



Final Network Services Report

November 16, 2018

Event: IEEE 802 Plenary Session

Venue: Marriott Marquis Queen's Park, Bangkok, Thailand

Dates: November 12-16, 2018

SUMMARY

Linespeed Events, LLC is providing comprehensive wired and wireless network services in 25 meeting rooms, foyers and offices on all floors of the Marriott Marquis Queen's Park Hotel (MMQP). Linespeed is also providing a local document server synchronized in near real time with mentor.ieee.org.

The local area network (LAN) supporting the meeting space is comprised of five intermediate distribution frames (IDFs) cross connected with redundant 10Gb fiber to the main distribution frame (MDF). Linespeed's wireless local area network (WLAN), comprised of 45 IEEE 802.11 a/g/n/ac Wave 2 compliant access points, is currently providing Wi-Fi connectivity to more than 2000+ unique devices (laptops, tablets, smartphones, smartwatches, etc.) at this session. The WLAN deployment is shown in Figure 1.

IETF contracted with NTT and TRUE to provision two temporary 1000M Internet circuits at the MMQP for use during the IETF 103 Meeting held the week before. IETF graciously allowed Linespeed to extend the duration of the circuits, so they could be used for the IEEE 802 Plenary Session. The IETF IPv4 DHCP server pool was comprised of 5000+ public addresses coming from two CIDR address blocks (/20 & /22) provided by IETF. Linespeed also provisioned native IPv6 connectivity for all attendees.

Linespeed provisioned the network with redundant routers in addition to a 10Gb LAN backbone comprised of redundant core, distribution and edge switches configured for instant failover in case of outage.

Linespeed tested all Cat5 copper connections interconnecting IDFs and meeting room ports prior to deploying network hardware in the meeting space.

Inbound and outbound bandwidth utilization for the session are shown in Figures 2 and Figure3.

Linespeed also took over the MMQP guest room and public wireless infrastructure to allow attendees to take advantage of the bandwidth provisioned for IETF. The two NTT and TRUE circuits were connected to the hotel wireless infrastructure to create an open wireless network with the SSID ietf-hotel available throughout the hotel. The ietf-hotel wireless network remained up throughout the duration of the IEEE 802 Plenary Session.

ISSUES

We are pleased to report that there were no network related problems or issues reported to the Network Help Desk or Linespeed staff during this session. As expected, increased latency was experienced with traffic to North American sites. This was due to the transit distance and large number of hops comprising the routing paths.

WLAN DEPLOYMENT

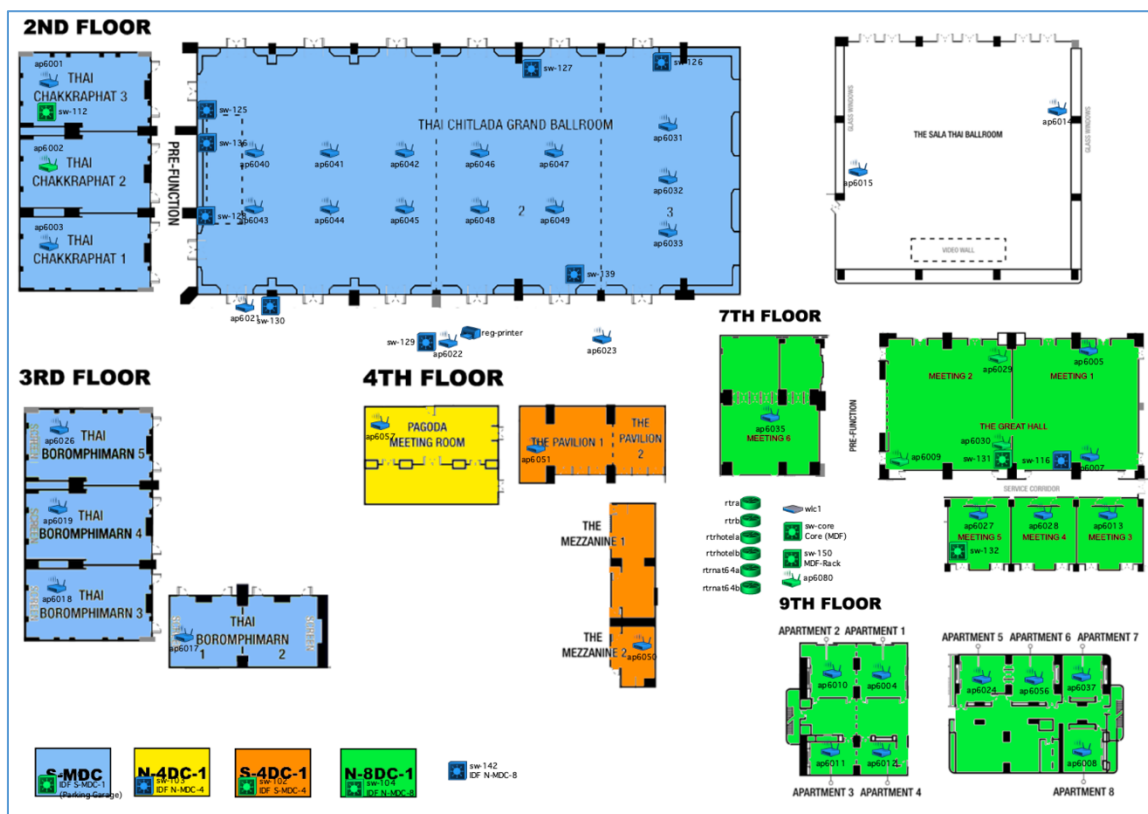


Figure 1. Forty-five access points were deployed throughout the meeting space.

BANDWIDTH UTILIZATION

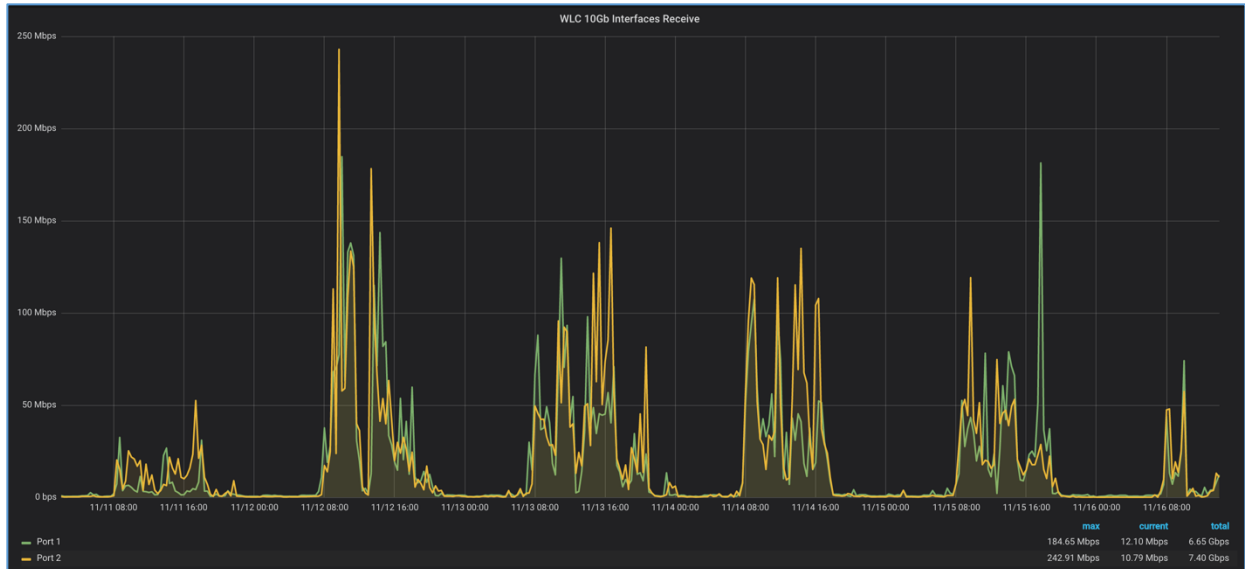


Figure 2. Inbound bandwidth utilization.

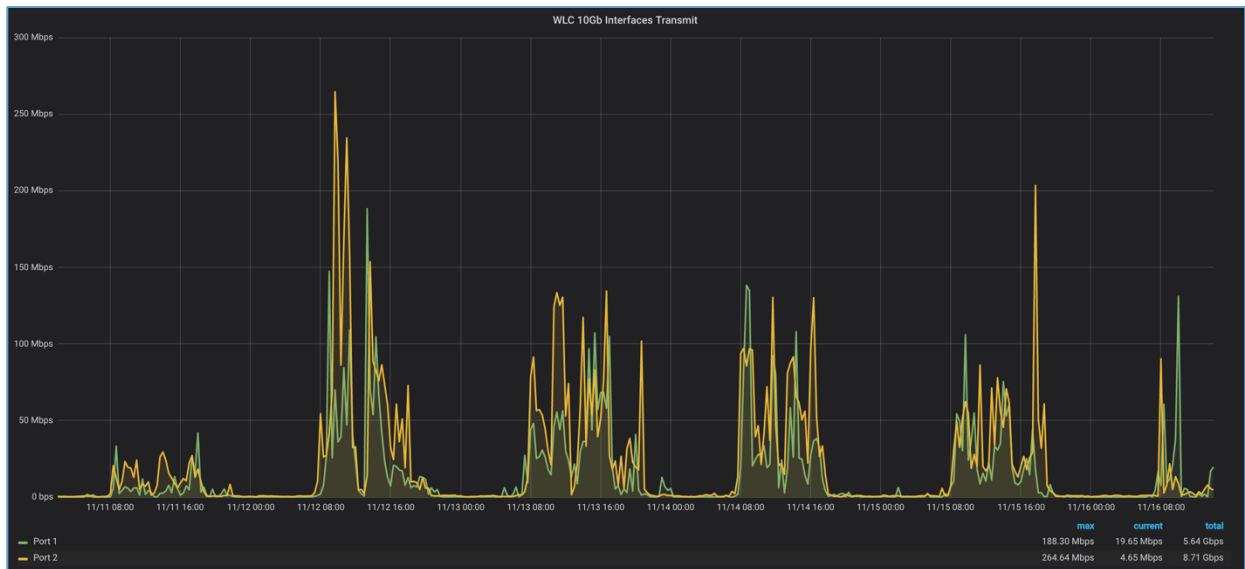


Figure 3. Outbound bandwidth utilization.