



Network Services Report

March 14, 2025

Event: IEEE 802 Plenary Session

Venue: Atlanta Hilton

Dates: March 10-14, 2025

SUMMARY

Linespeed Events, LLC provided comprehensive wired and wireless network services in 22 meeting rooms, ballroom foyers, dining areas and offices in the Hilton Atlanta. Linespeed deployed redundant routers configured to failover in case of equipment failure. Linespeed also provided a local information portal and landing page (ieee802.linespeed.com) with a local document server synchronized in near real time with mentor.ieee.org.

The local area network (LAN) supporting the meeting space was comprised of a main distribution frame (MDF) and six intermediate distribution frames (IDFs). Linespeed's wireless local area network (WLAN), was comprised of 48 IEEE 802.11 a/g/n/ac/ax compliant WiFi 6e access points. Linespeed simultaneously provided Wi-Fi connectivity to 900 devices represented by 1751 mac addresses (laptops, tablets, smartphones, smartwatches, etc.) at this session (Figure 1.)

Hilton Atlanta provided IEEE 802 with a symmetrical 1Gb/s Internet circuit provisioned for 600Mb/s and a /29 CIDR block of public routable IPv4 address space for this event.

Bandwidth utilization graphs for a 24 hour period, a 48 hour period and the week are represented in Figures 2-4.

Network performance, both wired and wireless, was negatively impacted during AM2 on Monday due to exceeding the rate limited 600Mb/s cap on the Internet circuit provided by the hotel (see Figure 2). An external link for the annual distribution of IEEE 802 Standards was made available to attendees for download on Monday morning, which ultimately resulted in exceeding the amount of available external bandwidth.

Individual requests for support during the week were addressed by Linespeed staff.

WLAN DEPLOYMENT

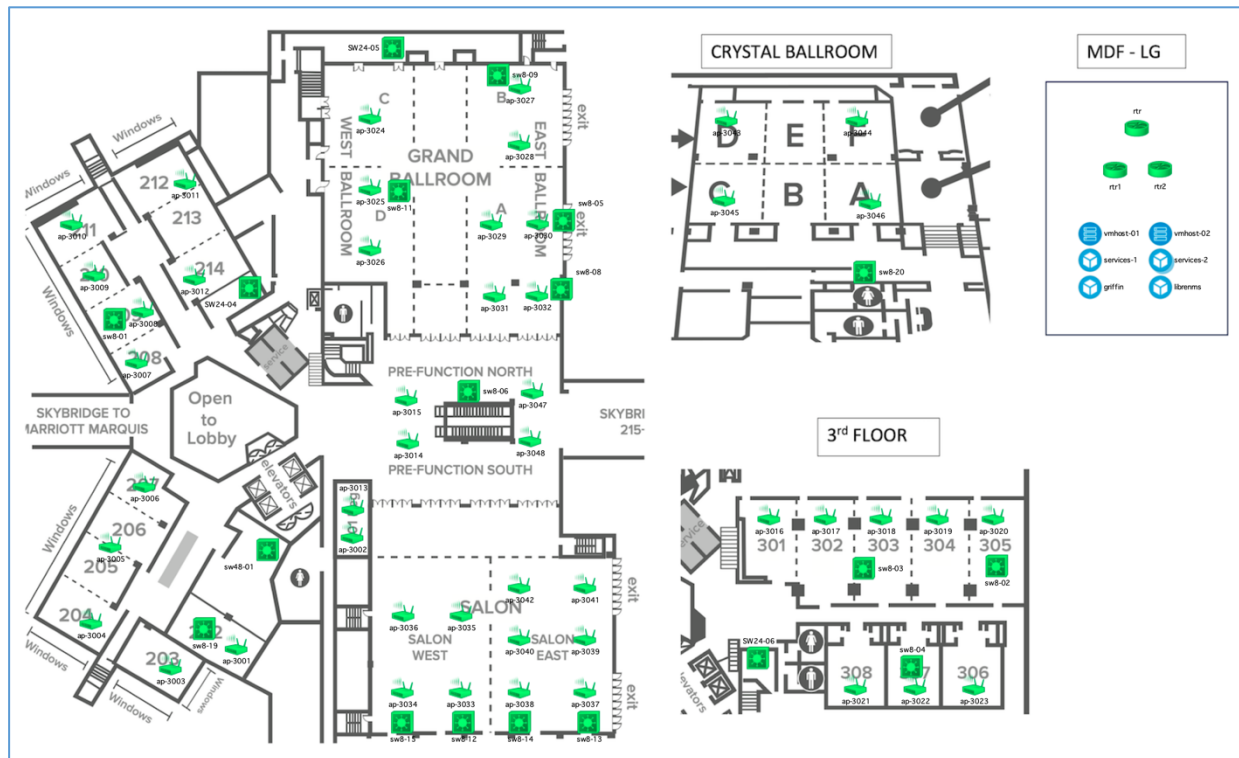


Figure 1. Forty-eight access points were deployed throughout the meeting space.

FINAL STATISTICS (as of 3PM 3/14/25)

- Total Internet data: 4.90 TB
- Total Internet data inbound: 3.93 TB
- Total Internet data outbound: 0.970 TB
- Inbound Internet bandwidth utilization
 - Peak: 600.56 Mb/s
 - 95th Percentile: 257.38 Mb/s
- Outbound Internet bandwidth utilization
 - Peak: 264.85 Mb/s
 - 95th Percentile: 61.25 Mb/s
- Maximum simultaneous wireless network clients: 900

BANDWIDTH UTILIZATION

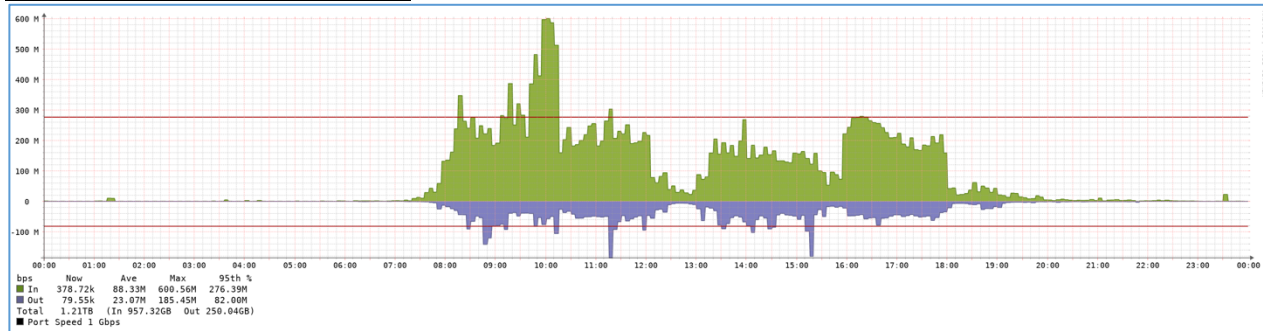


Figure 2. External Bandwidth: 24 hours.

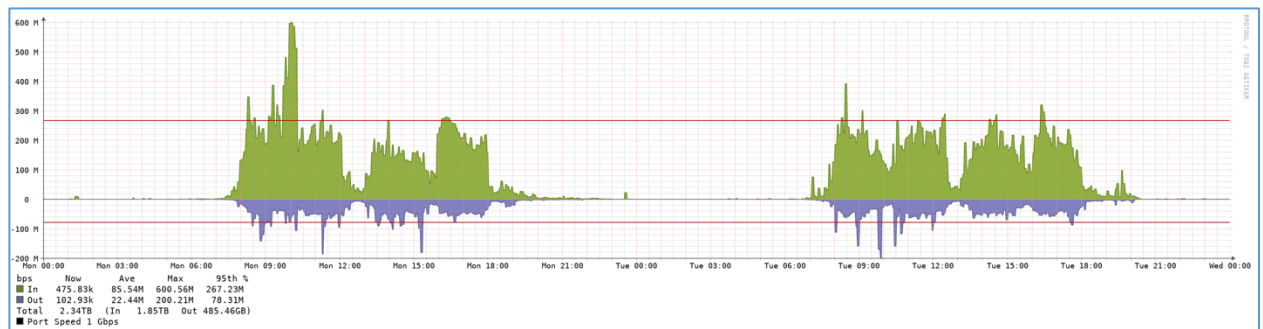


Figure 3. External Bandwidth: 48 hours.

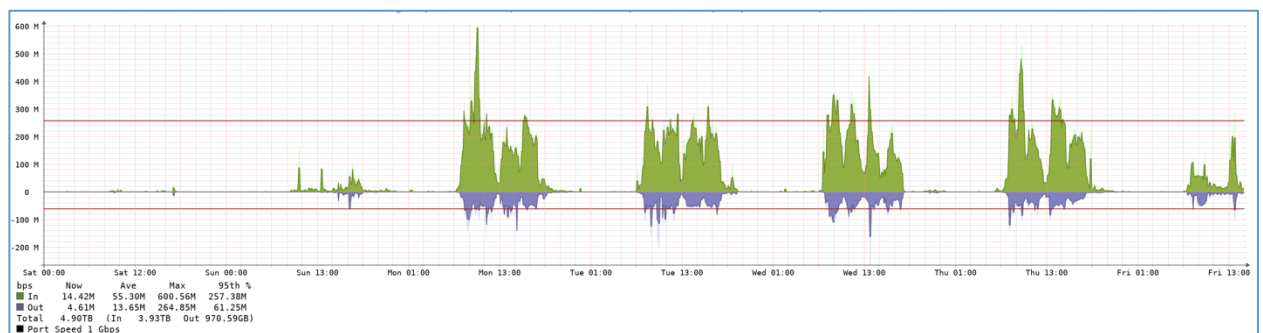


Figure 4. External Bandwidth: 1 week.