

A wide-angle photograph of the Seoul skyline at dusk. The sky is a mix of light blue and pink. The city lights are visible, with the most prominent building being the Lotte World Tower, which is illuminated with blue and white lights. Other buildings are also lit up, and the city lights reflect on the water in the foreground. The overall scene is a vibrant and modern cityscape.

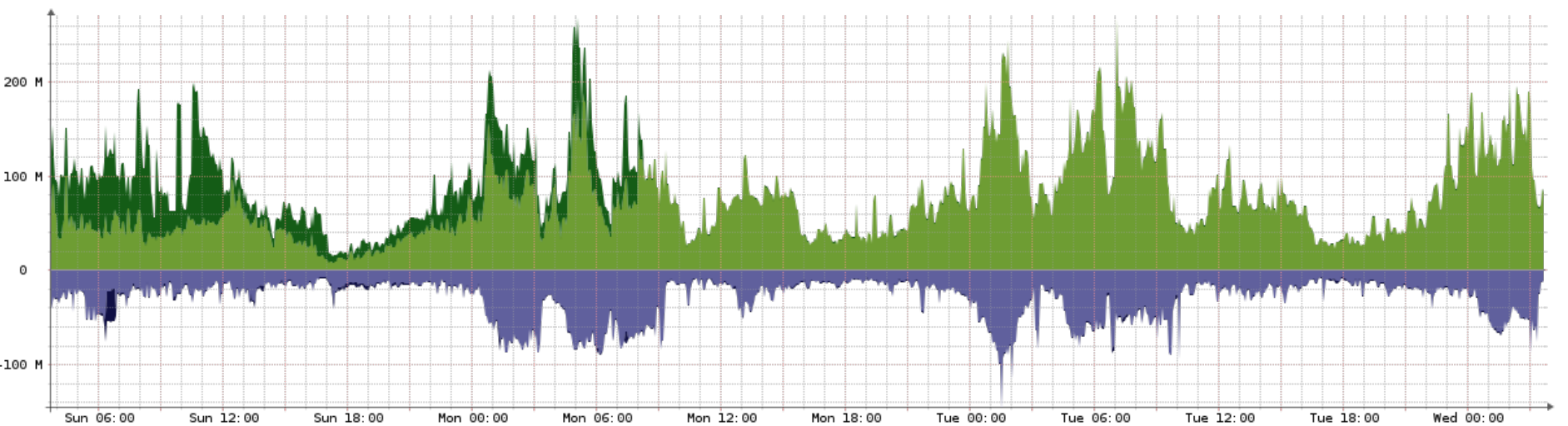
IETF 97: Seoul

NOC Report

Network Basics

- 2 Dedicated 1Gbps circuits; one donated by NTT and one purchased from SK Telecom.
- Two Cisco 5520 Wireless LAN Controllers and Forty Three 802.11ac Cisco Access Points.
- IETF network extended to the hotel guest rooms via the “Conrad_Seoul” SSID broadcast on hotel infrastructure.

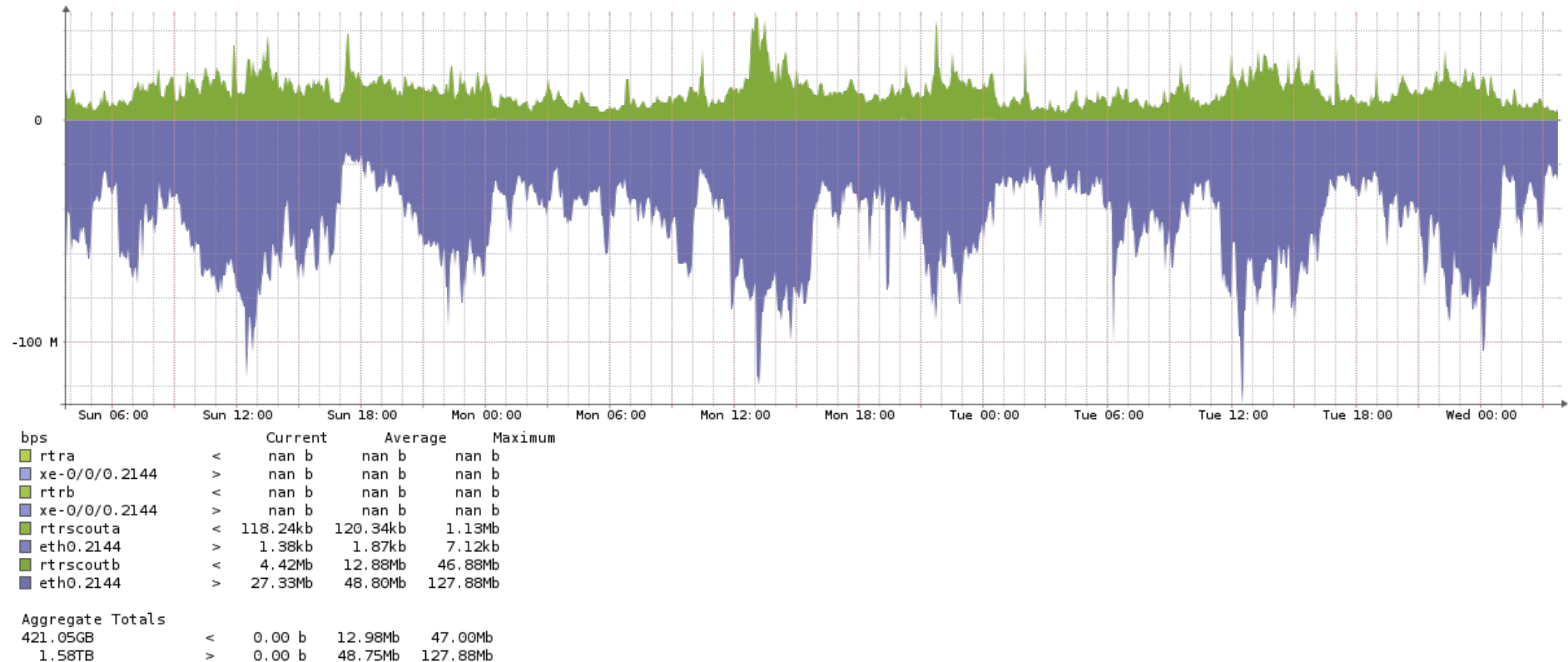
External Traffic



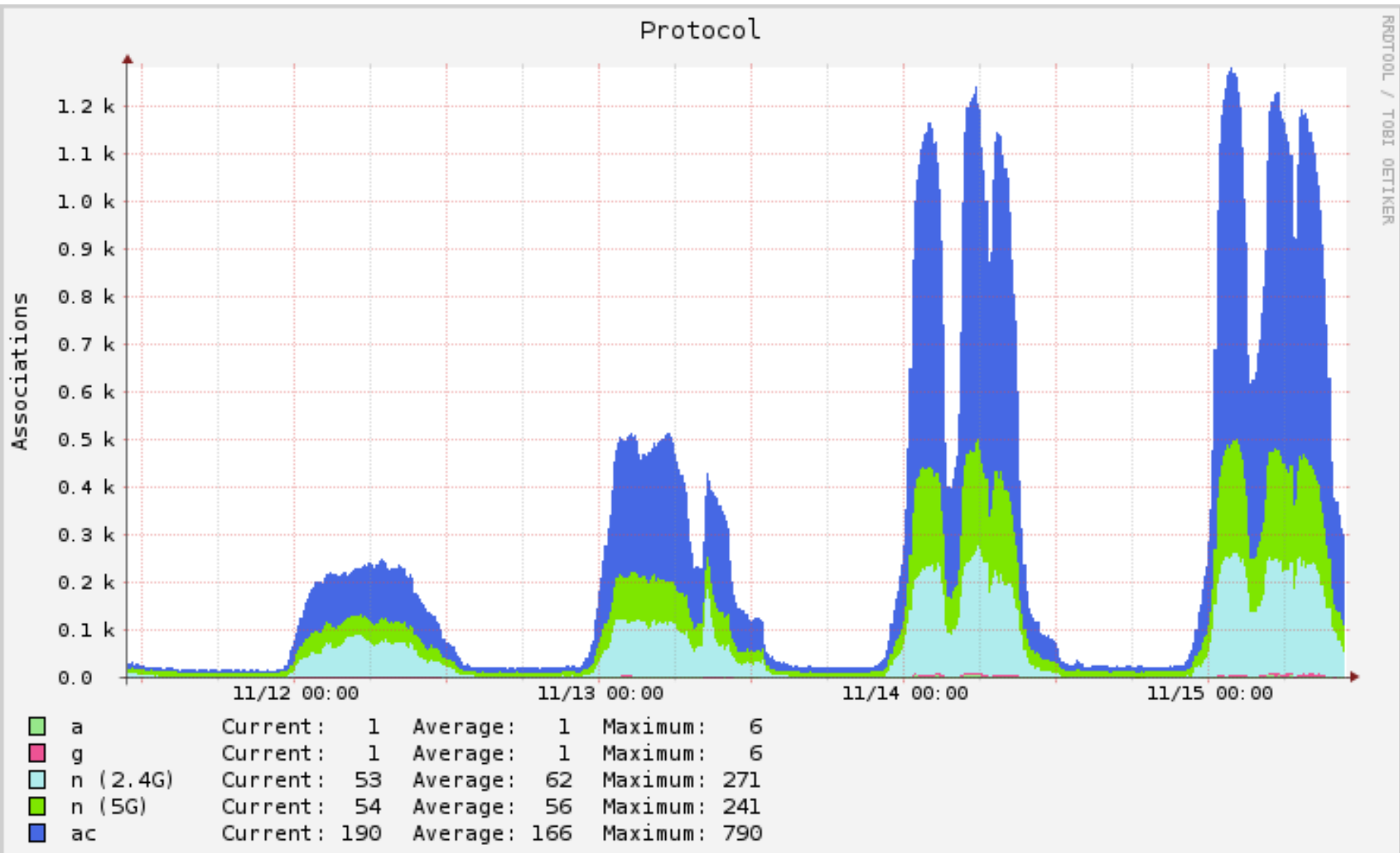
bps		Current	Average	Maximum	Total
rtra	<	0.00 b	0.00 b	0.00 b	0.00 B
ge-1/1/2	>	0.00 b	0.00 b	0.00 b	0.00 B
rtrb	<	0.00 b	0.00 b	0.00 b	0.00 B
ge-1/1/2	>	0.00 b	0.00 b	0.00 b	0.00 B
rtrscouta	<	0.00 b	0.00 b	0.00 b	0.00 B
eth5	>	0.00 b	0.00 b	0.00 b	0.00 B
rtrscoutb	<	0.00 b	0.00 b	0.00 b	0.00 B
eth5	>	0.00 b	0.00 b	0.00 b	0.00 B
rtra	<	82.41Mb	72.73Mb	267.32Mb	18.87TB
ge-1/1/0	>	12.39Mb	30.75Mb	145.29Mb	7.98TB
rtrb	<	0.00 b	0.00 b	0.00 b	0.00 B
ge-1/1/0	>	0.00 b	0.00 b	0.00 b	0.00 B
rtrscouta	<	0.00 b	0.00 b	0.00 b	0.00 B
eth7	>	0.00 b	0.00 b	0.00 b	0.00 B
rtrscoutb	<	0.00 b	0.00 b	0.00 b	0.00 B
eth7	>	0.00 b	0.00 b	0.00 b	0.00 B
rtra	<	0.00 b	0.00 b	0.00 b	0.00 B
ge-1/1/1	>	0.00 b	0.00 b	0.00 b	0.00 B
rtrb	<	1.52kb	15.24Mb	144.83Mb	3.96TB
ge-1/1/1	>	49.99kb	593.88kb	33.59Mb	154.11GB
rtrscouta	<	0.00 b	0.00 b	0.00 b	0.00 B
eth6	>	0.00 b	0.00 b	0.00 b	0.00 B
rtrscoutb	<	0.00 b	0.00 b	0.00 b	0.00 B
eth6	>	0.00 b	0.00 b	0.00 b	0.00 B

Aggregate Totals				
2.85TB	<	82.41Mb	87.98Mb	267.68Mb
1.02TB	>	12.44Mb	31.35Mb	145.37Mb

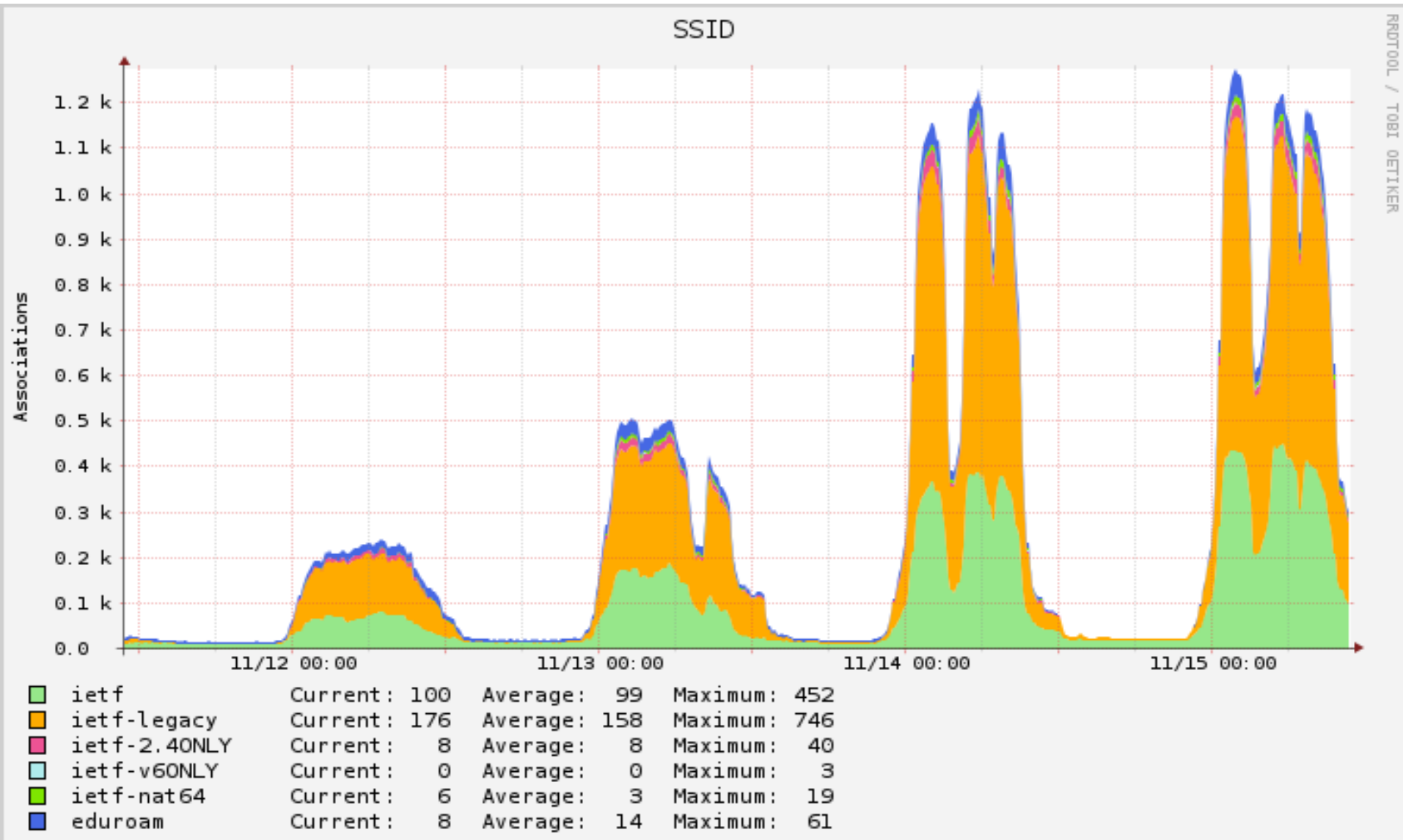
Aggregate Hotel Traffic



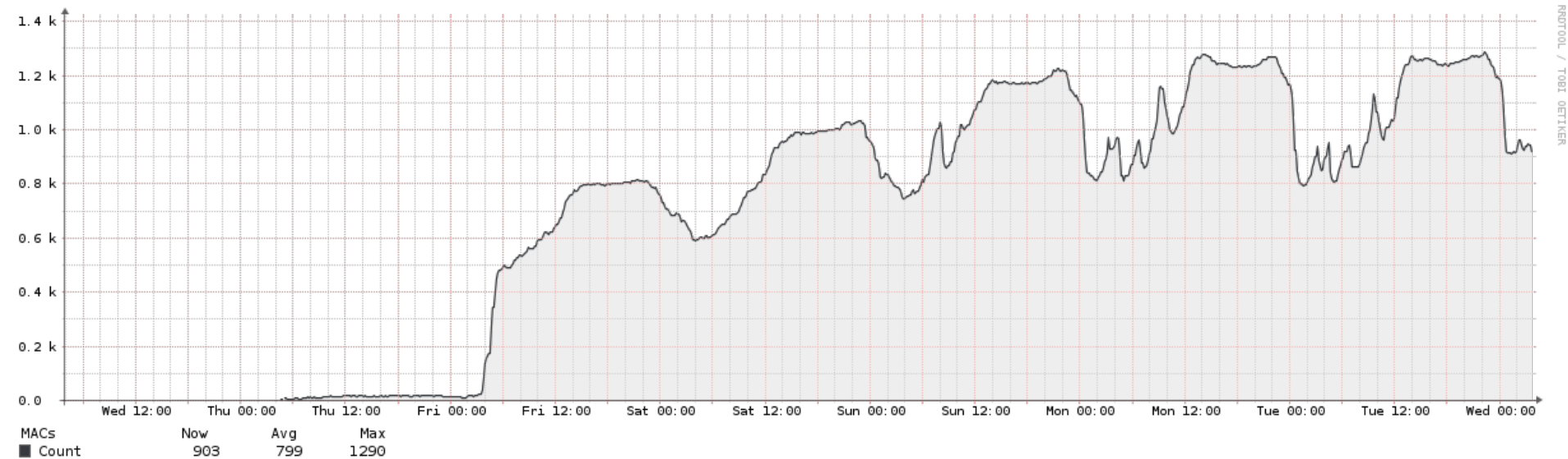
Wireless Associations (by protocol)



Wireless Associations (by SSID)



Guestroom MAC Addresses

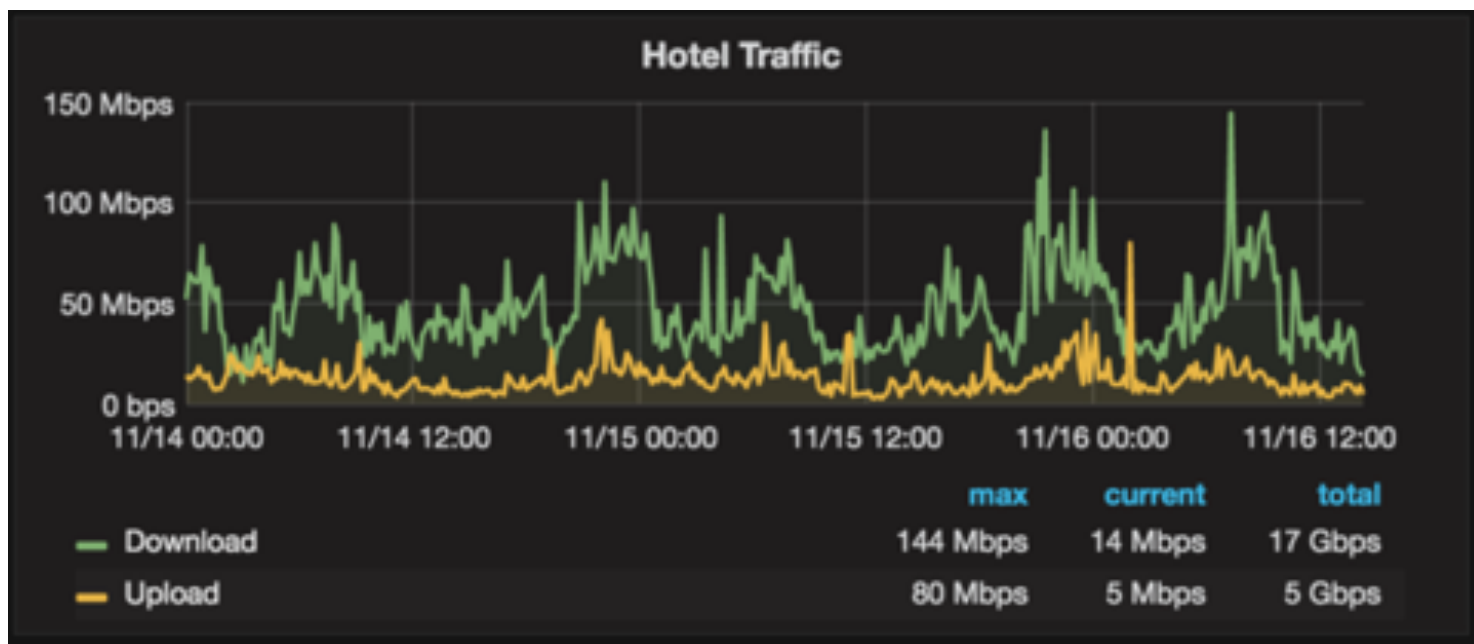
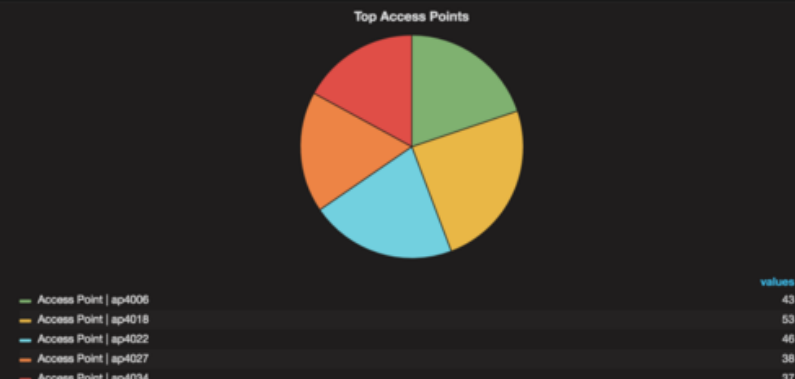
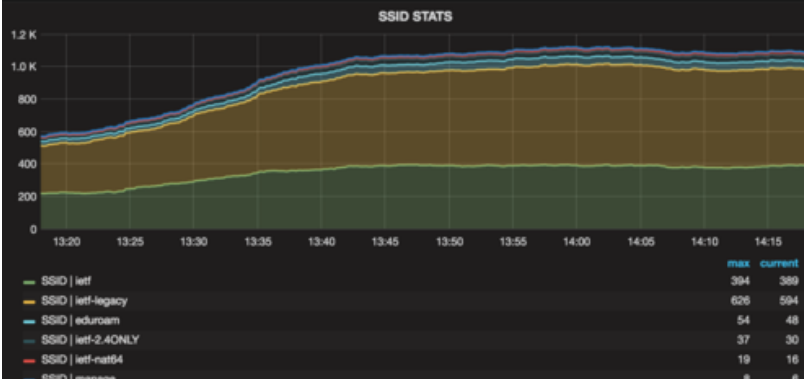


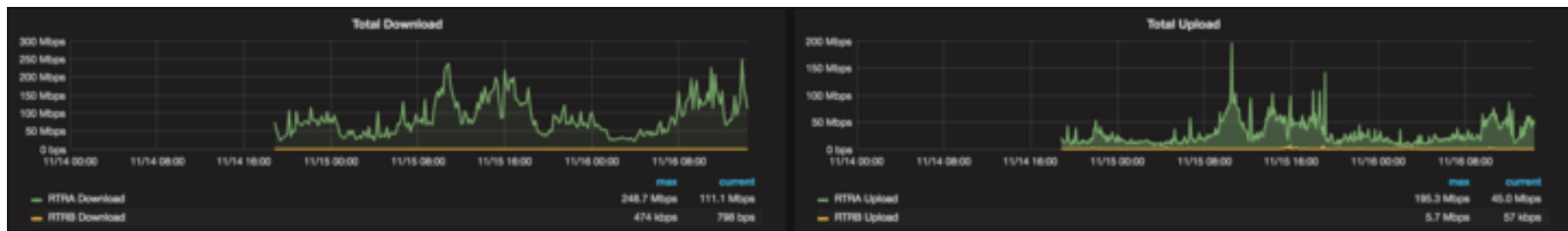
What's New

- Implemented Cisco CleanAir to proactively manage the RF environment.
- We have further expanded our monitoring tools to track the wired and wireless network environment.
- Started using Prometheus/Grafana to visualize and monitor various aspects of the network (see following slides)

11-16-2016
14:18:13

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Plenary Access Points



Network Team

IETF NOC Team Volunteers:

- Hirochika Asai (The University of Tokyo/WIDE)
- Randy Bush (IIJ)
- Joe Clarke (Cisco)
- Colin Doyle (Right! Systems Inc)
- Bill Fenner (Arista)
- Joel Jaeggli (Fastly)
- Bill Jensen (University of Wisconsin–Madison)
- Hans Kuhn (NSRC)
- Lucy Lynch (NSRC)
- Jim Martin (INOC)
- Rob Nagy (DeepDive Networking)
- Karen O'Donoghue (ISOC)
- Clemens Schrimpe

Verilan:

- James Dishongh
- Geofry Glenn
- Reid Kells
- Nick Kukich
- Con Reilly

Thank You

- NTT
 - Connectivity
- Cisco
 - Gear contribution
- Juniper
 - Gear contribution
- A10 Networks
 - Gear contribution
- V6Sonar
 - Software contribution
- Netbeez
 - Gear contribution
- OSC Radiator
 - Licensing
- Ubiquiti Networks
 - Gear contribution



And our friends here at the Conrad Seoul.