LINESPEED

Final Network Services Report
September 16, 2022

Event: IEEE 802 Wireless Groups Interim Session
Venue: Hilton Waikoloa Village
Dates: September 12-16, 2022

SUMMARY

Linespeed Events, LLC is providing comprehensive wired and wireless network services in 10 meeting rooms, foyers and offices in the Hilton Waikoloa Village (HWV) Convention Center. 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 a main distribution frame (MDF) and three intermediate distribution frames (IDFs). Linespeed's wireless local area network (WLAN), comprised of 21 IEEE 802.11 a/g/n/ac/ax compliant access points is currently providing Wi-Fi connectivity to 671 unique devices (laptops, tablets, smartphones, smartwatches, etc.) at this session (Figure 1.)

IEEE 802W has contracted with HWV to provide a symmetrical 300Mb/s Internet circuit and a /29 CIDR block of public routable IPv4 address space for this event.

Linespeed provisioned the network with redundant routers configured to failover in case of an outage.

Linespeed tested all Cat5 copper lines interconnecting IDFs and meeting room ports prior to deploying network hardware.

Bandwidth utilization graphs for the past week, 48 hours and 24 hours are shown in Figures 4-6.
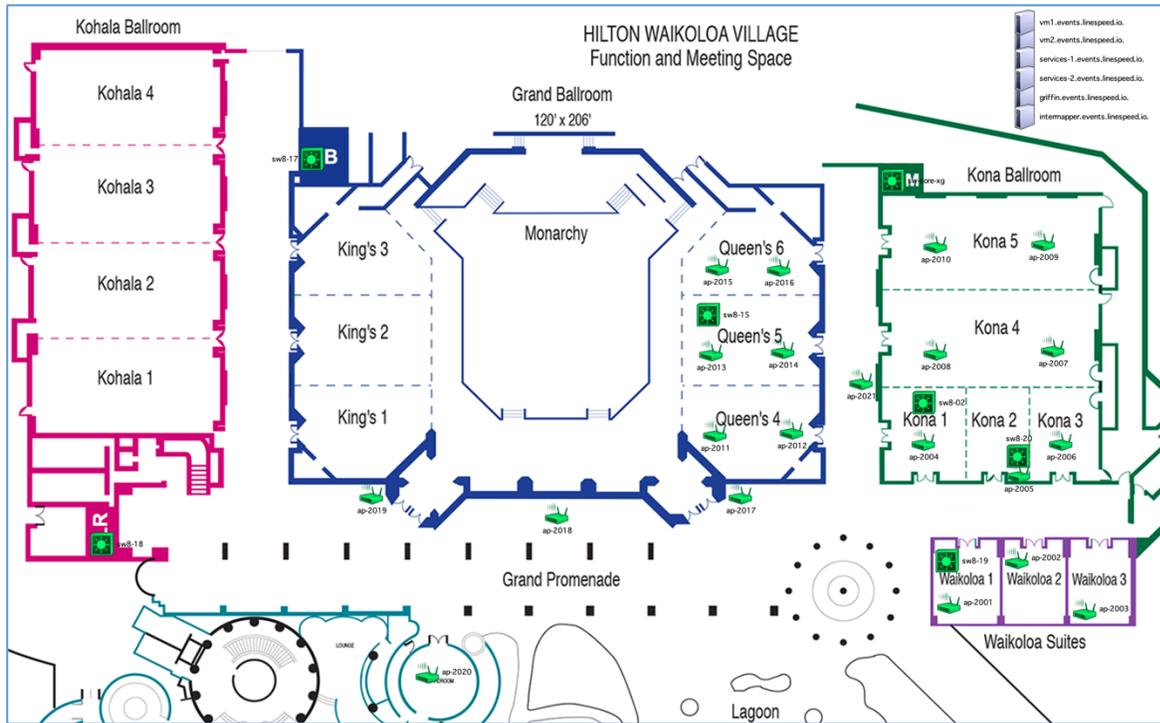
WLAN DEPLOYMENT

Figure 1. Twenty-one access points were deployed throughout the meeting space.

FINAL STATISTICS

- Total Internet data inbound: 2.08 TB
- Total Internet data outbound: 365.87 GB
- Inbound Internet bandwidth utilization
  - Peak: 314.36 Mb/s
  - 95th Percentile: 87.01 Mb/s
- Outbound Internet bandwidth utilization
  - Peak: 87.01 Mb/s
  - 95th Percentile: 31.90 Mb/s
- Maximum wireless network associations: 671 unique devices

BANDWIDTH UTILIZATION

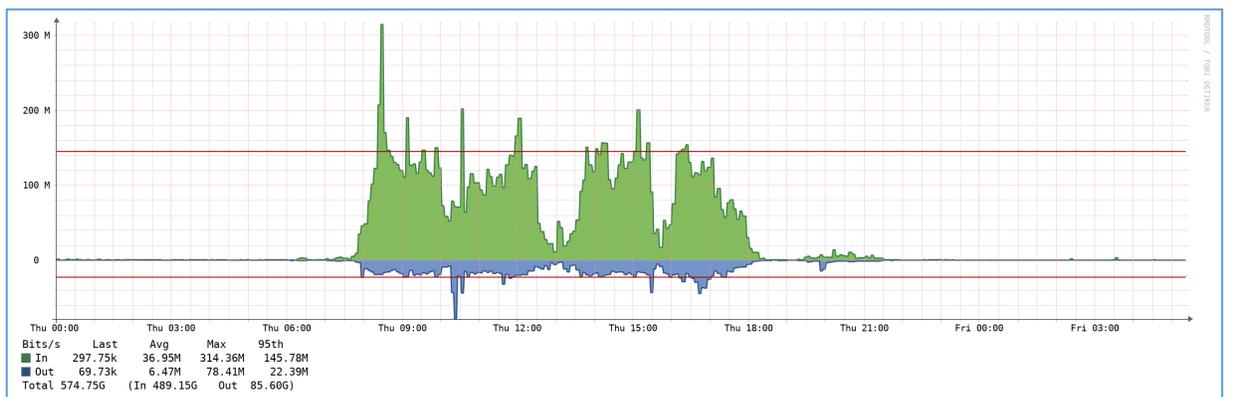Figure 4. External Bandwidth: past week

Figure 5. External Bandwidth: past 48 hours

Figure 6. External Bandwidth: past 24 hours