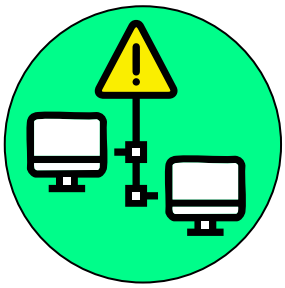
Stabilising an Australian school's digital foundations for future growth

AT A GLANCE

Summary:
A leading Australian secondary school broke ground on a new campus set to open within the next two years. They reached out to Affinity Blue for help designing a wired and wireless network that would modernize their current infrastructure and position both campuses for long-term growth.



The situation:

Ageing wired and wireless infrastructure putting performance and data security at increasing risk



The solution:

HPE Aruba Networking-based network refresh for least-privileged access, protecting school data and systems from nosy students or bad actors



The results:

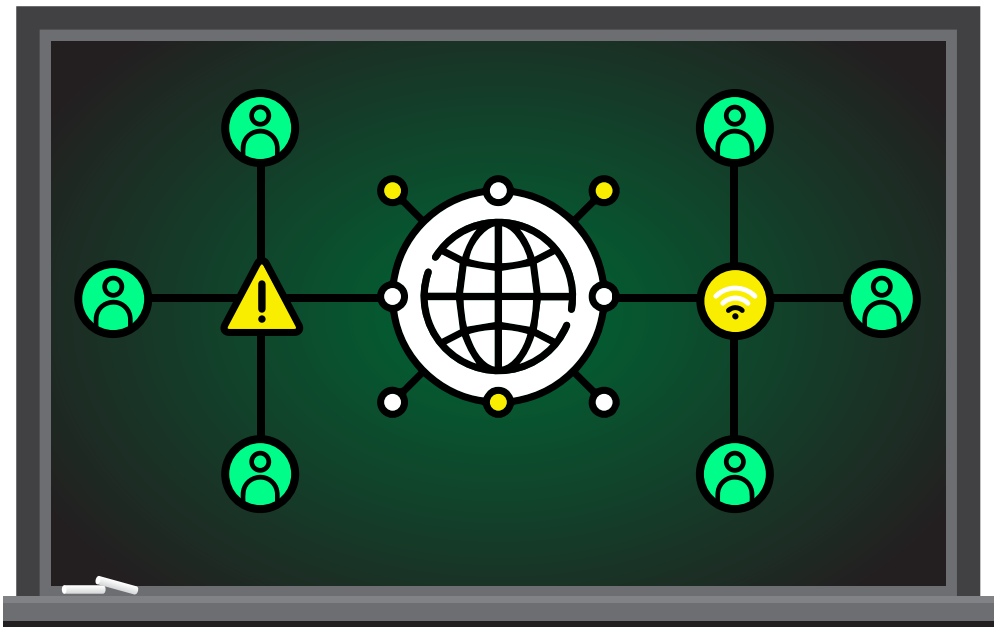
High-performance wireless connectivity with minimal disruption to students or staff, creating a template for better networks in upcoming campuses

THE SITUATION

With over 1100 students in Victoria, enrollment in this Australian secondary school was steadily growing, encouraging the school to begin work on a second campus in a neighbouring suburb that is set to open in 2026. However, the school's current wired and wireless infrastructure was starting to show signs of aging, putting long-term performance and security at risk. This was particularly evident in the school's guest Wi-Fi network, which had been designed and installed for a much smaller number of users without planning for long-term growth in demand.

"There was no grand plan behind the network design when the school was starting out," observed Neon Islam, Technical Director and co-founder of Affinity Blue. "The school's success meant it needed a refreshed network that could keep up with both the volume and complexity of students' digital needs well into the future."

The school's IT team also faced concerns about network security, particularly from access by students and visitors to restricted or sensitive data. Their previous installation lacked the robust security controls to set and enforce the right network permissions for different groups, like students or teachers, making it hard for IT to not only spot but also contain any potential breach.



THE SOLUTION

Based on the extensive nature of its issues, the school enlisted Affinity Blue's help to design and implement a full refresh to both its wired and wireless networks. Security would prove a key requirement in any solution, as would the user-friendliness of the network for students, guests, and network admins alike.

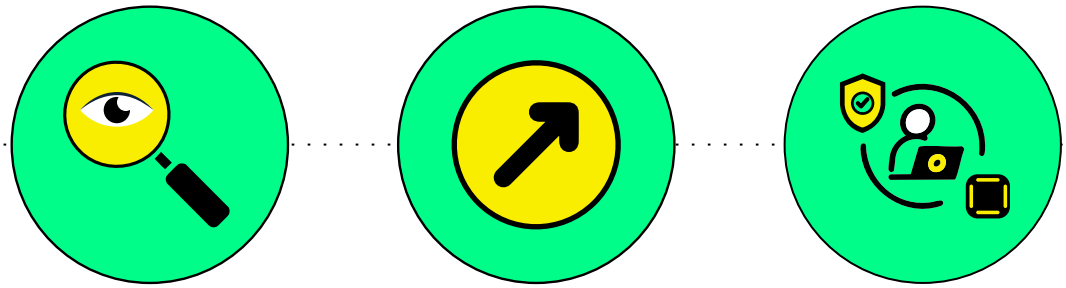
To refresh the school's network, Affinity Blue's team used its well-tested methodology for education providers which included:

- In-depth requirements gathering from both technical staff and educators;
- Aligning business needs with Australian standards for the education industry; and
- Optimising performance with both pre- and post-installation network surveys.

Affinity Blue eventually designed both wired and wireless networks based on HPE Aruba Networking's infrastructure, including HPE Aruba Networking ClearPass Policy Manager to securely and automatically manage overall network access depending on each user's role. With the upgrade, visitors would also be able to fully manage the Wi-Fi sign-on process, streamlining their experience and reducing IT's workload without endangering security or compliance. This means users are only given enough access to do what they need done as a student, teacher or guest, and it's easy for IT to maintain – a big plus for schools.

Affinity Blue's network design factored in security at every stage, with microsegmentation from HPE Aruba Networking also playing a major role in insuring the school against current and future cyber risks. After a successful proof of concept, Affinity Blue used the school holidays to upgrade the existing wired switches to ones from HPE Aruba Networking; and during the next set of holidays, the team refreshed the school's wireless network with an on-premise instance of HPE Aruba Networking ClearPass and wireless routers.

After installation, Affinity Blue's post-commissioning wireless surveys identified ways to further optimise its placement of access points, ensuring maximal performance with no dead zones campus-wide. "As good as predictive network mapping is, there are some nuances you won't catch unless you test onsite," explained Chris Heywood, Senior Network Engineer at Affinity Blue. "Post-commissioning surveys are a default part of every network we build, because they allow us to quickly optimise the infrastructure and ensure our customers get exactly the quality and coverage they expect – if not better."



THE RESULTS

The school's network performance and security have experienced strong improvements since the extensive overhaul by Affinity Blue, with minimal disruptions to students and teachers alike. The school has already enlisted Affinity Blue to help plan and build wired and wireless networking for its new campus as construction gets underway.

"It's always a nice opportunity when a customer comes to us during site construction; we don't need to worry about working around performance and security issues from old networks and we can design something that perfectly matches our customer's requirements," said Heywood. "Getting in from Day 1 allows us to employ a more rigorous approach to network design and build a digital foundation that is as strong and long-lasting as the physical one."



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