



# SD-WAN and NaaS — Tackling common network challenges



White paper

Technology, covered.

## Tackling common network challenges

IT leaders across Canada are facing a variety of complications when it comes to their legacy network solutions. Today's workforce has evolving technology needs that, when implemented and managed properly, can act as a catalyst to your organization's transformation.

### Network complexity

Network complexity is one of the biggest IT challenges facing organizations today. In "Avoid These 'Bottom 10' Networking Worst Practices," Gartner analysts Andrew Lerner, Bill Menezes, Vivek Bhalla, and Danellie Young reported that IT leaders regularly complain about the complexity of their networks and that it has an impact on their networks' availability, security, and agility.

A recent survey from Network World found similar results. Complexity, they found, was the enemy of good engineering.

"What we found was the complexity of today's networks to be a common complaint. It wasn't necessarily called out that way. Respondents often pointed to the symptoms underlying cause of complexity," Dave Greenfield writes. "As we looked at the primary networking challenges for 2018, for example, 39% of respondents ranked 'equipment maintenance and updates' as the number two challenge and 35% of respondents made 'managing the network' the number four challenge."

The more complex your infrastructure, the more likely it is to be vulnerable to malicious attacks.

### Escalating bandwidth demands

There are countless cloud-based applications that can help your organization improve communication, collaboration, customer service, and more. They can unlock limitless growth—but you're going to need the network to back it up.

The increasing demands on your bandwidth, especially from applications that require high-quality voice and video, can put a serious strain on your WAN.

Your network should support the programs and applications that keep your organization running. Is your current network holding your organization back from opportunities to be innovative?

## The key benefits of cloud networking solutions

### Network as a Service and SD-WAN from OnX Canada

OnX has the deep experience in providing end-to-end solutions you need to keep your business connected and using technology to reach its highest potential for growth and collaboration. Our Network as a Service (NaaS) and Software-Defined Wide Area Network (SD-WAN) solutions can be designed, implemented, and managed separately or together to help you increase productivity, cut costs, and respond to your organization's evolving business needs.

Both solutions are fully managed by a bench of more than 700 certified engineers and are designed to bring value to all types of organizations. In fact, we believe that every organization, regardless of size or industry, could benefit from one or both of these solutions, but it's all about finding the perfect fit for your goals.

Let's take a look at each of these solutions in-depth:

### Network as a Service

Your legacy network has started to cost your IT team excessive time, money, and resources, and it's still not meeting your organization's needs. Your organization is looking to transform by leveraging cloud-based services and streaming apps with high-bandwidth demands, but your current network simply can't keep up.



Worse yet, costly downtime is putting your organization at risk. All of these challenges are wrapping up your IT team in time-consuming troubleshooting instead of focusing on the initiatives that help your organization grow.

If you're ready to modernize and simplify your network and future-proof your organization, a NaaS solution from a trusted, experienced IT service provider may be right for you.

NaaS is a fully managed service offering designed to provide a simple, scalable method to offload the complex tasks of supporting, maintaining, expanding, and securing your network. This solution offers cloud integration, security, switching, Wi-Fi, management, monitoring, and SD-WAN.

The OnX Network as a Service solution offers your organization the opportunity to offload the time- and resource-consuming task of keeping your network up, running, and protected.

NaaS from OnX can offer a number of key advantages for your organization:

- **Predictable monthly service fee.** Investing into a brand new network means a hefty capital expenditure, and it starts the countdown clock ticking toward your next network refresh. Instead, NaaS from OnX allows you to not only switch to a predictable monthly fee, but it will also offer significant cost savings. And you'll always have access to the latest and best technology for your organization.
- **24x7x365 support.** The expert engineers from OnX will manage, monitor, and protect your network, so you can focus on what matters most to your organization.
- **Hassle-free scaling.** Whether your organization is scaling down during a slow season, growing exponentially due to mergers and acquisitions, or adding new branches, our NaaS solution can easily scale to meet your business needs.
- **Enterprise-grade security.** You can rest easy knowing your network is secured with anti-malware and perimeter defense technology.
- **Real-time analytics.** Our powerful business intel can help your organization grow its revenue.
- **Improved network performance and functionality.** Our NaaS solution offers Auto VPN and Power over Ethernet (POE) to improve the overall performance of your network.

### Cisco Meraki

The OnX cloud-managed NaaS solution is powered by Cisco Meraki which offers a scalable method of supporting, maintaining, expanding, and securing your network with cloud integration, security, switching, Wi-Fi, management, monitoring, and auto VPN.

Cisco Meraki features include:

- **Cloud-managed wireless:** The Cisco Meraki wireless LAN feature offers centralized management of Wi-Fi deployments and distributed multi-site networks from a single pane-of-glass. Powerful location analytics, application visibility and control, and high-capacity 802.11ac work together to put you in control. Dedicated security radio that instantly detects interference, vulnerabilities, and attacks, combined with identity-based firewall protections help keep your network secured.
- **Cloud-managed security and SD-WAN:** Security features like intrusion prevention, identity-based firewall, auto VPN, content filtering settings, advanced malware protection, and high availability and failover protect your network from any threat that comes its way. All this comes with application visibility and control and centralized management features.
- **Cloud-managed switching:** Meraki cloud-managed switches include features like multigigabit ethernet, flexible stacking, layer 7 visibility, layer 3 scalability, voice and video QoS, and network topology that streamline your network every step of the way from deployment to security to troubleshooting.



## SD-WAN

Your traditional MPLS network isn't keeping up with the demands of your organization—and it's costing you. Your team needs low-latency/high-performance access to cloud applications, but your network is dragging and inhibiting your ability to leverage these transformative technologies.

Plus, security and management requirements associated with disparate traffic flows have added to the complexity of managing branch operations, increasing your operational costs.

If that scenario rings true for your organization, SD-WAN may be the perfect solution.

The cloud-delivered SD-WAN solution from OnX offers an agile platform to deploy, manage, and monitor hybrid public, private, wireline, and wireless networks. Our expert engineers will architect the right migration strategy designed to meet your needs.

This solution provides network visibility and control from a central location, but also allows you to offload the management and analysis of any issue to the experienced IT professionals at OnX. You'll also be able to remediate impairments across multiple pathways to reliably handle applications and traffic across branch offices, data centers, and the cloud.

SD-WAN can be ideal for organizations that operate call centers or rely heavily on critical applications, especially voice and video.

OnX SD-WAN solution offers a number of key benefits for your organization:

- **Improved business agility.** This software-defined solution delivers faster deployment, on-demand bandwidth, and faster disaster recovery.
- **Increased IT efficiency.** Automation and cloud management removes that burden from your IT team, allowing them to focus on more important tasks.
- **Reduced overall costs.** Stabilize your IT budget by eliminating data center upgrades and redesign costs, and commit to a predictable monthly fee. You'll reduce your costs but still have access to an agile, high-performance network.
- **Superior quality of experience.** Improve performance of critical applications with multiple levels of redundancy.

OnX is committed to providing all of our technology solutions on the best-in-class technology that will help our partners reach their business goals. Our SD-WAN solution can be delivered on either Cisco SD-WAN with Viptela technology or VMWare SD-WAN by VeloCloud, so your organization can leverage the perfect SD-WAN offerings for your needs.

### Cisco SD-WAN with Viptela technology

The Cisco SD-WAN with Viptela technology solution is a powerful option that is perfectly suited for enterprise-level organizations with large site locations and those who operate across thousands of locations.

Cisco SD-WAN allows you to deploy your WAN over any type of connection from MPLS, Internet, or 4G LTE. You'll gain rich services like WAN optimization and firewall or basic WAN connectivity, for physical or virtual platforms across the branch, WAN, or cloud.

You can also access real-time application optimization for productivity and SaaS applications. Intent-based dynamic path control optimizes network and application performance. Cisco SD-WAN offers all this with integrated security for superior threat intelligence.



The benefits of Cisco SD-WAN include:

- **Enhanced user experience.** Cisco SD-WAN allows users to deploy applications in minutes on any platform, and it delivers a consistent user experience and predictable performance.
- **Great agility.** Your organization can leverage faster, easier deployment and operation of your WAN, and faster performance that uses less bandwidth.
- **Advanced threat protection.** Cisco SD-WAN allows your organization to securely connect users to applications, while multilayer security encrypts all data for protection from the WAN edge to the cloud.

#### VMWare SD-WAN by VeloCloud

VeloCloud SD-WAN is a perfect fit for organizations operating multiple branches with regional or national site locations. It offers performance and reliability on a cloud-ready network, and you can enable zero-touch branch network deployment with automation and business policy-based orchestration.



This solution provides bandwidth expansion as well as direct optimal access to enterprise and cloud applications, and data. It also enables virtual services insertion in cloud and on-premises, while dramatically improving operational automation.

SD-WAN can be delivered on wired or wireless broadband Internet with or without traditional MPLS to create enterprise-grade WAN with increased bandwidth, high performance access to cloud, service insertion, and extensive network visibility.

VMWare SD-WAN by VeloCloud features include:

- **Performance and reliability.** The solution provides hybrid WAN with high performance, reliability and transport, and provider flexibility to assure optimal performance even for high-bandwidth applications like voice and video.
- **Cloud network.** SD-WAN allows you to eliminate datacenter backhaul penalties with a cloud-ready network to provide an optimized direct path to both public and private clouds.
- **Virtual services.** You can reduce the branch office footprint with a single click with seamless insertion and chaining of virtualized services on-premises and in the cloud.
- **Automation and orchestration.** You can enable zero-touch branch network deployment with automation and business policy-based orchestration.

To blueprint your migration to the cloud and identify the most effective SD-WAN or NaaS solution, contact the experts at OnX for a customized plan tailored to the needs of your business.

Call 1.866.906.4669 for a free consultation to answer your questions today.