LINESPEED

Final Network Services Report
January 20, 2023

Event: IEEE 802 Wireless Groups Interim Session
Venue: Hilton Baltimore Inner Harbor
Dates: January 16-20, 2023

SUMMARY

Linespeed Events, LLC is providing comprehensive wired and wireless network services in 13 meeting rooms, foyers and offices in the Hilton Baltimore Inner Harbor (HBIH). Linespeed is also providing a local document server synchronized in near real time with mentor.ieee.org and a landing page (ieee802.linespeed.com), which contains links to local documents, meeting schedule, registration and venue information

The local area network (LAN) supporting the meeting space is comprised of a main distribution frame (MDF) and four intermediate distribution frames (IDFs). Linespeed's wireless local area network (WLAN), comprised of 30 IEEE 802.11 a/g/n/ac/ax compliant access points is currently providing Wi-Fi connectivity to 772 unique devices (laptops, tablets, smartphones, smartwatches, etc.) at this session (Figure 1.)

IEEE 802W has contracted with HBIH to provide a symmetrical 150Mb/s Internet circuit and a /29 CIDR block of public routable IPv4 address space for this event. Linespeed worked with HBIH to provide shared access to the venue's existing 1Gb/s Internet circuit.

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.
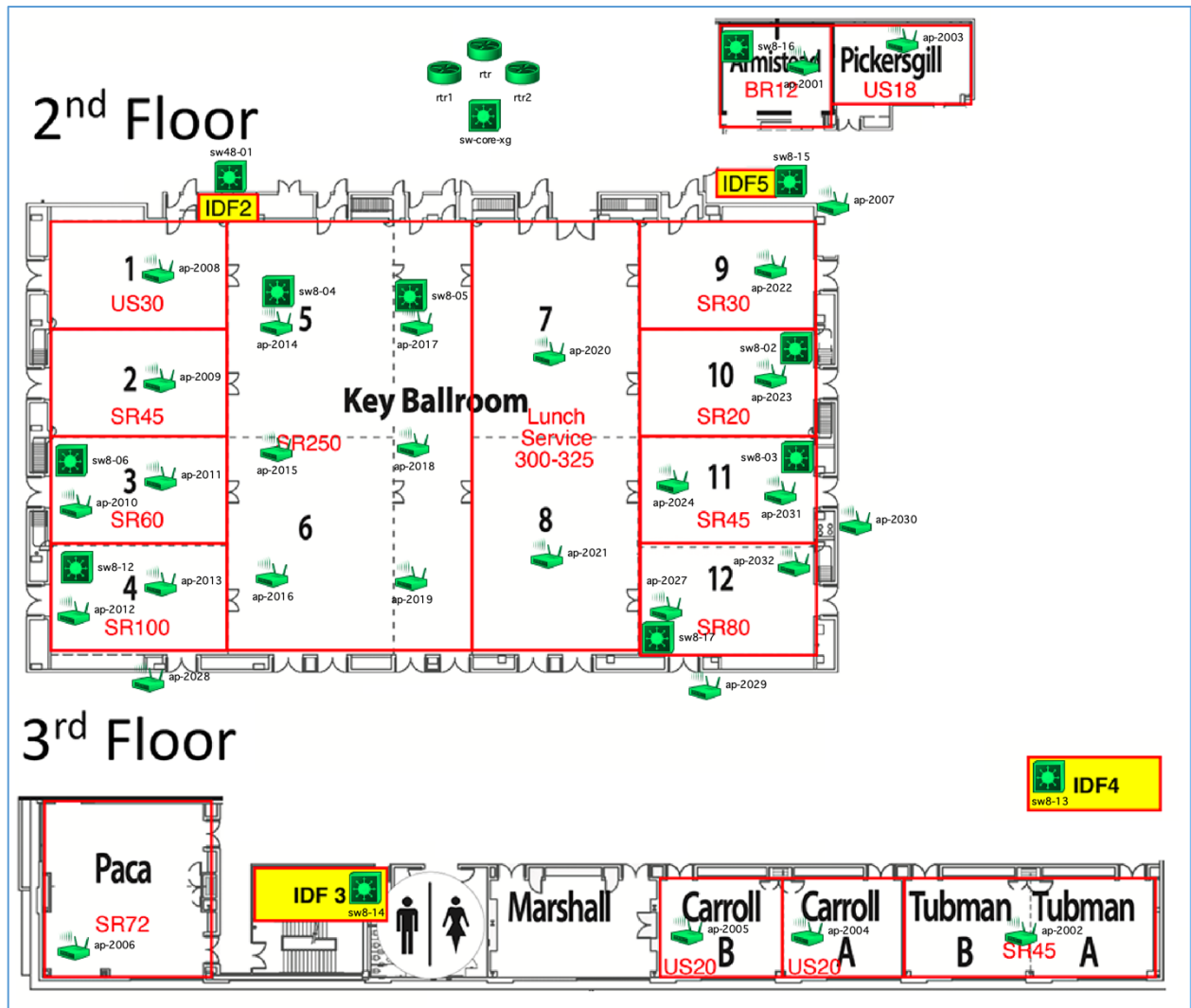
WLAN DEPLOYMENT

Figure 1. Thirty access points were deployed throughout the meeting space.

FINAL STATISTICS

- Total Internet data inbound: 2.09 TB
- Total Internet data outbound: 341.05 GB
- Inbound Internet bandwidth utilization
  - Peak: 271.89 Mb/s
  - 95th Percentile: 152.90 Mb/s
- Outbound Internet bandwidth utilization
  - Peak: 79.99 Mb/s
  - 95th Percentile: 22.74 Mb/s
- Maximum wireless network associations: 772 unique devices
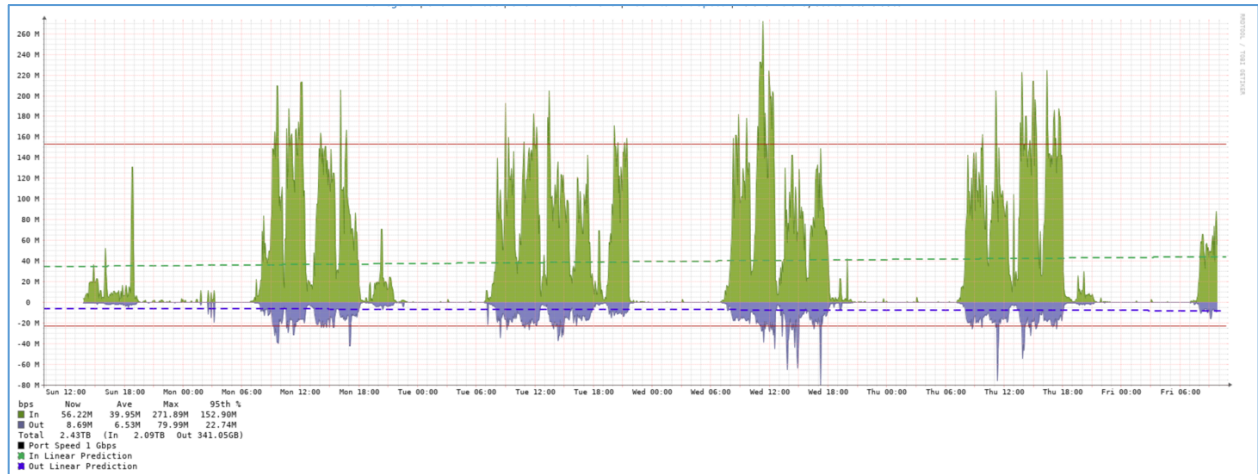
BANDWIDTH UTILIZATION
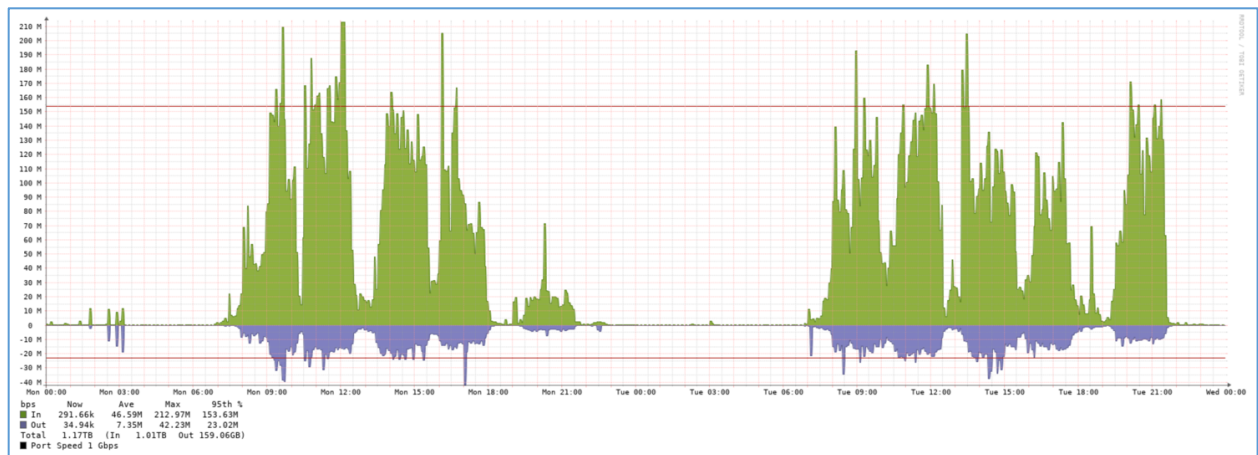

Figure 4. External Bandwidth: past week
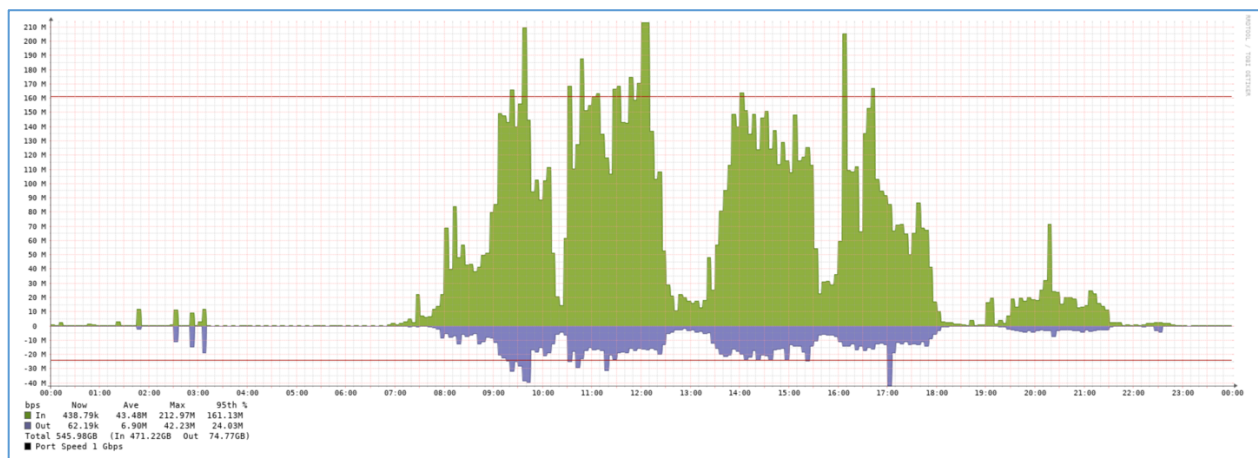

Figure 5. External Bandwidth: past 48 hours

Figure 6. External Bandwidth: past 24 hours