

Islamic College of Melbourne

AI-Native Network improves the student experience

Discover how to enable today's learning models and streamline network operations.

[Learn more →](#)

Industry

Education

Region

APAC

Every Wi-Fi connection counts when students are learning

Islamic College of Melbourne (ICOM) is the largest private school in Tarneit, a fast-growing suburb of Melbourne, and offers an excellent academic program based on Australian and Islamic values to over 1,800 students from foundation to year 12. To find out more about the college, visit www.icom.vic.edu.au.

The co-educational school chose the Juniper AI-Native Networking Platform to deliver an exceptional learning experience to students, faculty, and IT staff as the school expands to accommodate growing enrollment.

Overview

Challenge

"We can't afford issues with our network," says Bakr Dennaoui, IT Manager, Islamic College of Melbourne.

But the school's decade-old wireless network had become an obstacle to learning. The Wi-Fi connectivity was unreliable, and learning was often disrupted. Complaints were growing, but the IT staff lacked visibility into the user experience to effectively troubleshoot.

ICOM wanted to upgrade its network to Wi-Fi 6/6E and needed campus switching that would deliver 10Gbps capacity and plenty of PoE power. It also sought out AI for IT operations to simplify network management and free up the IT team.



Transformation

ICOM chose the Juniper AI-Native Networking Platform for its ability to deliver advanced AI for IT operations (AIOps) to enable exceptional digital experiences for students, staff, and visitors. With more than nine years of AI and ML delivered from a microservices cloud, the Juniper AI-Native Networking Platform makes every connection more reliable, measurable, and secure for every device, user, and application.



Outcomes

Assured experiences

2,200+

Students and staff have reliable Wi-Fi connectivity for learning

Free up IT staff

0

Network issues since deploying Juniper AI-Native Networking

Proactive operations

80%

Less time managing the network

Solution and implementation



[Juniper AP45 Wireless Access Point](#)

[Juniper Mist Wireless \(Wi-Fi\) Assurance](#)

[Juniper EX4100 Ethernet Switch](#)

[Juniper Mist Wired Assurance](#)

[Juniper EX4400 Ethernet Switch](#)

[Juniper Marvis VNA](#)

AI-Native Networking puts the student experience first

ICOM uses Juniper AP45 Wireless Access Points to deliver high-performance Wi-Fi 6/6E to connect laptops and tablets in classrooms, the library, canteen, and gymnasium. The network supports the school's growing number of devices and high-bandwidth video and digital learning applications. The Juniper Mist Wireless (Wi-Fi) Assurance service automates troubleshooting and operations while providing near-real-time visibility into user service levels.

ICOM uses Juniper EX4400 Switch and Juniper EX4100 Switch for a 10-Gbps access network and to provide plenty of PoE to connect printers, security cameras, wireless access points, desktop PCs, and other wired devices. The Juniper Mist Wired Assurance service brings Mist AI to the access-layer switches, enabling AI-native operations and automation.

Key takeaways and outcomes



Watch how to keep learning running with Juniper Mist AI

A smarter network for a growing school

“With Juniper, we don’t worry about the network anymore,” says Dennaoui.

That’s because a Juniper AI-Native Network is predictable, reliable, and measurable—with a user experience that is continuously assured. The intuitive Mist portal made it simple to configure and deploy wireless access points and switches using templates. New features and updates are delivered from the Juniper Mist AI microservices cloud without downtime for simplified network operations.

- **Best student, educator, and staff user experiences**

With Juniper networking in ICOM’s classrooms, students can stay focused on their studies—everything from the fundamentals of reading to upper-level chemistry.

- **Speed up issue resolution with Mist AI**

Juniper’s Marvis Virtual Network Assistant adds conversational AI to empower the IT team to speed issue resolution with the ability to proactively identify and resolve issues before they impact the end-user experience. “Now we can be proactive about the network before people complain,” says Dennaoui.

- **Future-proofed network for growth**

ICOM is looking ahead to the construction of new buildings on its current campus and opening a secondary school campus to allow thousands more students to benefit from the school’s multicultural, academically rigorous, and nurturing environment.

More information

Learn more about Juniper AI-Native Networking

To learn more about Networking solutions for education, visit our website at <https://www.juniper.net/us/en/solutions/education.html>.

To learn more about Wireless access, visit our website at <https://www.juniper.net/us/en/solutions/wireless-access.html>.

Take the next step

Connect with us

Learn how we can build what’s next.

[Connect with us →](#)

Explore solutions

Discover Juniper’s solution practice.

[Juniper AI for IT solutions →](#)

Read case studies

See how we help unlock new growth.

[King’s College International School Bangkok →](#)

[James Cook University Singapore →](#)

More insights

Get the latest news delivered weekly.

[The Feed →](#)