# Streamlining Campus Network Deployments with Juniper Validated Designs

Deploy more quickly and confidently, improve outcomes, and save valuable time

Discover how Juniper Validated Designs (JVDs) for the campus can help you design and deploy an optimal networking solution

Explore campus JVDs →

#### The challenge

# Navigating the complex landscape of campus deployments

Network architects and IT leaders face unprecedented challenges in deploying and managing campus networks—the backbone of modern enterprise productivity. They must ensure seamless connectivity, robust security, and exceptional performance while adapting to emerging technologies and changing business needs. This entails managing multiple platforms efficiently, reducing extended timelines, enhancing responsiveness, ensuring scalable growth, streamlining fragmented management, and overcoming the shortage of skilled professionals.

#### The capabilities you need

# Fully tested, well-documented campus network designs

The network for the next decade centers around delivering better user experiences and simplifying IT operations. Traditional wired and wireless LAN solutions lack the scalability, reliability, security, performance, and agility needed to address today's challenges and diverse enterprise needs. JVDs for the campus combine a robust hardware portfolio with the power of Mist AI™ to streamline network operations, improve user experiences, and enable IT teams to focus on strategic initiatives.



# Scalability

Validated designs are built out based on customer input and requirements and are tailored to meet specific common use cases at maximum scale.

## Reliability

Because JVDs are prescriptive designs used by multiple customers across various industries, all JVD customers benefit from lessons learned through lab testing and real-world deployments.

## Velocity

JVDs have clearly defined performance profiles to help you make informed decisions about your network, resulting in up to 9x faster deployments.

## Predictability

JVDs undergo a rigorous testing framework to achieve validation with ongoing, automated verification in each new release.



## The answer

# JVDs for the campus

JVDs offer a game-changing approach to campus network design and deployment. They address a range of challenges head on while rapidly delivering substantial business value and lowering project, operational, and security risks.

Current JVDs for the campus:

Campus Fabric Core Distribution ERB Using Mist Wired Assurance

Simplify the management and operation of your campus network infrastructure.

Campus Fabric Core Distribution CRB Using Mist Wired Assurance

Enhance user experience and achieve organizational goals with scalable, programmable, and standards-based architecture.

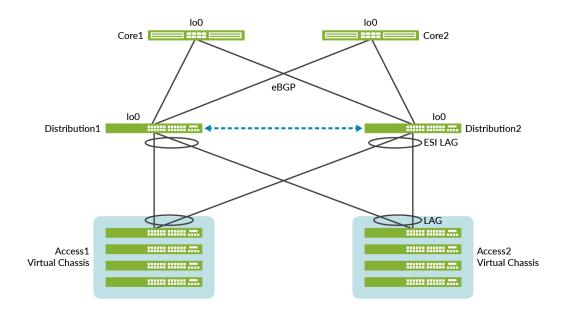
Campus Fabric IP Clos Using Mist Wired Assurance

Deploy a scalable and cost-effective Campus Fabric IP Clos architecture.

## How it works

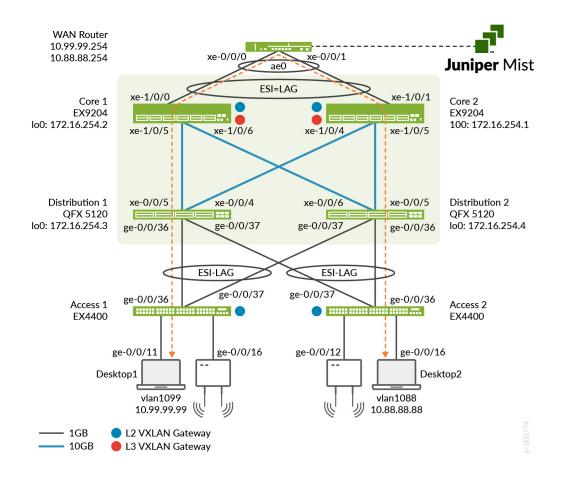
# The transformative power of campus JVDs

Campus Fabric Core-Distribution ERB, Pt-Pt links using /31 addressing between core and distribution layers:





## Campus Fabric Core-Distribution CRB, topology:



## Technologies and solutions used and tested:

Juniper Mist Cloud	Templates/port profiles
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Campus Fabric VRFs (Virtual Routing and Forwarding)

CRB (Centrally Routed/Bridged)

Juniper EX / QFX / MX

ERB (Edge Routed/Bridged) BGP

IP Clos DHCP Snooping

Underlay/Overlay SLE (Service Level Experience)

EVPN-VXLAN AP (access points)

Virtual Chassis / LAG / ESI-LAG Marvis AI engine

And many more...



## Core capabilities

JVDs minimize

while reducing

your IT burden

time to value

and accelerating

operational costs

## Accelerated JVDs provide pre-tested, optimized network architectures time to value that dramatically reduce deployment time and complexity. By leveraging these proven blueprints, IT teams can achieve up to 9x faster time-to-value, allowing them to focus on strategic initiatives rather than troubleshooting. **Enhanced** With built-in security best practices and integrated threat prevention capabilities, JVDs ensure a robust and resilient security posture defence against evolving cyber threats. This comprehensive approach instils confidence in IT leaders and helps safeguard critical business assets and services. Future-proof JVDs are designed with growth in mind, offering flexible and scalability modular architectures that easily adapt to changing business requirements. This scalability ensures that your campus network can evolve seamlessly, protecting your investment and supporting long-term success. Unified management By leveraging AI-driven operations and centralized and visibility management platforms, JVDs break down operational silos and provide unparalleled network observability. This holistic approach empowers IT teams to make data-driven decisions and proactively address potential issues before they impact the business. Operational JVDs significantly reduce the complexity of network deployment efficiency and management, enabling IT teams to do a lot more with less. With up to 85% reduction in OpEx and 90% fewer network trouble tickets, organizations can optimize their resources and redirect human talent toward innovation and growth. Confidence Rigorously tested and validated by Juniper's expert engineers,



Rigorously tested and validated by Juniper's expert engineers, JVDs deliver predictable, reliable network performance. This assurance allows IT leaders to deploy with confidence, knowing that their campus network will meet and exceed business expectations.



## Our advantage

## JVDs: faster, smarter, more secure

The JVD program develops solutions that reduce complexity for networking teams, helping them:

- **Qualify solutions faster** with tested architectures for building networks with well-documented capabilities and product/software release guidance
- Reduce risk with products, features, and topologies based on best practices and common use cases
- Achieve predictable, repeatable results with designs that have been validated at scale to ensure you will have faster, more reliable deployments

## Why Juniper

# The NOW Way to Network

Juniper Networks believes that connectivity is not the same as experiencing a great connection. Juniper's Al-Native Networking Platform is built from the ground up to leverage Al to deliver exceptional, highly secure, and sustainable user experiences from the edge to the data center and cloud. Additional information can be found at Juniper Networks (<a href="https://www.juniper.net">www.juniper.net</a>) or connect with Juniper on X (Twitter), LinkedIn, and Facebook.

## More information

# Learn more about JVDs for the campus

To explore current JVDs for the campus, visit <a href="https://www.juniper.net/documentation/validated-designs/us/en/campus/">https://www.juniper.net/documentation/validated-designs/us/en/campus/</a>

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More insights

Design and deploy optimal solutions.

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