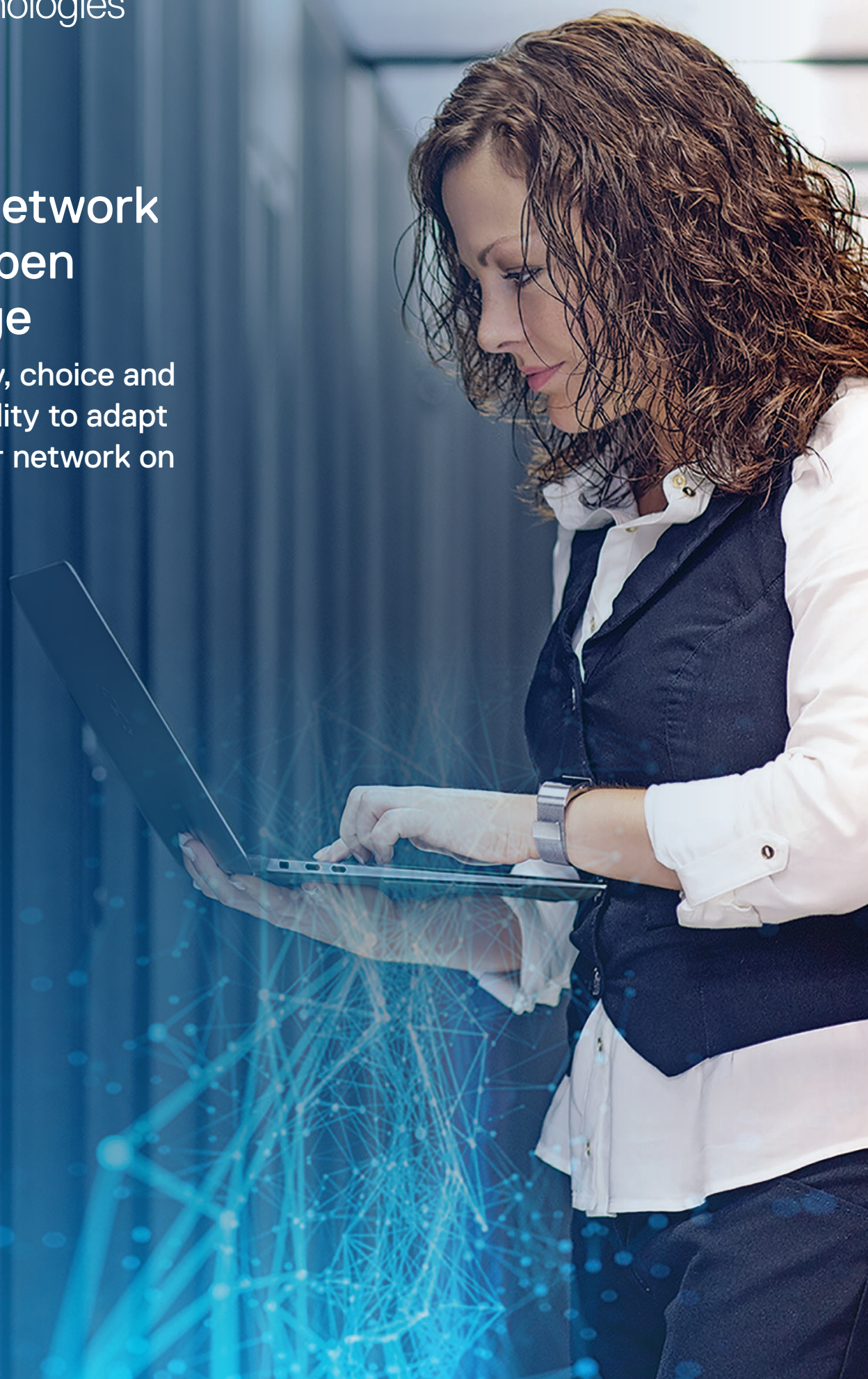


## Build a Network That's Open to Change

Add scalability, choice and greater flexibility to adapt and grow your network on your terms.



# Table of Contents

- Challenges with an evolving networking landscape . . . . . 4
- The Dell Technologies point of view . . . . . 5
- The value of our open networking vision . . . . . 5
- Open up the network — and connect to new possibilities. . . . . 7
- Learn more. . . . . 7

The world is advancing at a rapid clip. A global pandemic, emerging technologies, and a continual influx of data have put new demands on your IT infrastructure, and tremendous strain on your network. We've hit a point where it's no longer enough to keep up with change. Rather, it's about being prepared for whatever comes next.

While great strides have been made in the server and storage space in terms of, for example, virtualization, convergence, and disaggregation, networks have been slower to follow suit. Traditionally rigid and proprietary, networks create a lot of extra work for IT admins who would like to spend more time innovating and modernizing the network than responding to issues or maintenance demands.

At Dell Technologies, we're dedicated to changing that. On one hand, we're bringing something unique and differentiated — an open networking option — that is generating industry buzz and recognition. On the other, we're putting the Dell Technologies brand, our end-to-end offering, and global supply chain to work for your business and networking objectives.

Our evolved open networking vision brings massive scalability along with added agility in open, disaggregated solutions. Pick and choose the hardware, software, and network operating systems that best fit your requirements within your data center and at the edge. At the same time, take advantage of automation and innovative management tools and other key integrations that streamline and simplify your experience with open networking technology.





## Challenges with an evolving networking landscape

When it comes to your network, do you feel like you are operating in response mode? Are you dealing with changing traffic patterns, settling for rigid and slow-moving proprietary solutions, struggling to maintain capacity? Is your network complex, and do you spend a lot of time simply maintaining it? If you answered “yes” to these questions, you’re not alone.

For years, **network traffic patterns** were somewhat predictable, but that is changing. The global pandemic brought work from home mandates and massive shifts in network traffic. Instead of operating from a central location within the network, your employees — now working remotely — are accessing applications and files within your data center from outside locations. This puts an increased load on your network.

At the same time, more network traffic is generated through the use of artificial intelligence (AI), machine learning (ML) and virtualization — **emerging applications** that have increased the collection and flow of data.

Most networking vendors run systems with **proprietary features and functionality**. While this wasn’t really a problem when you could patiently wait for the next system upgrade, the new reality is that you must move faster than proprietary systems with long development cycles will allow.

We recognize that you’re looking for **easier, more seamless ways of keeping up with demand**. You want a network that is optimized for today, but that also provides flexibility to adopt new features and functionality tomorrow without undergoing a forklift upgrade.

Finally, many network operating systems are super complex. They’re still using command line interface (CLI) for management. And manual management using CLIs is labor intensive and prone to error.

All these factors have created greater demand for larger networks, networks that can scale faster and are more flexible and amenable to change.

## The Dell Technologies point of view

Dell Technologies is keenly aware of the challenges that exist in the networking space and what must be done to address the limitations brought on by slow-moving legacy, proprietary networks.

We want to simplify multi-cloud connectivity and dramatically improve your experience. Only with highly scalable and agile data center and edge networking solutions can you address these challenges and take your network infrastructure to the next level.

An open networking, standards-based approach completely disaggregates hardware and software as well as the networking operating system itself. This provides more freedom to choose your desired networking components while also removing functionality that may not be needed. You can build a network that is customized to meet your needs.

As capacity requirements shift, emerging technologies bring new demands. When the unexpected occurs, we want you to confidently move forward with a network that is flexible, simple to operate, and slated to grow.

## The value of our open networking vision

With Dell Technologies Open Networking, we offer a complete strategy that combines networking scalability and agility with standards-based hardware and innovative, best-in-class software solutions — and the automation tools to streamline a large amount of manual intervention.

You'll be in a better position to meet workflow and application demands with greater network flexibility and control.

### Open to scale

Dell Technologies Open Networking is designed around a highly scalable, cloud-ready data center network fabric. It leverages real-world tested Software for Open Networking in the Cloud (SONiC) OS, originally developed and hardened by Microsoft® for hyperscale cloud environments.

[Enterprise SONiC Distribution by Dell Technologies](#) is the first commercial version to provide enterprise-ready features and global support for large-scale environments. We've built additional capabilities around the SONiC OS. And we've hardened it with extensive testing and validation across our [Dell EMC PowerSwitch portfolio](#).



**Enterprise SONiC  
Distribution by  
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version to provide  
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support for large-  
scale environments.**



SONiC is currently running on **40,000+ Azure® switches.**

The Z9332F-ON is the **industry's first 400GbE open networking Ethernet switch.**

The SONiC OS is built around a containerized architecture and uses standards-based APIs, which help to remove some of the complexity with integration. You gain flexibility to adapt various applications to your environment — and run only what you need. The solution is also backed by a large community of developers who are constantly delivering new software and applications.

Achieve better outcomes for data center networking solutions by easily integrating the latest open source and virtualization innovations.

### Open to choose

Dell Technologies Open Networking enables greater agility to customize a just-right network that leverages modern, cost-effective open standards-based solutions. You can choose from a broad offering of innovative network infrastructure platforms, network operating systems, components of the OS, and native network tools and applications. Our disaggregated hardware, software and OS offering for the data center and network edge is tested, certified and globally supported.

For example, you can take advantage of the highly scalable Enterprise SONiC Distribution by Dell Technologies or other full-featured software-defined networking operating systems, like [SmartFabric OS10 software](#).

In the past, Dell Technologies worked closely with Microsoft on the Switch Abstraction Interface (SAI), which is what allows us to run different types of operating systems on our switching hardware. In fact, the PowerSwitch Z9332F-ON is the industry's first 400GbE open networking Ethernet switch. You can now choose from a broad range of Ethernet switches for core, edge or cloud deployments. The [Dell EMC PowerSwitch portfolio](#) is designed for architectural agility and flexibility, helping you smoothly migrate to a software-designed data center.

In addition to switches, we offer two multi-function solutions that operate at the network edge. [Dell EMC SD-WAN Solution powered by VMware](#) and [Dell EMC Virtual Edge Platform \(VEP\)](#) are edge platforms ideal for remote offices, districts, and more. These edge solutions greatly reduce the cost of remote connections by leveraging existing broadband facilities. The VEP platforms are also disaggregated, which means you can interchange components such as virtual firewalls and acceleration tools.



Automate up to  
**99% of network  
configuration steps.**

### Open to simplify

At Dell Technologies, we simplify the design, deployment and operations of the network infrastructure from edge to core. We break down silos, help reduce mundane and repetitive tasks, and give your IT admins freedom to spend more time on new services and innovation.

We greatly simplify management and integration with state-of-the-art data center networking automation software like Red Hat® Ansible®, Dell EMC SmartFabric, and cloud-based SD-WAN solutions. For example, the Dell EMC Networking SmartFabric OS10 with [SmartFabric Services](#) automates up to 99% of the network configuration steps for VxRail hyperconverged environments.

And by eliminating a lot of the manual activities, you can also minimize errors, which is great news given that 90% of issues occur because of human error: someone misconfiguring a port or protocol setting, for example.

### Open up the network — and connect to new possibilities

Network modernization is the ultimate objective. But we understand that you don't want just any solution. You want an enterprise- or telco-grade network that is proven to scale and grow with your business — that's customized for your specific needs, easier to integrate and manage, and fully supported by the Dell Technologies brand.

Working together, let's take your network to the next level. Where you can integrate more easily with other systems and have the capacity to address tomorrow's traffic patterns. Where you can support the adoption of new technologies, new workloads, and applications. Where you can automate and simplify network management, removing the stigma of network complexity moving forward. And, most importantly, where you are open to new technologies, new shifts — and, of course, new possibilities.

### Learn more.

[Click here](#) to learn more about Dell Technologies Open Networking.



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