

## WHICH CLOUD-MANAGED WI-FI 6 APS **PERFORM BEST UNDER PRESSURE?**

A March 2021 Packet6 test of cloud-managed Wi-Fi 6 access points (APs) put five cloud-managed, 4-stream APs under pressure in a real-world, high-density environment. Under simultaneous data, voice and video demand from 60 clients, only the CommScope RUCKUS® AP met enterprise-grade service levels.

## VENDORS' BEST WI-FI PUT TO THE TEST

The test challenged each out-of-the-box AP to manage and prioritize traffic associated with 30 Wi-Fi 6 laptop clients streaming 1080p video; 20 Wi-Fi 5 laptop clients and five Wi-Fi 5 tablets downloading data; and five Wi-Fi 5 tablets running simulated bi-directional Voice over Internet Protocol (VoIP) calls.

The RUCKUS R750 was the only AP that delivered stall-free video to all 30 clients and provided a "good" mean opinion score (MOS) to the VoIP clients, while delivering nearly twice the throughput of the other APs.



#### **NETWORK** THROUGHPUT

Throughput is a measure of the aggregate data traffic flowing between the AP and all of the clients in the network. A higher number is better, as it indicates that the AP can accommodate more users, devices



4.12

RUCKUS

R750

Meraki

**MR46** 

#### **VOICE MOS**

Voice mean opinion score (MOS) is a commonly used measure of user-perceived voice quality during a PSTN or VoIP call. The higher the score, the higher the call quality. A high-performing network prioritizes voice traffic over other data traffic to ensure good call quality.

#### **STALL-FREE** STREAMING VIDEO

Extreme

AP650

Mist

AP43

Aruba

AP535

Streaming video and other video formats are common in work and school environments. When videos stall, it creates a poor user experience and may result in extra IT work. The score indicates the number of videos, out of 30, that were delivered without stalling.



#### TROUBLESHOOTING WITH **NETWORK ANALYTICS TOOLS**



#### MEAN TIME **TO IDENTIFY**

Mean time to identify (MTTI) is the time a network administrator needs to determine the root cause of a network issue or incident. A shorter average MTTI reduces the troubleshooting burden on IT while improving user experience by allowing IT to more effectively limit incident duration and impact.

## **TEST CONDITIONS**

## REPORTING



Two rooms simulating office or educational environment



Real-world client mix of device types, Wi-Fi standards and operating systems



80 MHz-wide channels



Out-of-the-box AP configuration



AP testing observed and validated by independent industry consultant, Rowell Dionicio (CWNE #210), of Packet6



Network analytics testing conducted by Packet6



Methods and results publicly available in Packet6 report

# **RUCKUS DELIVERS** WHERE OTHERS DON'T



Reliable Wi-Fi connectivity while under real-world stress



Better real-world application performance for every client



Up to two times greater throughput, supporting more users and devices



Out-of-the-box QoS mechanisms that ensure high-quality VoIP calls



Al- and ML-powered analytics that reveal root cause faster

### DOWNLOAD THE REPORT

# **RUCKUS TECHNOLOGY POWERS** PEAK PERFORMANCE

#### **BeamFlex+**®

Automatically adjusts antenna patterns in real-time, packet-by-packet, maximizing throughput for every client device.



## **ChannelFly**®

Automatically switches a client from a crowded channel to one that's less congested.



#### SmartCast<sup>™</sup>

Combines sophisticated scheduling and queuing mechanisms with advanced heuristic algorithms that automatically identify and characterize traffic based on its unique behavior.



### Al-powered incident analytics

**RUCKUS** Analytics automatically classifies service incidents by severity, traces root causes and recommends steps for remediation to deliver the best end-user experience



#### EXPLORE MORE RUCKUS TECHNOLOGY

