



ARUBA AIOPS. REAL AI, REAL RESULTS

# Monitoring PoE Switch Budgets with AI

## INTRO

### You thought PoE sounded simple, right?

What's not to like about a switch that allows a single cable to carry power and data? Nothing, that's what. So you dive right in. You study power-over-ethernet (PoE) switch options. You learn about 802.3af, about power sourcing equipment capable of supporting the devices you need to run. And all seems well. But things change, and now there are new cameras, Wi-Fi 6 APs, and a never-ending list of other IoT devices people want.

## CHALLENGE

### Does your old PoE budget support your evolving needs?

Well, maybe. But you'll need to spend time inventorying devices to determine power budgets on each switch. You've also found that you're troubleshooting endpoint and Wi-Fi issues that never existed. Things that were working great not long ago. But newer devices act differently and now you're not sure if your power sourcing equipment (PSE) has sufficient power output. You're second-guessing.

A sixth sense would have been nice.

## SOLUTION

### Wired assurance using Aruba AIOPS

Luckily, Aruba Central includes wired, wireless, and WAN AI-powered insights that help identify when your infrastructure and endpoints run into trouble. Instead of spending hours on spreadsheets and troubleshooting random issues, IT gets a list of AI Insights that point out actual problems. You can see impacted sites, infrastructure, and clients just by drilling into site specific insights.

For switches, insights continuously monitor PoE budgets, central processing unit (CPU) and memory utilization, and port flaps on AOS-CX and AOS-Switch series devices. IT can see if the switches are providing enough power as new devices are added and if a powered device was denied or had the power demoted (cut back). Insights pinpoint where PoE problems are affecting your network, so IT can plan for changes accordingly. It's way better than guessing.

# A real-life Aruba customer case study

When COVID struck and schools emptied, a mid-sized school district asked their small but energetic IT team to install cameras to deter vandalism and break-ins, and to provide analytics when students returned. At the district's direction, IT also installed new, high-speed Wi-Fi 6 access points in high-traffic areas and vape detection/air quality monitoring devices throughout the campus.

They plugged the new cameras and monitors into existing Aruba switches, as well as new APs. All seemed to be functioning fine, at least at first. Then staff and teachers started returning. Users suddenly experienced random connectivity and performance problems, even in areas where new Wi-Fi 6 APs had been installed. Some of the cameras and monitoring devices were even rebooting, seemingly at random. What was going on?

Their Aruba systems engineer (SE) volunteered to take a look.

With proficiency in Aruba Central, the SE introduced the IT team to the built-in AI Insights dashboard, which displayed the PoE problems and identified which switches and clients were impacted. Within an hour, they'd discovered the root problems and devised a plan to address them: They'd borrow PoE injectors for some of the cameras until they could install an additional Aruba switch or power supply unit. Problems averted.

## SUMMARY

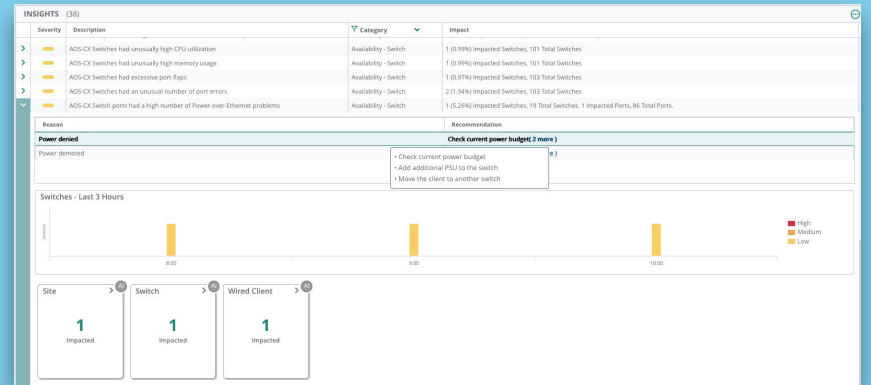
Installing additional devices, including cameras that require more power, created the need for a new PoE plan. Luckily, in today's fast-paced world, Aruba AIOps is there to help. Simple to use AI and machine learning automatically reacts to issues and delivers proactive insights, empowering IT while also relieving them of manual troubleshooting.



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