends Report

#### Virtualization Traffic Trends Overview

Trends of switch traffic, resource utilization and connected virtualized infrastructure.

#### **Virtualization Traffic Trends Options**

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a sort option	Select the column on which you want to sort the results.

Table 430 Hypervisor and Virtual Machine Inventory Options

Name	Description
Report period	Period over which the report applies, by default the previous twenty-four hours. When you select:
	Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.
	<b>Range</b> , you can enter start and end dates and times.
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 430 Hypervisor and Virtual Machine Inventory Options

#### Virtualization Traffic Trends Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Echo.
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.
Sorted by	Column on which the results are sorted.

Table 431 Virtualization Traffic Trends Header

#### **Virtualization Traffic Trends**

Identifies changes in key metrics when compared to the previous reporting period.

Name	Description
Switch	Name or IP address Entuity uses to manage the device.
Percentage change con	npared to the previous report period
Physical Host Traffic (In/Out Bytes)	Inbound and outbound physical traffic handled by the switch over the reporting period.
Switch CPU	Percentage change in switch CPU utilization.
Switch memory	Percentage change in switch memory utilization.
# Connected Hypervisors	Percentage change in number of hypervisors connected to the switch.
# Connected VMs	Percentage change in number of VMs connected to the switch.

Table 432 Switches with Connected Hypervisors Summary

Name	Description
# Connected Physical Servers	Percentage change in number of VM platforms connected to the switch.

Table 432 Switches with Connected Hypervisors Summary

## vSwitch Inventory Report

#### Entuity Report

vSwitch Inventory

 Printed on:
 15 Nov 2011 11:32:22 GMT

 Description:
 Inventory of vSwitches

 View:
 Regional

#### VM Platform: blade

vS	Switch: vSwitch0 Port Count: 43 (Maximum = 64)		
1	Virtual Port Group: Management Network	VLAN: No VLAN	
	Connection	vNIC	Hypervisor
Ì	MAC: b8:ac:6f:82:5e:c9		

#### Virtual Port Group: Physical Adapters

vNIC	Hypervisor	Switch Port	Switch Name
/mnic0	blade.entuity.local		
/mnic1	blade.entuity.local		

VLAN: N/A

VLAN: No VLAN

#### Virtual Port Group: VM Network

-		*
Connection	VNIC	Hypervisor
MAC: 00:0c:29:d7:a1:6b (skyline)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:e8:74:8b (oracle-em12c)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:58:27:fc (rh64mk)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:15:79:48 (npe-testing)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:54:5a:15 (wintest08)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:27:4b:6d (NFAEE)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:02:1b:4e (NFAEE-Lin)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:cc:ba:d9 (remedy)	Network adapter 1	blade.entuity.local
MAC: 00:50:56:88:00:0b (Jeff?s iSCSI NAS)	Network adapter 1	blade.entuity.local
MAC: 00:50:56:88:00:0a (Jeff?s vCenter 4.1)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:bb:98:4b (bmc-iiws)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:70:29:b5 (bmc-bppm)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:af:dc:d9 (winLicense_mk)	Network adapter 1	blade.entuity.local
MAC: 00:50:56:88:00:09 (RH-PP)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:c5:2c:92 (pvrk)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:2d:fd:ab (win2k8s-ce)	Network adapter 1	blade.entuity.local
MAC: 00:0c:29:d9:83:18 (vcenter5)	Network adapter 1	blade.entuity.local

Figure 162 vSwitch Inventory Report

#### vSwitch Inventory Overview

Inventory of vSwitches by their VM Platform. This report provides a breakdown of vSwitch inventory; their virtual port group's management network, physical adapters and VM network.

Centuity

## vSwitch Inventory Options

Name	Description
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Please select a hypervisor	Select the hypervisor on which you want to run the report, which can be All Hypervisors or a particular hypervisor.

Table 433 vSwitch Inventory Options

#### vSwitch Inventory Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. vSwitch Inventory.
Printed on	Date and time the report was generated.
Description	Description of the report.
View	Entuity view against which the report was run.

Table 434 vSwitch Inventory Header

#### vSwitch Inventory

Details of each hypervisor are included to the report on a separate page. VMs on Oracle hypervisors that are down Entuity groups together as Unassigned.

Name	Description
Hypervisor Details	
Name	Hypervisor name.
Platform	VM Platform
Product	Full name of the virtualization product, which may include its name, version and build number.
Version	Version number of the virtualization product.
Memory	Total memory available to the hypervisor.
Build	Build number of the virtualization product.
CPUs	Total number of CPUs available to the hypervisor.
VM Count	Current number of virtual machines on the hypervisor.

Table 435 vSwitch Inventory Summary

Name	Description
Virtual Machine Details	
VM Name	Virtual Machine Name.
Memory (MB)	Total memory assigned to the VM.
Guest OS	Details of the operating system running on the VM.
Configuration File	Primary configuration file for the virtual machine.

Table 435 vSwitch Inventory Summary

## Virtual/Physical Host Traffic Mix Over Time Report



Figure 163 Virtual/Physical Host Traffic Mix Over Time Report

#### Virtual/Physical Host Traffic Mix Over Time Overview

Daily traffic for connected virtual/physical hosts over time. This displays the information in the Virtualization Perspective in a form suitable for printing.

Name	Description
Output Format	Available output formats for the report, i.e.HTML, PDF, CSV, RTF, TXT, XML, ODF, ODS, DOCX, XLS and XLSX.
Please select an Entuity server	Available when the server acts as a central server in a multi Entuity server environment. From the drop down list you can select one or <b>All Servers</b> to run the report against.
Please select a view	Entuity view against which the report is to be run. From the drop down list you can select one view to run the report against.
Report period	<ul> <li>Period over which the report applies, by default the previous seven days.</li> <li>When you select:</li> <li>Recent, you specify time period in relation to the time the report is run, e.g. one hour before the report time.</li> <li>Range, you can enter start and end dates and times.</li> </ul>
Prime Time	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

#### Virtual/Physical Host Traffic Mix Over Time Options

Table 436 Hypervisor and Virtual Machine Inventory Options

## Virtual/Physical Host Traffic Mix Over Time Header

Name	Description
Company Identifiers	Company icon and name defined through the report format.
Report title	Report title, e.g. IP SLA Echo.
Printed on	Date and time the report was generated.
Description	Description of the report.
Prime Time definition	The time within the reporting period for which the report is applicable, e.g. between 09:00 and 17:00 each day.

Table 437 Virtual/Physical Host Traffic Mix Over Time Header

#### Virtual/Physical Host Traffic Mix Over Time

Name	Description
Number of Hypervisors and VMs over time	A daily breakdown of hypervisors and virtual machines.
VM Traffic (Mbps) vs Total Traffic (Mbps) over time	Charts inbound and outbound VM traffic (Mbps), alongside total inbound and outbound traffic (Mbps) over the reporting period.

Table 438 Virtual/Physical Host Traffic Mix Over Time Summary

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