

Seoul Semiconductor

Global manufacturer lights up its AI-Native Network experience

Discover how to make every connection count with an AI-Native campus and branch solutions

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Industry

Manufacturing

Region

APAC

Enhance network performance for a brighter future

Seoul Semiconductor has secured more than 18,000 patents for innovation in lighting technology. The company has more than 1,000 customers around the world and operates factories in Korea, the United States, China, and Vietnam. Known for eco-friendly and energy-efficient technology, Seoul Semiconductor invests 10% of sales into research and development, a commitment that has allowed it to expand its competitiveness by developing its own technology without relying on mergers, acquisitions, or equity investments.

By selecting the Juniper AI-Native Networking Platform to support efficient and stable business operations for its employees, Seoul Semiconductor can accelerate its trailblazing research in lighting.

Overview



Challenge

Enhance network performance for a brighter future

Seoul Semiconductor wanted to upgrade the wireless network used in offices and manufacturing plants for business growth and to maintain its technology leadership. Its legacy wireless network supporting product innovation faced limitations in data throughput and coverage, and the wireless LAN controller architecture led to network management inefficiencies and vendor lock-in issues.

“Modern enterprises are evolving into spaces where collaboration across various departments and mobility within work processes are fundamental,” said Jinho Lee, principal engineer, information technology LT at Seoul Semiconductor. “For any company like ours, where extensive workspaces and complex processes coexist, it’s crucial to maintain uninterrupted network operations.”



Transformation

Network agility, automation, and assurance

Seoul Semiconductor sought a comprehensive wireless LAN solution that would deliver secure user experiences, consistent policy enforcement, and IP mobility tailored to its users' roles at domestic and international manufacturing sites. It also wanted intuitive cloud-managed network monitoring and controls.

Seoul Semiconductor chose the Juniper AI-Native Networking Platform for its ability to deliver industry-leading AI for IT operations (AIOps) that assure exceptional digital experiences. With more than nine years of reinforced learning in a microservices cloud, the Juniper AI-Native Networking Platform enables every connection to perform exceptionally.

"Juniper's AI-Native Networking Platform **has minimized disruptions and blind spots**, offering cloud-based management to oversee all potential network incidents."

Jinho Lee
Principal Engineer,
Information Technology LT,
Seoul Semiconductor

Outcomes

Industry leader

#1

Global manufacturer of UV LED

Global operations

4

Countries where Seoul Semiconductor operates manufacturing plants

Innovator

18,000+

Patents in the optical semiconductor sector

Solution and implementation

[Juniper AP32 Wireless Access Point](#)

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

[Juniper Marvis Virtual Network Assistant](#)

AI-Native Networking supports lighting innovation

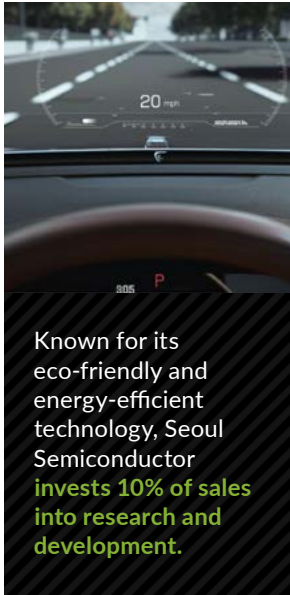
Juniper AP32 Wireless Access Points, that operate in both the 5GHz and 2.4GHz band to deliver Wi-Fi 6 to connect the latest mobile devices, as well as older mobile devices at the company's office and manufacturing locations, are managed through the Juniper Mist Cloud architecture. With Juniper Mist Wireless (Wi-Fi) Assurance, IT can set client service levels and the Wi-Fi is automatically optimized for an exceptional user experience.

The agility, automation, and assurance of a Juniper AI-Native network allows Seoul Semiconductor's IT team to efficiently manage and monitor the network in real time, gain insights into the user experience, and rapidly identify and resolve network issues to minimize manual troubleshooting.

Juniper's Marvis Virtual Network Assistant brings conversational AI to assist the IT team in resolving issues faster and with greater accuracy to improve the user experience.

Juniper's Marvis Virtual Network Assistant adds conversational AI to empower the IT team to speed up issue resolution with the ability to proactively identify and resolve issues before they impact the end user experience.

Key takeaways and outcomes



Reliable network, enhanced efficiency, and leadership

“Juniper’s AI-Native Networking Platform has minimized disruptions and blind spots, offering cloud-based management to oversee all potential network incidents,” said Lee. “We are committed to enhancing the workplace experiences of our employees, which will enable improved efficiency all while fostering a secure corporate environment.”

Optimized user experiences

The performance, resilience, and security of Juniper AI-Native Networking supports employees’ work efficiency and enables a more stable corporate environment. Seoul Semiconductor significantly reduced client disconnections and Wi-Fi blind spots on its campuses.

AIOps simplify global network monitoring

IT teams can more easily monitor and manage the network from the Juniper cloud portal. With Juniper AIOps tools, the network team can automate operations, more easily manage the wireless network across the world, and provide an optimized response in case of network issues.

A network foundation for lighting innovation

A stable, reliable network from Juniper allows Seoul Semiconductor to solidify its leadership in optical semiconductor technology used in lighting, cars, televisions, mobile devices, and augmented/virtual reality, and maintain its focus on delivering exceptional value through advanced research and development.

More information

[Juniper AI-Native Campus and Branch Solutions](#)

[Juniper Mist AI in Action demo](#)

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