IEEE 802 Plenary Session

Hilton Waikoloa Village
Waikoloa, HI

Mid-Session Network Services Report

July 15th, 2015

Summary

Verilan, Inc. is providing comprehensive network services for the IEEE 802 July 2015 Plenary session at the Hilton Waikoloa Village (HWV) in Waikoloa, HI.
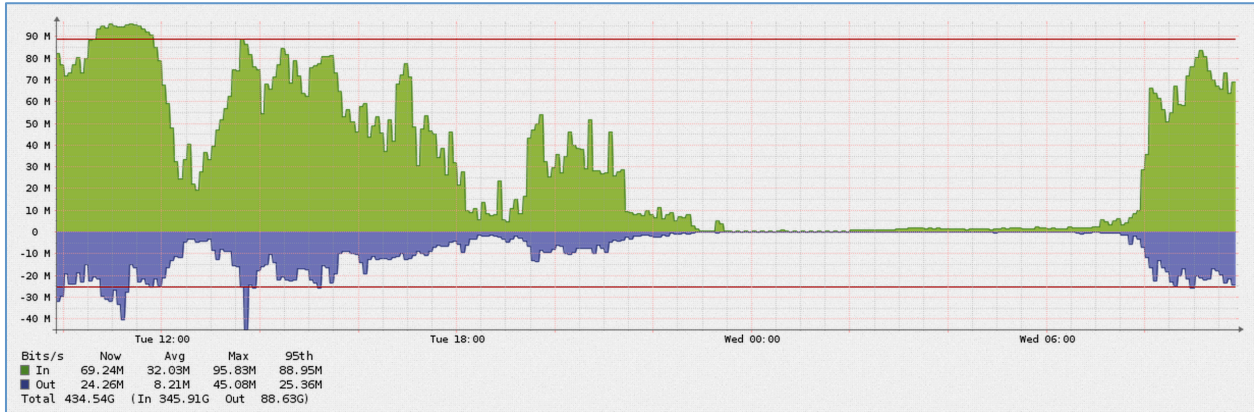
We are pleased to report that after a full infrastructure deployment, the network is now fully operational and supporting in excess of 1400 unique wireless devices including, laptops, tablets, smartphones, at al.

The Verilan Network Help Desk, located in the Grand Promenade of the Conference Center, is providing support for all attendees during all scheduled meeting hours. All Help Desk client support requests have been addressed and fully resolved by the Verilan staff.
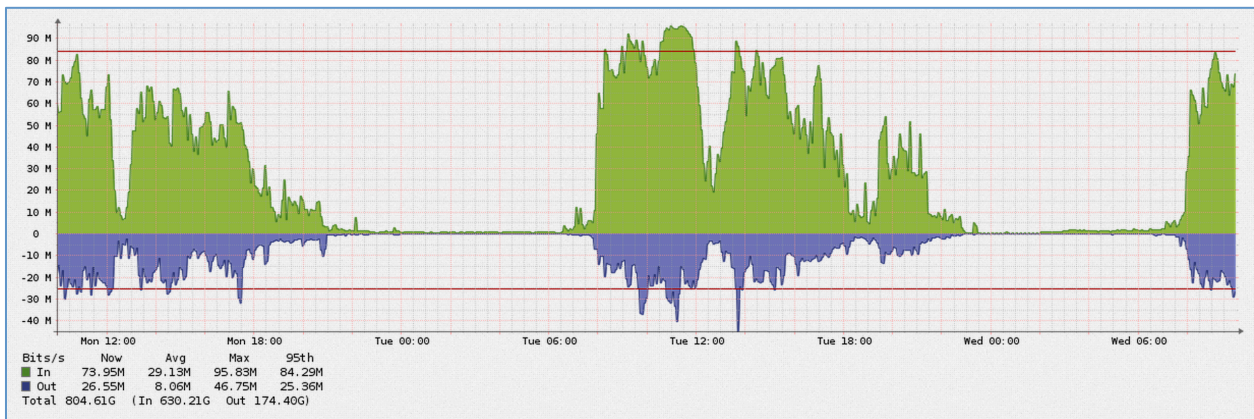
The Hilton Waikoloa Village meeting space and conference center is provisioned with a 1-Gigabit fiber Internet circuit from Oceanic Time Warner, capped at 200Mbps. IEEE 802 contracted for 45Mbps of high speed Internet service (HSIA) for this plenary session. The Hilton Waikoloa Village generously provided us with shared access to the 200Mbps Internet circuit.

Comprehensive LAN and WLAN infrastructure including managed layer 3 switches were configured and deployed in the MDF, IDFs and 26 meeting rooms located in the Ocean Tower, Palace Tower and the HWV Conference Center. A total of eight IDFs were interconnected to the MDF via copper and OM1 optical links.
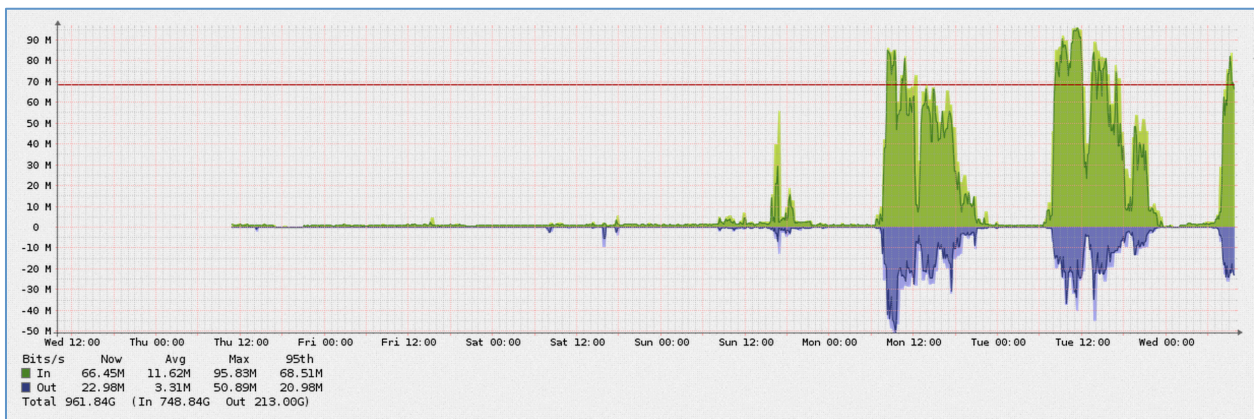
Peak inbound Internet bandwidth recorded during this session is currently 95.83Mbps. The 95th percentile bandwidth utilization over the past 24 hours is 88.95Mbps. The average throughput inbound data rate measured over the past 24 period is 32.03Mbps. The average throughput outbound data rate measured over the past 24 hour period is 8.21Mbps. Internet usage for the last 24 hour period is shown in Figure 1. Internet usage for the last 48 hour period is shown in Figure 2. Internet usage for the past seven days is shown in Figure 3.

Figure 1. Internet Usage: 24 hour period

Figure 2. Internet Usage: 48 hour period

Figure 3. Internet Usage: 7 day period

Network Issues

We are pleased to announce that this has been a trouble free deployment with no network issues being reported.

Network Deployment & Coverage

Verilan deployed a full Gigabit Ethernet LAN and a WLAN comprised of 52 enterprise grade tri-modal IEEE 802.11a/g/n wireless access points throughout the Hilton Waikoloa Village and Conference Center providing coverage for all IEEE 802 meeting spaces. Verilan is providing a secure (WPA2-PSK) network for all registered attendees. The location of WAP deployments is shown in Figure 4.

Verilan also provided a separate wireless network, VLAN and address space to facilitate the continuation of the MAC address randomization experiment for IEEE 802 Privacy EC, which is also being run at IETF and NANOG meetings.
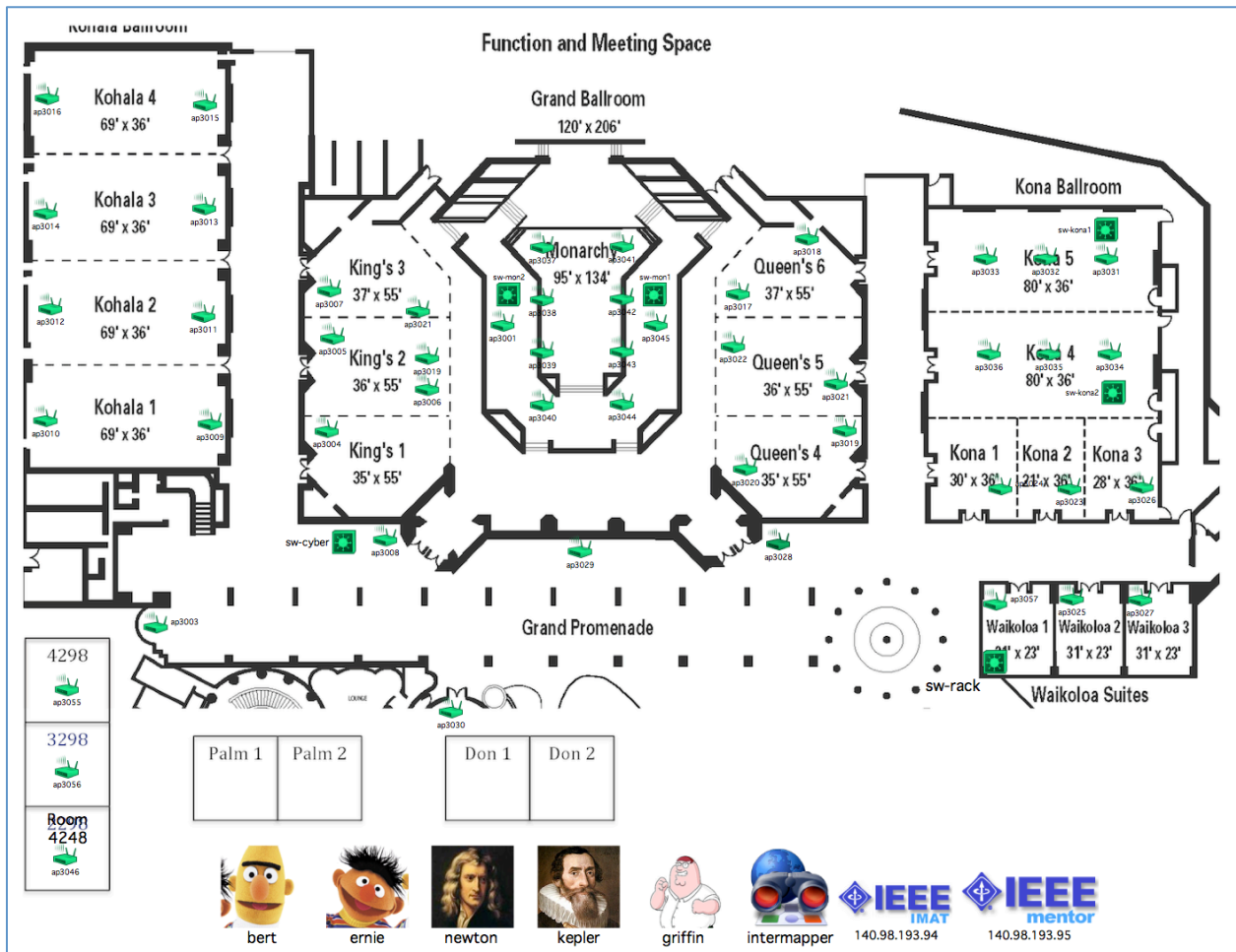

Figure 4. Wireless Access Point Deployment Plan