

**COMMON UNITY** = Community

# WI-FI HEATMAPPING

## 3 TIPS FOR TOPLINE PERFORMANCE

At HPE Common Unity, we're unified to thrive. We want your school or university to excel, and know that you need the right resources to keep your educational community at the cutting-edge.

That's why we're proud to bring you tools from our **team of systems engineers**, all of whom are HPE accredited solutions experts. Put their knowledge to use with their **Wi-Fi Heatmapping Tip Guide**. Conduct a survey of your site and measure your Wi-Fi parameters for optimal performance.

  
**Hewlett Packard**  
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# ADVANCE YOUR AP KNOWLEDGE

**Location:** Start by finding out where your access points, or APs, are located. Learn where your school's or university's existing cable drops already are, as well as where new APs can be mounted.

**Type:** Generally, you'll be working with one of **three AP types**:



**Antenna Support:** Know which antennas are compatible with your APs. Omni-directional antennas receive signals from a 360-degree radius, while directional antennas receive signals from a radius of either 45, 90 or 120 degrees.

# UNDERSTAND YOUR USER DENSITY

**Size:** Are you equipping a small classroom? A large auditorium? Know if you need an infrastructure that can support a high volume of users, and plan accordingly.

**Technology:** Future-proof for the long term by understanding the latest technology. One way to achieve this? Improve capacity across your campus with MIMO technology.

**MIMO** (Multiple Input, Multiple Output)

Uses multiple antennas in a wireless connection to receive and transmit signals.

## **SU-MIMO** (Single User Mimo)

Allots an AP's entire bandwidth to a single high-speed device.

## **MU-MIMO** (Multiple User Mimo)

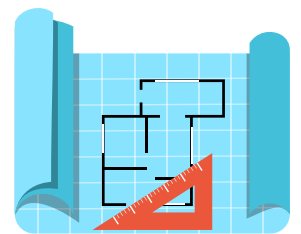
Supports environments in which multiple users are simultaneously accessing a wireless network.

**Benefits:** Reap the advantages of Wi-Fi 6 (802.11ax). Designed to accommodate large bandwidths supporting the 802.11ax wireless standard, Wi-Fi 6 offers significant enhancements. **Benefits include augmented encryption and security, which help to meet Privacy Impact Assessment (PIA) requirements.** Enhanced signal modulation, which allows for more efficient air time usage, is also a feature of Wi-Fi 6.

# OPTIMIZE FOR PARTNERS

**Education:** By advancing your AP knowledge and understanding your user density, you're on your way to successfully optimizing your Wi-Fi parameters. Now is also a good time to **sketch a blueprint for partners and distributors.** During this final heatmapping step, you'll also want to make note of your building's structural foundation. Be sure to know which materials (concrete, metal or steel) are used in walls, as well as the building's dimensions and geographic location.

*Put these 3 heatmapping steps to use for your next campus Wi-Fi undertaking. Have questions along the way? Contact an HPE-Tech Data representative to discuss your specific needs.*



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for more insights on how technology nurtures innovation and benefits the greater good at campuses worldwide.