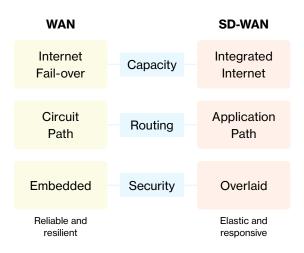
# Build a wiser WAN.



## Managed SD-WAN with Application Aware Routing.

Demand for cloud and mobile technologies is higher than ever, and with it comes the need for better application performance. Because reaching more people in more places is just the beginning. Doing it quickly and reliably is another story. Some organizations have turned to the public Internet to help make it happen. But can you rely on public IP services without sacrificing performance? With a software-defined wide area network (SD-WAN), the answer is yes.



SD-WAN is an advanced networking approach that helps enterprises shape their WAN to handle changes in Internet traffic, SD-WAN platforms create hybrid networks to integrate broadband or other network services into the corporate WAN. All while maintaining the performance and security of real-time and sensitive applications.

Our Managed SD-WAN with Application Aware Routing platform measures and monitors performance of multiple services in the hybrid network, and uses application routing to offer more granular control of where and under what circumstances an application transaction uses a specific service. This allows your enterprise to make better use of your overall network, because capacity that may have been dormant in fail-over networks is included into an active/ active configuration.

Our Managed SD-WAN platform also allows organizations to offload Internet-bound traffic, which means private WAN services remain available for real-time and mission-critical applications. This added flexibility helps improves traffic flow and alleviates pressure on the corporate network.

Finally, with traditional private WAN services, security is normally embedded and centralized. Instead, Managed SD-WAN overlays a single security policy, often in the form of virtual private network (VPN) tunnels across the entire infrastructure. This single policy allows you to standardize your security across your network.

#### Reducing risks associated with SD-WAN.

SD-WAN brings powerful new capabilities. but along with the many benefits of hybrid WAN comes additional complexity to policies and templates that administer security, quality of service (QoS), protocols, service types, devices, controllers, and operating systems. And while organizations want to adopt hybrid platforms, many may not have staff with the expertise to manage the risks that come with that added complexity. Verizon Managed Services can support your SD-WAN and help your enterprise move forward confidently with your implementation.

> **Powerful capabilities** require skilled oversight. We have more than 20 years experience managing and protecting customer networks.

## Migrating to SD-WAN with confidence.

While many companies may want to move to hybrid networking, many networking teams will face challenges migrating to SD-WAN. They may not have the tools, expertise, or infrastructure to build and manage the solution. Our Professional Network Consulting Services help IT teams bring complex projects-like hybrid networking-to life.

These services include Network Strategy Workshops, Network Discovery and Assessment, Network Design and Implementation, and a variety of technology-specific design, transformation, and adoption strategy solutions, including:

Challenges of SD-WAN	Verizon's Managed Service Benefits
Moving from a traditional, IP destination address, per- packet-based approach to an end-to-end, application- aware approach	Standardized SD-WAN operational practice helps simplify consumption and speed transition while providing positive return on investment.
Security implications of public IP services and Internet breakout options	Multiple security options, including cloud-based firewalls, provide flexibility to architect the solution to balance compliance/risk with performance.
Multiple access-service types, multiple service providers	Bonds multiple services into a single service with a unified view into performance reporting, change management, and troubleshooting.
Moving from multiple in-house managed and carrier- managed WANs to an overlay WAN	Global WAN SLA inclusive of many third-party service providers.
Updating application routing rules as new users, applications, and changing business patterns impact WAN performance	Tested change-management processes help you avoid unnecessary downtime from configuration errors.
Obtaining accurate application inventory and applying reporting metrics to improve routing and utilization	Reporting platforms and processes to observe, analyze, and recommend changes based on application behavior.
Integrating new reporting and changing management platforms for application visibility	As-a-service platforms can be easily turned on and scaled to support your growing implementation with project management oversight for delivery.
Cost of hiring, training, building, and maintaining application-centric routing and management systems, people, and monitoring platforms	Geodiversified network operations centers, trained personnel, and scaled, carrier-integrated management platforms with options for both shared and dedicated engineering resources.

- Application assessments to determine flow and performance thresholds and routing rules
- · Feasibility assessments and recommendations to improve network performance and control costs
- · Unbiased analyses of all options, including a hybrid network, adding additional bandwidth to the private network, or other alternatives

## Realizing the positive business impact of SD-WAN.

SD-WAN can improve the efficiency of your network. It can also help your IT staff deliver services faster, improve service levels, and focus more attention on business partners. But only if you manage it the right way.

> Leverage portals, platforms, and tested practices and processes to implement SD-WAN with confidence.

Our Managed SD-WAN with Application Aware Routing solution gives you the tools, monitoring, oversight, and life-cycle support you need to maintain application visibility and control-and support increased network use while keeping up with application performance. By leveraging our tested practices and processes, portals, and platforms, as well as our people, you can absorb the new technology into your organization without making drastic changes. Verizon's life-cycle management approach helps you develop a migration plan that suits your readiness now and in the future. This includes:

- Fault/configuration/change management of the underlying hybrid platform and transport services
- Instrumentation of path quality and management of associated thresholds and alarms
- Customer-accessible reporting on path quality, application prioritization, utilization, trending, and changes in application path selection
- Proactive traffic management-refreshing application rules and path selection
- Troubleshooting performance degradation

We can help you connect users to applications simply, securely, and reliably.

#### Moving beyond SD-WAN.

SD-WAN can improve throughput and application performance. For enterprise IT, this is just the first step toward aligning IT with the business. New technologies can help you improve visibility and speed to support growing cloud workloads and unpredictable user demand inside and outside the corporate network.

Verizon can help you on your journey. The software-defined networking transformative impact is moving its way through our managed services solutions. Our traditional managed-network platforms are now capable of providing your organization with a single view into application performance and end-user impact. This allows you to break down IT silos that inhibit fast service delivery. Our analytics platforms give you even more visibility, helping you make sense of the increasingly complex flow of apps and user transactions before they seriously impact your organization.

Our ongoing investments in next-generation network technologies and related virtualization products are paving the way to connect users securely and reliably. And we're constantly reshaping and reconfiguring to meet your changing business technology needs.

Our Managed Network Services portfolio frees you from the complexities of day-to-day management of your network and applications so you can focus on moving your business forward.

## Learn more.

Find out how partnering with Verizon can help you improve your IT operations and drive business growth. Contact your representative today.

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