

## NetExpress Walkthrough

The aim of this is to have a look at the reporting capabilities of the NetExpress and there is a separate demo for the service policies.

To begin with, we will need to generate some traffic for this, so open up a browser and on the home page click *SteelCentral Lab Configuration*. You should receive the following:

The screenshot displays the Riverbed SteelCentral Cloud NetExpress configuration interface. At the top, the header reads "Riverbed SteelCentral Cloud" and "zycko® Inspiring Innovation". The main area shows two WANs, WAN 1 and WAN 2, each with a cloud icon and a "Load Gen" slider. Below each WAN, there are three sliders for "Bandwidth", "Delay", and "Loss", all set to 0. To the right of each WAN, there are two server icons representing service policies: WEB01 and WEB02 for WAN 1, and SQL01 and MSQL01 for WAN 2. Above and below each WAN, there are two "OFF" buttons and a "CPU MEM" indicator. At the bottom, there are two buttons: "Apply" and "Reset".

On the left side of the screen click the slider below *Load Gen* and drag it to the right and then click *Apply*. After a short pause you should see the following dialogue box:

The screenshot shows a dialog box titled "Running Configuration". The dialog box is light gray and contains a single "OK" button in the center.

Click *OK*.

**Please leave this webpage open while the configuration is running**

Now, return to the home page and click the *SteelCentral NetExpress* link and login with a username of *admin* and a password of *password*.

Navigate to the top of the window and in the Quick report text box enter *172.40.2.20* and click *Go*:

Quick report:

You should see something which resembles the following:

Host Information Report

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Host Information Report (Jan 5, 2015, 1:30 PM - 2:30 PM), by 15 Minutes Intervals

**riverbed** Reporting on Host 172.40.2.20

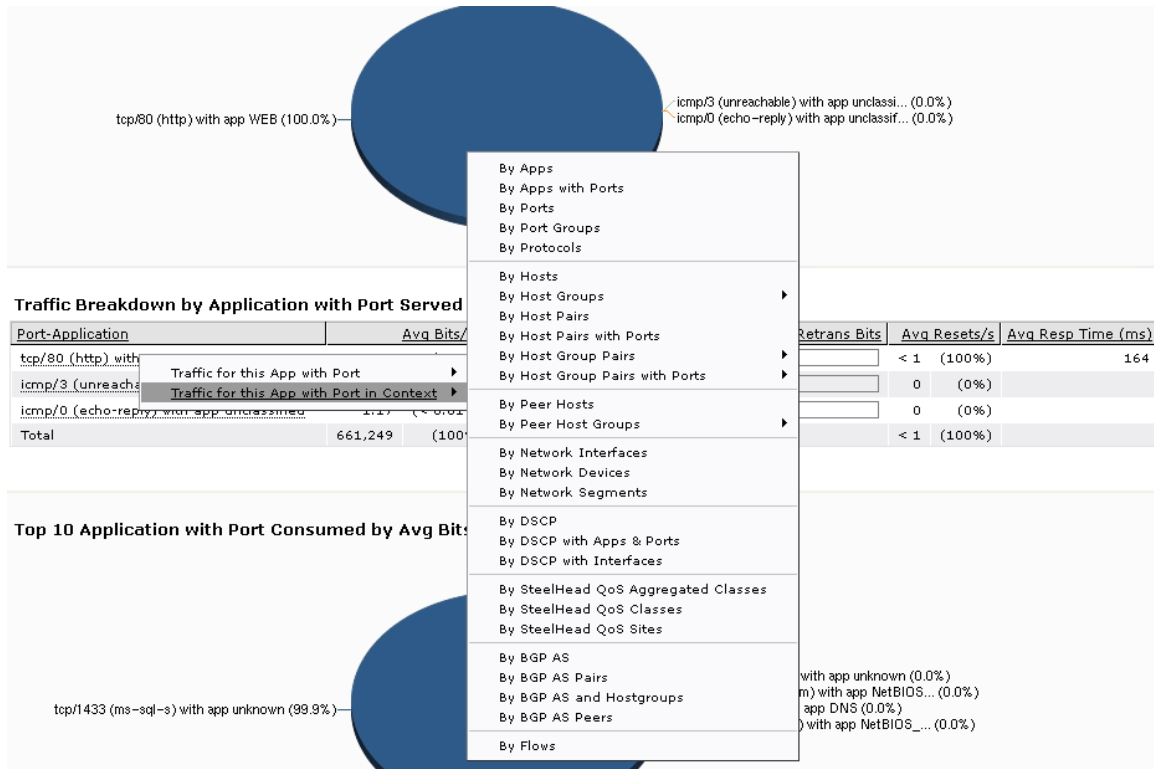
Host Information	Traffic Summary	Host Groups 1 - 2 of 2
Host IP: <a href="#">172.40.2.20</a> Host: <a href="#">web01</a> MAC: MAC Source: MAC Time: First Seen: Nov 20, 2014 3:12 PM Host Switch Info:	Avg Bits/s (Rx): 49,657 Avg Bits/s (Tx): 648,160 Peak Bits/s (Rx): 54,437 Peak Bits/s (Tx): 702,612 Avg Active Connections/s: < 1 Peak Active Connections/s: < 1 Avg App Bits/s per Conn: 22,304 Peak App Bits/s per Conn: 1,608,000 Avg Conn Duration: 1 minute 33 seconds Peak Conn Duration: 1 hour 41 minutes	<input type="button" value="Group +"/> <a href="#">ByInternalHosts:All</a> <a href="#">ByLocation:Webservers</a>

Traffic Volume by Avg Bits/s

The bits transmitted exceed the bits received as this is a web server. Navigate through the report, showing the main ports consumed (1433 for SQL) and the ports served (80 – this is a web server afterall) with the clients connecting to it.

Expand the *Conversations* section showing who is connected and how much traffic has been transmitted.

We can drill down from this report to give even further detail. Go to *Traffic Breakdown by Application with Port Served* and then right click the top line. Select *Traffic for this App in Context > By Host Pairs* as shown:



In the resulting report expand the *Report Criteria* and then select *Pie Chart* and click *Run now*:

Report by:   Break out MAC-IP assignments [?](#)

▼ Report Format

- Overall traffic graph
- Time chart
- Pie chart
- Bar chart
- Summary table
- Connection graph
- Flow list

Historical detail:  Security profile:

Time frame:

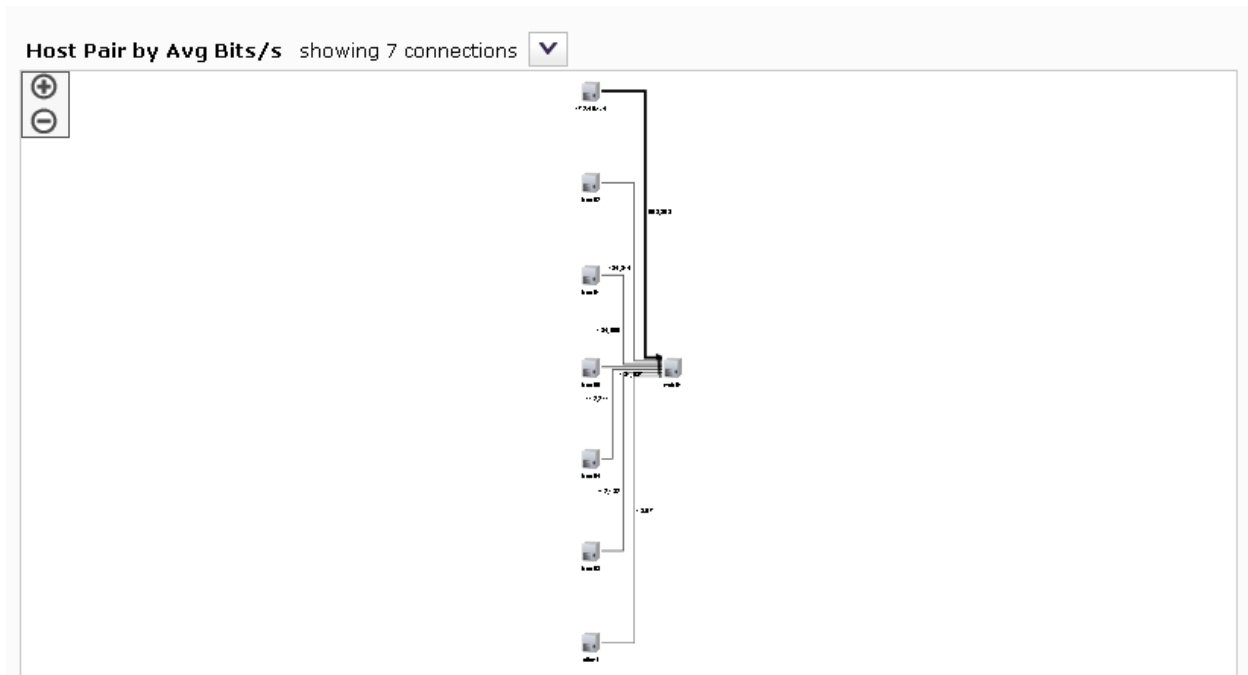
Starting  Hour(s) ago

From:

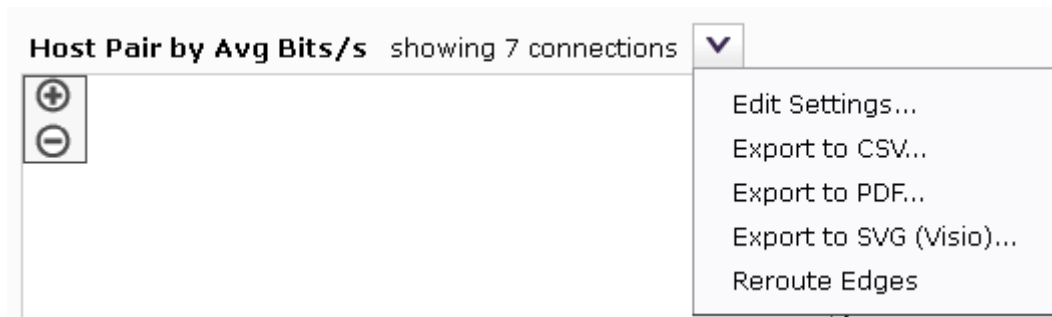
To:

Data resolution:  [?](#)

Show the time and pie charts and then scroll down to the connection diagram near the bottom of the report. This should look like the following:



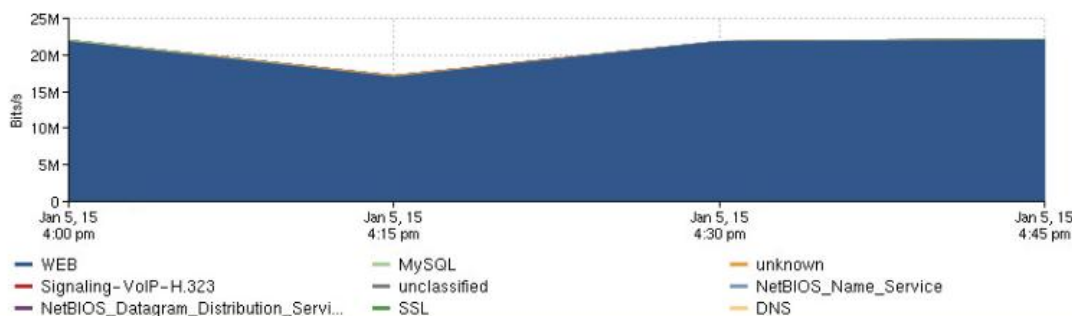
Use the + and - to zoom in and out, the line thickness represents traffic.



Select *Export to PDF*. it is easy to create connection graphs detailing dependencies.

We are mostly running HTTP traffic on this network and we can show the top applications here very easily. Go to *Reports -> Top Talkers* and then select *Top applications*. You should see something similar to the following:

### Top 10 Applications by Avg Bits/s

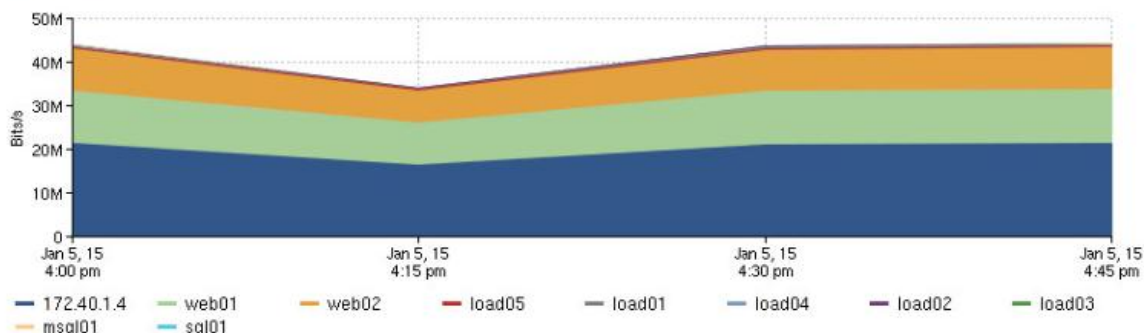


### Application 1 - 9 of 9

Application	Avg Bits/s	Avg Packets/s	Avg Active Connections/s	Avg Net RTT (ms)	Avg Server Delay (ms)
WEB	20,490,417 (100%)	25,018 (100%)	455.99 (100%)	< 1	4
MySQL	60,829 (< 1%)	21.22 (< 1%)	< 1 (< 1%)	< 1	< 1
unknown	36,278 (< 1%)	15.09 (< 1%)	< 1 (< 1%)	< 1	102
Signaling-VoIP-H.323	672.43 (< 0.01%)	< 1 (< 0.01%)	< 1 (< 0.01%)	< 1	< 1
unclassified	134.25 (< 0.01%)	< 1 (< 0.01%)	< 1 (< 0.01%)	< 1	< 1
NetBIOS_Name_Service	26.52 (< 0.01%)	< 1 (< 0.01%)	< 0.01 (< 0.01%)	< 0.01	< 0.01
NetBIOS_Datagram_Distribution_Service-CIFS	10.18 (< 0.01%)	< 0.01 (< 0.01%)	< 0.01 (< 0.01%)	< 0.01	< 0.01
SSL	1.21 (< 0.01%)	< 0.01 (< 0.01%)	< 0.01 (< 0.01%)	< 0.01	< 0.01
DNS	< 1 (< 0.01%)	< 0.01 (< 0.01%)	< 0.01 (< 0.01%)	< 0.01	< 0.01
Total	20,588,370 (100%)	25,055 (100%)	456.31 (100%)		

We can also show the top hosts by going to the top of this report, expanding *Report Criteria* and selecting *Top Hosts*:

### Top 10 Hosts by Avg Bits/s



### Host 1 - 16 of 16

Host	Group	Avg Bits/s	Avg Packets/s	Avg Active Connections/s	Avg Net RTT (ms)
172.40.1.4	Datacentre	19,727,251 (48%)	24,922 (50%)	455.09 (50%)	< 1
web01	Webservers	11,503,903 (28%)	10,412 (21%)	227.00 (25%)	< 1
web02	Webservers	9,084,216 (22%)	14,642 (29%)	229.26 (25%)	< 1
load05	Datacentre	169,946 (< 1%)	21.44 (< 1%)	< 1 (< 1%)	< 1
load01	Datacentre	156,886 (< 1%)	19.80 (< 1%)	< 1 (< 1%)	< 1
load04	Top Talkers - Riverbed SteelCentral NetExpress Virtual Edition: cascade-express-VE - Google Chrome	19 (< 1%)	< 1 (< 1%)	< 1 (< 1%)	< 1
load02	Top Talkers - Riverbed SteelCentral NetExpress Virtual Edition: cascade-express-VE - Google Chrome	19 (< 1%)	< 1 (< 1%)	< 1 (< 1%)	< 1
load03	Datacentre	19 (< 1%)	< 1 (< 1%)	< 1 (< 1%)	< 1
msq01	Datacentre	19 (< 1%)	< 1 (< 1%)	< 1 (< 1%)	< 1
sql01	Datacentre	19 (< 1%)	< 1 (< 1%)	< 1 (< 1%)	< 1
224.0.0.252	Unass	< 0.01% (< 0.01%)	< 1 (< 0.01%)	< 1 (< 0.01%)	< 1
wan2-p1	Webservers	< 0.01% (< 0.01%)	< 0.01 (< 0.01%)	< 0.01 (< 0.01%)	< 1
172.40.3.3	Datacentre	< 0.01% (< 0.01%)	< 0.01 (< 0.01%)	< 0.01 (< 0.01%)	< 1
172.40.2.3	Datacentre	< 0.01% (< 0.01%)	< 0.01 (< 0.01%)	< 0.01 (< 0.01%)	< 1
Firewall	Datacentre	< 0.01% (< 0.01%)	< 0.01 (< 0.01%)	< 0.01 (< 0.01%)	< 1

Once finished, we should stop generating traffic so click back on the *SteelCentral Lab Configuration*, and click on the Running Button (It should change when you hover over it to “Stop”) this will stop the load generation. Wait for the confirmation message, press OK and then Click Reset.

### **Resetting the lab**

If for any reason you close the Lab Configuration Window, to reset it, hit Reset, then click Apply, wait for the confirmation, and then press Stop. This will reset any running configuration.