Lightning Talk

Alternate power sources for Internet Exchanges

Anycasting the Olympics

TVNZ - CityLink joint effort
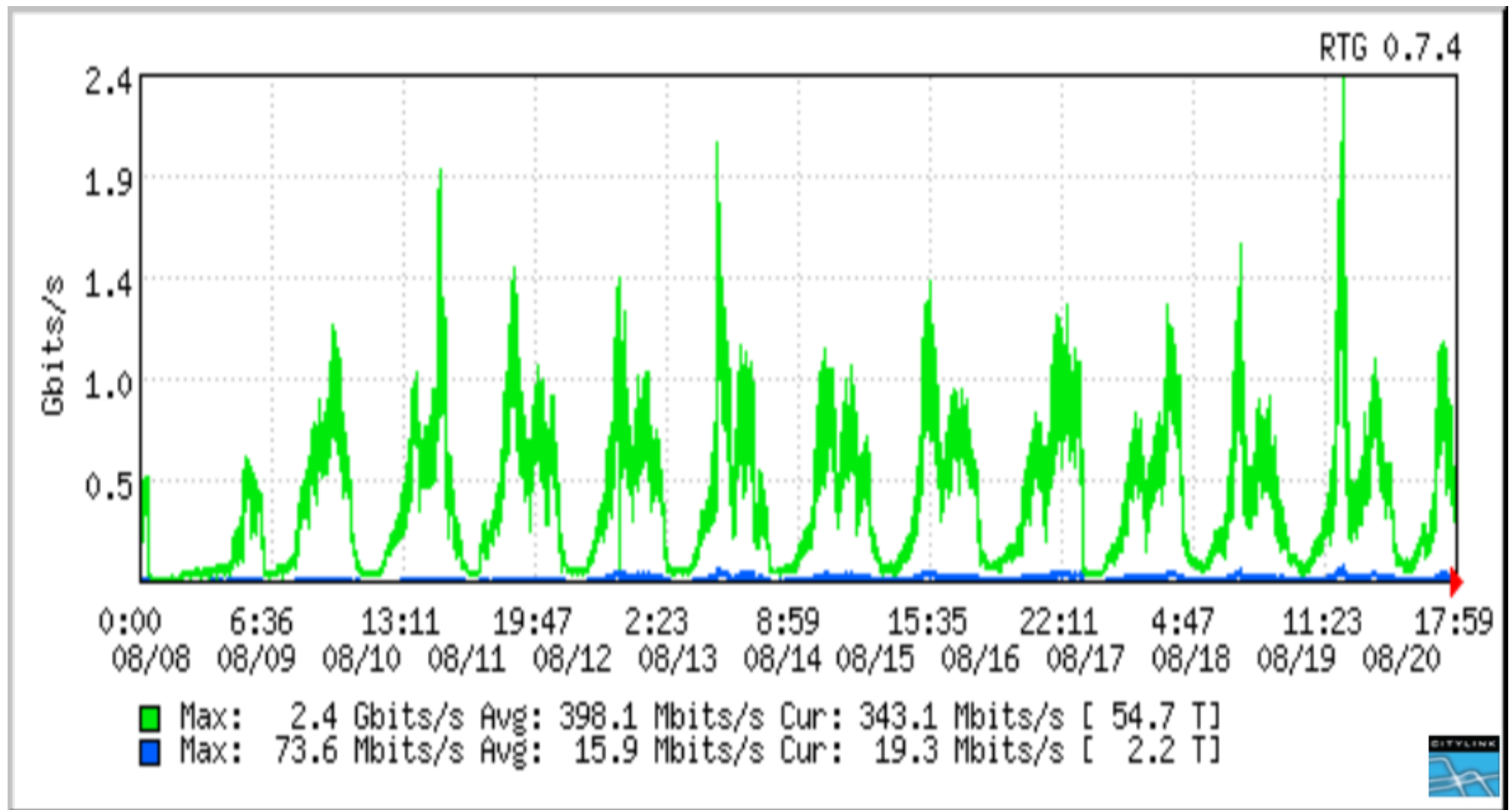
Platform

Nodes in:
  San Francisco - PAIX
  Auckland - APE
  Wellington - WIX
  Christchurch - CHIX
Using Anycast, GeoIP, Linux load
balancing, Windows Server 2008

Daily traffic on Auckland node

RTG 0.7.4

Gbits/s

2.4	
1.9	
1.4	
1.0	
0.5	

0:00   6:36   13:11   19:47   2:23   8:59   15:35   22:11   4:47   11:23   17:59
08/08 08/09 08/10 08/11 08/12 08/13 08/14 08/15 08/16 08/17 08/18 08/19 08/20

Max: 2.4 Gbits/s Avg: 398.1 Mbits/s Cur: 343.1 Mbits/s [54.7 T]
Max: 73.6 Mbits/s Avg: 15.9 Mbits/s Cur: 19.3 Mbits/s [2.2 T]

CITYLINK

Peak load

Olympics peak load was on Tuesday at 3:40pm (around the time the men's triathlon finished, and NZ played Germany in the men's hockey):

    Akld: 2.4Gb/s

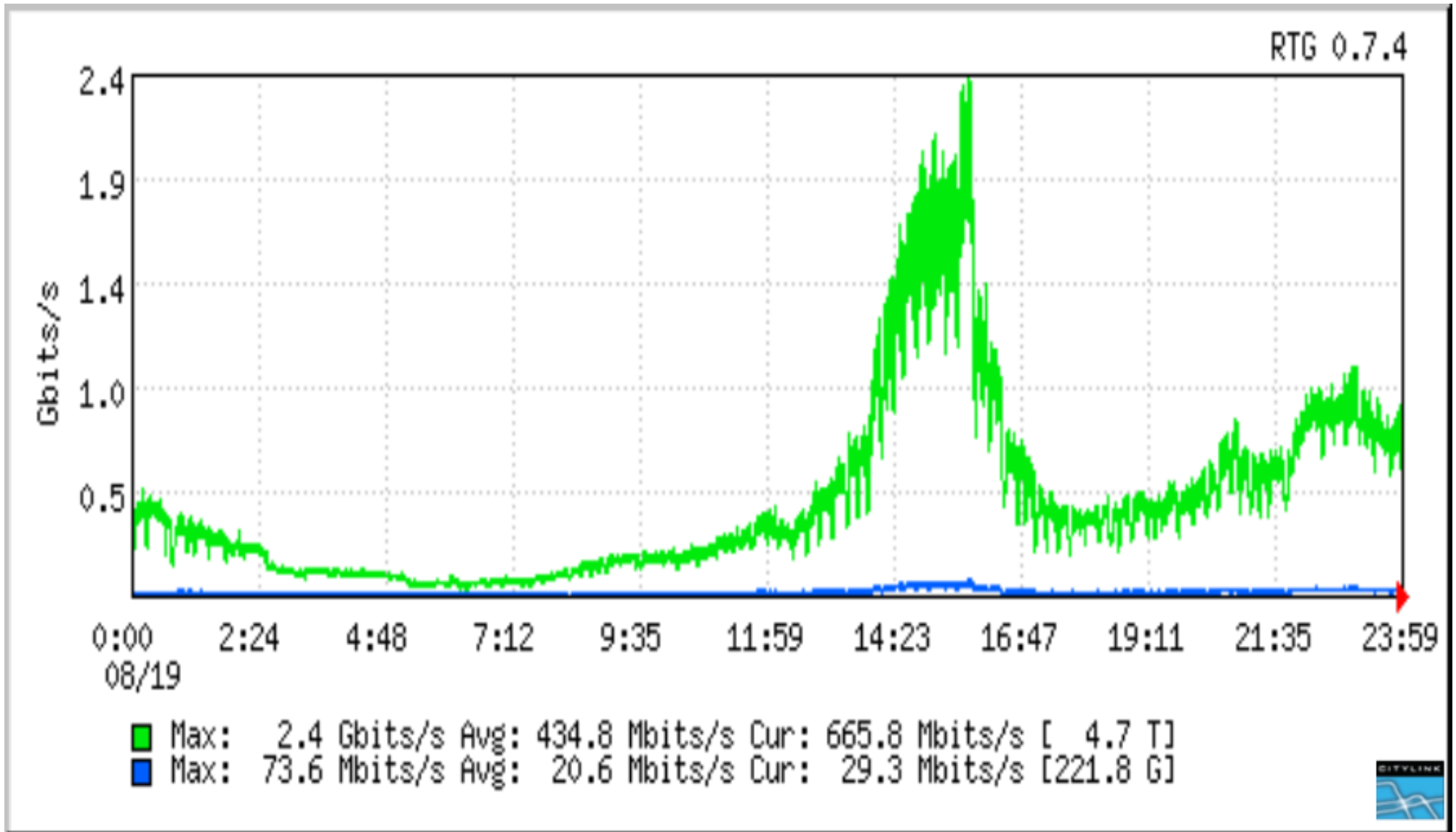   Orcon: 365Mb/s

    Wlg: 1.3Gb/s

    Chch: 625Mb/s

    SFO: 510Mb/s

Peak load (contd)

Sums to about 5.2Gb/s, which I'm guessing would be the most traffic moved for a single event on the Internet in NZ.
Daily peaks over the fortnight were 1.5-2Gb/s, with most consumption during business hours (so we didn't get much load on "super saturday")

Peak traffic on Auckland node

Bytes moved

Overall, we've moved
   Akld: 54 TB
   Orcon: 6.5 TB
   Chch: 11 TB
   Wlg: 14 TB
   SFO: 8 TB

So around 95 TBytes of data moved up until last Friday morning - that's equivalent to almost 5000 20GByte monthly data caps.

Data caps are evil!

We actually engineered deliver 10-15Gb/s, the difference is probably people being scared off from consuming the Olympics content because of their traffic caps.