

# Mist and the Self-Driving Campus

*The connected campus with AI-driven, digital learning-ready networks*

For institutions of higher learning, the digital transformation demands scalable, secure, reliable broadband connections. Unfortunately, weak, complex, and difficult-to-manage networks threaten to undermine this transition. Digital learning and online assessments suffer when students and professors experience dropped or poor connections. And for campus network administrators, overly complex workflows and tools that focus on network health rather than the end-user experience make troubleshooting and resolving these access issues exceedingly difficult.

## AI-Driven, Digital Learning-Ready Networks from Mist, a Juniper Company

Thankfully, university IT administrators no longer need to compromise nor invest precious budget dollars in networks built on outdated architectures. Unique to the industry, the Mist AI-driven enterprise solution addresses and greatly enhances network infrastructure projects with a modern, scalable, secure, and reliable solution that delivers a true self-driving campus. By empowering IT teams with proactive operations, the Mist solution automatically identifies and fixes wired/wireless/device problems using machine learning, enabling university network subscribers to benefit from:

- Proven and trusted enterprise-class, automated, and self-forming switch fabrics
- The Mist wireless solution, the first cloud-based WLAN to leverage AI and machine learning to make Wi-Fi predictable, reliable, and measurable—ensuring a great digital learning experience
- Less complexity, simplifying network operational and management workflows for the IT staff

Whether your university is planning a network upgrade to boost broadband connection capacity or a project to modernize data distribution, wireless data distribution, and the data protection infrastructure, Mist is able to fulfill the needs of everything from single-school campuses to large universities. The Mist solution is also easy on the budget, offering lower estimated five-year total cost of ownership (TCO) than the leading competitive brand.

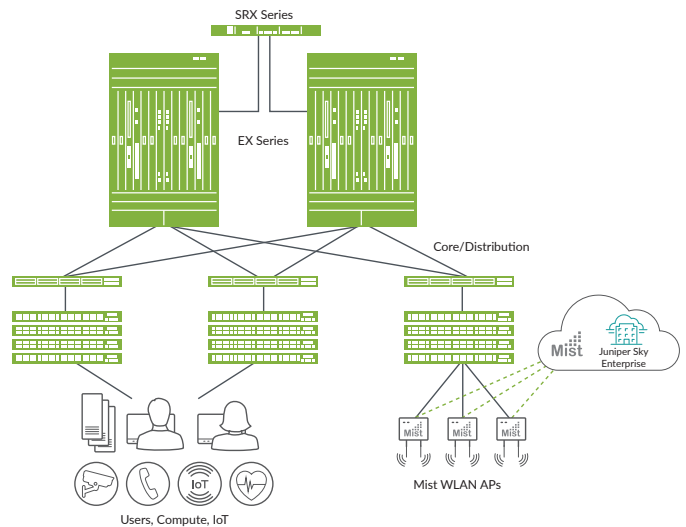


Figure 1: The Mist solution

## Mist Connected Campus Solution Components

**Juniper Networks®**  
**EX Series Ethernet**  
**Switches**



Designed for the converged school district campus and data center to address demands for high availability, unified communications, and virtualization, EX Series switches offer high-performance, scalable, fixed-configuration 1GbE and multigigabit platforms; fixed configuration 10GbE aggregation switches ideal for high-density campus deployments; and modular core switches optimized for high-density, mission-critical applications.

**Juniper Networks**  
**QFX Series**  
**Switches**



QFX Series switches, ideally suited for district traffic aggregation points and data centers, improve the efficiency of district fiber networks by aggregating traffic for WAN and Internet access transport. The QFX5100 line of scalable Layer 2/Layer 3 switches is optimized for application delivery and contains a powerful feature set for virtualized data centers. The QFX10000 line offers a highly scalable, high-density network foundation for supporting today's most demanding data center and cloud environments, including midsize to large data centers, private clouds, and public clouds.

## Mist Connected Campus Solution Components

### Mist AI-Driven Wireless LAN



Designed for the demands of digital learning, Mist WLAN makes Wi-Fi predictable, reliable, and measurable by providing unprecedented visibility into the user experience. Enterprise-grade Wi-Fi, Bluetooth Low Energy (BLE), and IoT are merged, creating personalized, location-based wireless services for the best end-user experience. With Mist, customizing Wi-Fi service levels, providing easy guest services, replacing time-consuming manual IT tasks with proactive automation, gaining insights through detailed analytics, and leveraging location-based services to locate valuable assets are now within reach.

### Juniper Networks SRX Services Gateways (Next- Generation Firewalls)



SRX Series Services Gateways are rightsized for a variety of district applications. Offering a complete set of next-generation firewall (NGFW) and unified threat management (UTM) features, the SRX Series physical and virtual firewalls protect district networks from the latest content-borne threats. These firewalls also support the Children's Internet Protection Act (CIPA) and the Family Educational Rights and Privacy Act (FERPA), contributing to ensuring district-wide compliance.

### Juniper Networks MX Series 5G Universal Routing Platforms



Juniper's portfolio of high-performance, software-centric physical and virtual routers deliver all the performance, features, and functions school district applications need, including private WAN for multisite connectivity through a private backbone; data center interconnect for connecting multiple data centers for disaster recovery; geo clustering and virtualization; and Internet edge to act as the school district's Internet gateway.

## Summary

Improving students' achievement while equipping them with 21st century skills is key to higher education's digital transformation. The digital curriculum is driving unprecedented demand for bandwidth. With the Mist connected campus-eligible offerings, institutions of higher learning now have attractive options for delivering an extraordinary education experience. They are able to create cutting-edge connected classrooms for teachers and staff by deploying reliable networks offering greater scalability, better security, less complexity, and lower TCO.

## Next Steps

Contact your Juniper Networks representative or Juniper Networks Partner to learn how we can help your university improve your broadband connections for digital learning, protect your network investments, and provide an attractive option for your infrastructure project.

## About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

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