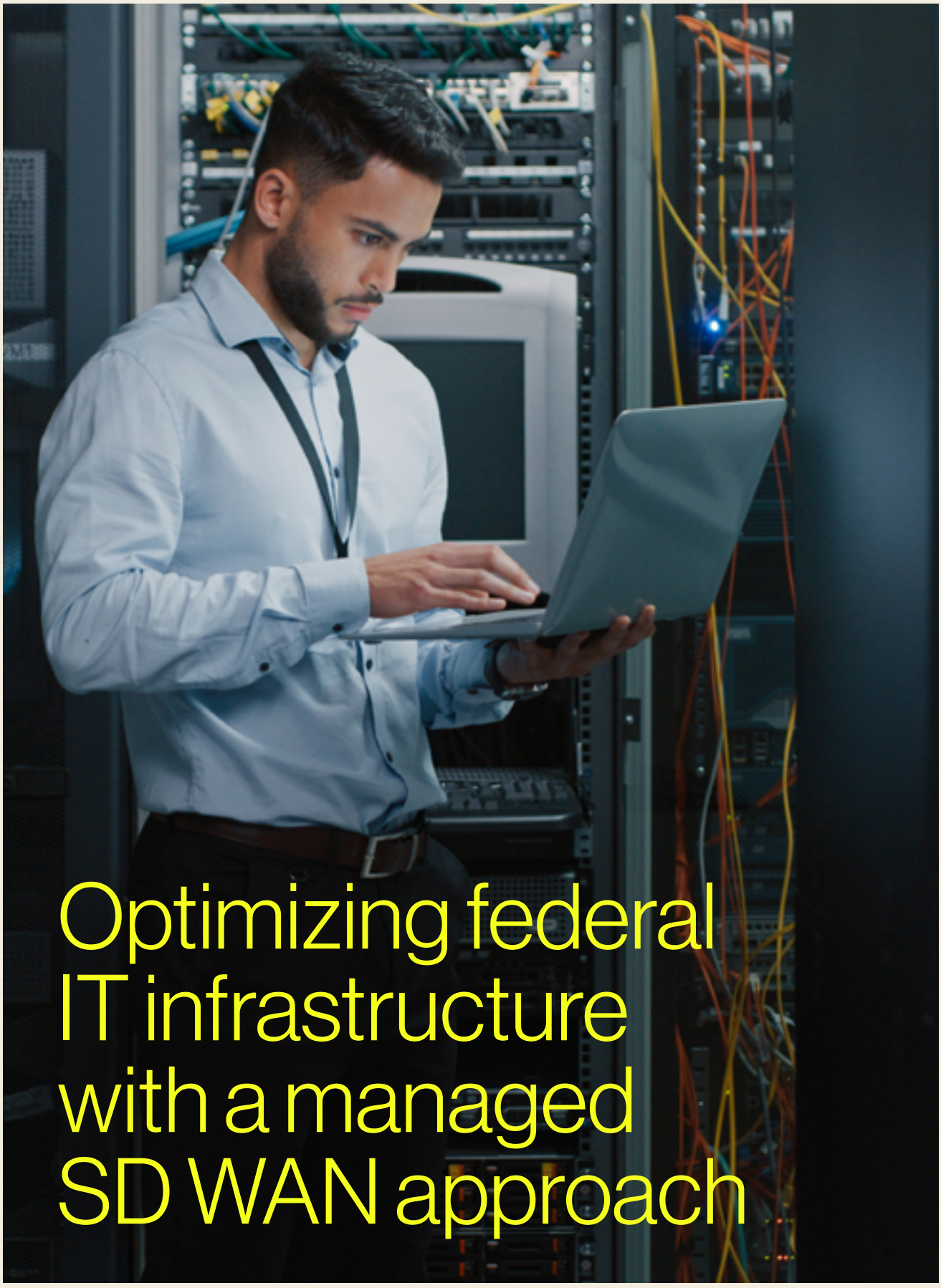

Optimizing federal IT infrastructure with a managed SD WAN approach

verizon

"Federal agencies continue to look for opportunities to leverage the latest technology to increase efficiency, while also modernizing their network infrastructure with the required compliance and security," said Kim Mirabella, vice president for business development and strategic sales at Verizon. "Managed SD WAN delivers tailored solutions that empower agencies to meet these demands more efficiently, while reallocating critical resources and accelerating the deployment of cutting-edge technology."[1]

Both civilian and defense agencies face mounting pressure to modernize IT infrastructure while enhancing security, reducing costs and combating waste, fraud and abuse. Managed Software-Defined Wide Area Networking (SD WAN) offers a targeted solution that enables faster, more secure connectivity across agencies, field offices and cloud environments. This white paper explores how a Government Cloud-Managed SD WAN can empower federal IT leaders to build a more resilient, efficient and future-ready network infrastructure.

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- David Rouse, director of defense sales at Verizon

The evolving needs of federal IT networks

Digital transformation is not just a buzzword – it has been a federal priority for over a decade, ensuring government operations keep pace with an increasingly digital world.[2] Recent years have accelerated modernization efforts, driven by growing demands for cloud services, secure remote access, and resilient infrastructure.

There are a number of key drivers for federal IT systems. One of them is the push to phase out TDM-based services. A key driver of change is federal mandates to phase out TDM-based services.

"More recently and in some areas, there is a new driver," explained David Rouse, director of defense sales at Verizon. We are seeing local mandates and regulations about carbon footprint and green energy initiatives where legacy TDM and copper infrastructure is required to be shut down for more efficient IP and fiber-based solutions."[3]

While traditional WAN architectures are still foundational and in many federal environments, they are increasingly challenged by the demands of cloud adoption, inter-agency collaboration, and secure, high-speed data access. Dynamic routing and application aware routing as offered by SD Wan allow adaptive routing solutions. Agencies need more adaptive solutions that integrate with legacy systems while addressing modern performance, security, and cost-efficient goals.

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With the federal government's heightened focus on reducing waste, fraud, and abuse, agencies must embrace more efficient and scalable networking solutions. SD WAN, enhanced by AI-driven network management, can strengthen security and help ensure compliance while cutting costs. It integrates with existing infrastructure, improves visibility and control, and supports a more cost-effective and resilient federal IT ecosystem.

To fully realize these benefits without overburdening internal teams, many agencies are turning to managed services.

1. https://www.globenewswire.com/news-release/2025/04/29/3070221/0/en/Verizon-Launches-Government-Cloud-Managed-SD-WAN-to-Accelerate-Federal-Agency-Modernization.html
2. https://www.state.gov/digital-government-strategy
3. https://federalnewsnetwork.com/federal-insights/2022/08/purposeful-innovation-should-drive-dod-network-modernization-efforts/

What is a managed service?

A managed service[4] is a delivery model where a trusted, mission-aligned partner with federal expertise assumes responsibility for the day-to-day operations, monitoring, maintenance, and optimization of a specific technology or system. This approach relieves often overstretched internal IT teams, allowing them to focus on higher-value, mission-critical initiatives.

For federal agencies, a managed SD WAN approach offers significant advantages. It reduces the burden on in-house IT teams, helps ensure compliance with evolving federal standards, and accelerates the deployment of secure, scalable networking solutions across distributed environments. With FedRAMP-authorized solutions like Verizon's Managed SD WAN, agencies benefit from a trusted, centralized partner who can simplify complexity, manage upgrades, respond to incidents, and ensure mission continuity while maintaining visibility and control over their network environment.

Why SD WAN for the federal government?

SD WAN presents a transformative solution by virtualizing and intelligently managing network traffic to optimize cloud connectivity, strengthen security, and improve operational efficiency. For federal agencies navigating complex hybrid environments, SD WAN delivers the flexibility, control, and scalability needed to meet mission demands at the same time staying aligned with federal mandates and budget constraints.

An added advantage is the integration of AI-driven network intelligence, which continuously analyzes performance, predicts potential issues, and enables real-time, automated adjustments. This proactive approach enhances uptime, strengthens threat detection and response, and reduces the manual workload on IT staff.

The government's demand for SD WAN is reflected in its rapid market growth. Currently valued at $4.98B, the government SD WAN market is projected to reach $15.2B by 2032, with a compound annual growth rate (CAGR) of 13.18% over the next seven years.[5]

For federal agencies, SD WAN offers

- Enhanced security & compliance
- Optimized hybrid cloud performance
- Cost efficiency & agility
- Improved network resilience

4. https://www.verizon.com/business/products/networks/managed-network-services/
5. https://www.marketresearchfuture.com/reports/sd-wan-for-government-market-31863

SD WAN in federal hybrid cloud strategies

While traditional WANs struggle to support multi-cloud ecosystems, SD WAN can offer a dynamic, intelligent networking approach that helps establish seamless connectivity, optimized traffic management and enhanced security.

It enables agencies to:

- **Support multi-cloud and hybrid cloud environments:** SD WAN dynamically adapts to cloud-based workloads, providing direct, optimized connectivity to multiple cloud providers without relying on a single circuit or connection. As the U.S. General Service Administration (GSA) SD WAN Overview and Ordering Guide states, “SD WAN allows direct routing to/from cloud-based services, increasing networking efficiency without compromising cybersecurity.”[6]

- **Enable intelligent traffic routing:** Policy-based routing directs traffic through the most efficient and secure path, prioritizing critical applications while ensuring compliance with federal cybersecurity standards.

- **Improve security posture:** As SD WAN enhances visibility and control across the network, it enables agencies to implement zero trust principles, segment traffic, and detect threat in real time. AI-driven analytics further strengthen cybersecurity by identifying and responding to potential risks before they impact mission-critical operations.

6. https://eis-public-pricer.eos.gsa.gov/ajax.php/resources/download?type=file&file=GSA+SD-WAN+Ordering+Guide.pdf

Intelligent automation and analytics in federal IT

Combining SD WAN with AI can create additional benefits, helping agencies manage complex, distributed federal networks with intelligent automation to reduce operational burdens and enhance efficiency.

Verizon's Managed SD Branch[7] combines SD WAN, LAN, WLAN, and advanced security into a unified platform. It leverages automation, preconfigured tools, and cloud-based management to provide centralized control across distributed environments from small branches to large campuses.

Benefits:

- **Operational insight:** Reduce manual oversight with integrated dashboards and telemetry that provide a clear view into performance, traffic, and potential issues.
- **Automation:** Accelerate onboarding with preconfigured devices and policies that reduce errors and speed up deployment.
- **Flexibility & control:** Choose between fully managed and monitor/notify options, maintaining visibility, while offloading operational complexity.

By combining automation, integrated telemetry, and centralized visibility, Verizon helps agencies manage growing network demands in implementing managed intelligent operations. These intelligent capabilities lay the groundwork for more adaptive, secure, and scalable federal network infrastructure.

7. https://www.verizon.com/business/products/networks/managed-network-services/managed-sd-branch/

Key features and benefits for federal agencies

Unified network visibility and centralized control

Federal agencies operate within complex IT environments spanning on-premises data centers, cloud platforms, and remote offices with multiple levels of modern and legacy technologies. As the GSA pointed out, SD WAN "provides network agility to meet current and future organizational demands for a reliable and flexible network. The orchestration of network management reduces the complexity of operations and offers greater flexibility, which improves performance by allowing for more efficient operations."[8]

By centralizing network management, a Managed SD WAN approach can enhance oversight and help streamline operations. Federal IT teams can gain near-real-time visibility into network performance, enabling proactive policy enforcement, threat detection and rapid response to anomalies. Agencies can deploy updates, enforce security measures and resolve issues remotely without manual intervention.

Security and compliance: meeting federal standards

Keeping confidential and secure government documents protected is crucial and federal agencies must adhere to strict security and compliance mandates. SD WAN solutions provide secure, policy-driven network management that aligns with federal cybersecurity frameworks.

- **FedRAMP compliance[9] and secure SD WAN deployments:** Ensuring that SD WAN solutions meet the rigorous security standards required for cloud services used by federal agencies.
- **Zero Trust architecture and encryption:** Implementing strict access controls and end-to-end encryption to protect sensitive government data and communications.
- **Support for CISA and NIST cybersecurity guidelines:** Aligning with federal directives to enhance threat detection, incident response and overall network resilience.

By integrating these security measures, SD WAN is not only able to protect against cyber threats but also helps to simplify compliance with federal mandates.

8. https://origin-www.gsa.gov/system/files/GSA%20SD-WAN%20Use%20Case%20Primer%20November%202023-508.pdf
9. https://www.verizon.com/business/dam/img/solutions/public-sector/federal/meet-with-ease/Making-the-most-of-FedRAMP-white-paper.pdf

Cost optimization and budget efficiency

Balancing IT modernization with budget constraints is critical for federal agencies. While SD WAN deployment requires upfront investment, the long-term return on investment (ROI) by improving performance, streamlining management, and reducing the operational complexity of legacy networking environments.

Legacy architectures, especially those reliant on static configurations and low-bandwidth connections, can contribute to technical debt, diverting agency resources toward maintaining older, outdated systems. The U.S. government is projected to spend nearly half of its $100B annual IT budget on keeping legacy systems operational, limiting agencies' ability to invest in forward-looking solutions.

By introducing more dynamic, broadband-enabled networking strategies alongside existing infrastructure, SD WAN helps agencies optimize resource use without fully replacing legacy systems. A GSA analysis found that medium-sized agencies adopting SD WAN can achieve a 42% cost avoidance.[10] This is a significant improvement that enables better alignment of technology with mission goals.

Beyond cost savings, SD WAN's scalability allows agencies to align network growth with evolving mission needs, safeguarding adaptable and future-proof investments.

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Enabling a more efficient use of agency personnel

When resources and teams are already stretched thin, SD WAN allows federal agencies to delegate routine, time-consuming network management tasks to experienced mission-aligned providers. By outsourcing routine, time-consuming tasks such as network monitoring, patch management, configuration updates, and fault isolation, agency staff can redirect their focus to higher-value activities. These include analyzing threat intelligence, implementing proactive cybersecurity strategies and accelerating digital transformation initiatives that directly support mission outcomes.

This division of labor not only helps agencies operate more efficiently but also improves workforce morale and retention by allowing internal teams to work on meaningful, strategic priorities rather than administrative overhead.

Focusing on the mission, not the maintenance

Partnering with a trusted SD-WAN provider means agencies no longer need to focus their energies on building and maintaining every capability in-house. This frees internal teams to concentrate on what matters most: delivering services, advancing policy goals and supporting the mission.

10. https://gsablogs.gsa.gov/technology/tag/sd-wan/

Mission-critical SD WAN use cases for federal agencies

Securing Cloud Connectivity for Civilian Agencies

As federal agencies advance cloud-first strategies, ensuring secure, high-performance access to cloud applications and services across multiple locations is essential. FedRAMP Ready SD WAN solutions support these objectives by delivering dynamic, policy-driven routing to cloud applications, maintaining compliance and performance.

With SD WAN, agencies gain secure, encrypted access to cloud platforms for sensitive operations, such as public health, financial services, and citizen engagement. Intelligent traffic routing ensures critical data like medical records or tax filings, is transmitted securely and efficiently, even during peak usage periods. SD WAN can support compliance efforts, such as helping banks meet Payment Card Industry Data Security Standard (PCI DSS) requirements, while maintaining performance across distributed environments.

These features are especially valuable for agencies that experience seasonal or surge-based demand spikes, such as during tax-season or emergency response scenarios. SD WAN can temporarily redirect traffic across secondary circuits typically reserved for failover, helping to avoid costly congestion or downtime.

Managing Field Operations and Federal Mobile Workforces

Agencies with field operations, such as emergency response teams or mobile command units, require fast, secure and resilient connectivity in environments where traditional infrastructure may be unavailable or unreliable. SD WAN supports this need by delivering flexible, redundant networking that can rapidly be deployed in the field.

Mobile command centers, for instance, can benefit from SD WAN's intelligent traffic steering and failover capabilities to maintain real-time communication and data access during high-stakes operations.

Additionally, SD WAN supports hybrid workforce models by securely extending cloud access across government and contractor networks without backhauling traffic through central data centers. This reduces latency while maintaining visibility, compliance, and centralized control.

Strengthening Defense and National Security Communications

To support secure, mission-critical operations, the Department of Defense and other national security agencies require communication infrastructure that is both resilient and agile. SD WAN empowers these capabilities by intelligently routing traffic across multiple transport types based on real-time conditions, application packet priority, and security priority.

During joint military exercises or active combat training scenarios, SD WAN can provide secure, low-latency communications between military bases, mobile command units and remote operatives, maintaining connectivity even in contested environments where traditional solutions might fail.

SD WAN's agility also supports defense organizations in rapidly standing up new locations – whether it's a tactical operations center or a temporary base – and optimizing the use of public broadband for sites that don't require 100% uptime. This flexibility is critical for operational readiness and cost control alike.

SD WAN's Role in Workforce Modernization

Supporting Federal Hybrid and Remote Work Models

Federal agencies work from a myriad of locations, requiring secure and reliable network access for employees, regardless of their location. While SD WAN primarily provides secure site-to-site connectivity, linking offices, data centers and branch sites, it also plays a crucial role in enabling hybrid and remote work by ensuring consistent, prioritized access to government applications across these locations.

Through application-aware routing and intelligent bandwidth management, SD WAN directs critical application traffic efficiently between sites, reducing latency and improving overall network performance. This foundation supports secure remote access solutions and enables agencies to deliver a seamless user experience for employees, whether they connect from government offices, remote locations, or home networks.

Addressing IT Workforce Challenges in Federal Agencies

Traditional network solutions often require manual configuration and ongoing maintenance. SD WAN simplifies this through centralized, automated network management, allowing IT teams to manage their network efficiently from a single interface. By automating routine tasks like traffic routing and policy enforcement, SD WAN reduces manual workload, enabling IT staff to focus on strategic initiatives.

To fully leverage the breadth of what SD WAN has to offer, agencies can upskill their IT teams in software-defined networking and SD WAN management, ensuring staff can maximize benefits and enhance operational efficiency.

Future-proofing federal networks with SD WAN

Integrating SD WAN with 5G and edge computing

As agencies embrace emerging technologies, SD WAN will integrate with 5G and edge computing, ensuring networks remain agile and capable of meeting future demands. This combination helps enable real-time data processing closer to the source, essential for IoT networks, sensor networks, and other real-time applications across federal operations.

Next-generation SD WAN innovations for federal IT

SD WAN will continue incorporating AI-driven innovations to enhance network security and incident response. AI-powered solutions will proactively monitor network activity, identifying potential threats and automating responses in real time. Additionally, SD WAN's flexible architecture will enable agencies to scale and adapt without costly infrastructure overhauls.

Accelerating federal digital transformation with SD WAN

To initiate the transition toward a future-ready network, federal agencies should begin exploring SD WAN through established procurement pathways such as GSA, EIS, and other approved contracts. These pathways streamline the process of acquiring and implementing SD WAN solutions, making it easier for agencies to deploy modernized networks efficiently.

SD WAN in federal procurement: contracting considerations

Leveraging federal contract vehicles for SD WAN adoption

Once federal agencies have decided SD WAN is the right choice for modernizing their IT infrastructure, established procurement pathways like GSA's Enterprise Infrastructure Solutions (EIS) contract can assist in streamlining an SD WAN acquisition, allowing agencies to bypass lengthy OTA-types of negotiations and expedite deployment. Agencies can access a range of SD WAN solutions network and connectivity offerings to compliment an SD WAN application tailored to their specific needs, accelerating the adoption of modern network infrastructure and contributing to overall federal IT modernization goals.

As Christopher Dascenzo, DoD capture programs executive for Verizon, noted: "With usage-based pricing models, the more data you consume, the more your pricing tier adjusts year over year. The ability to offer services this way is built into the EIS contract, making it easier for agencies to scale based on demand."

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Why Verizon for Managed SD WAN?

FedRAMP Authorized and built for government needs

Verizon's Managed SD WAN solution is built to FedRAMP High standards, providing federal agencies with a secure, compliant foundation for network modernization. This managed service is fully integrated with the Verizon Government Cloud and Verizon's robust network infrastructure, ensuring a seamless and secure experience for agencies that must meet the government's most stringent cybersecurity requirements. Agencies can deploy with confidence, knowing the platform aligns with federal mandates for security, availability and performance.

Verizon Government Cloud SD WAN

Verizon's Government Cloud SD WAN service delivers secure, scalable, and cloud-optimized networking purpose-built for federal agencies. Designed to support hybrid cloud environments and distributed missions, it integrates with existing government systems while providing centralized visibility, intelligent traffic management and resilient connectivity. The solution is tailored to meet the unique demands of federal users, ensuring high availability, performance and compliance without compromising security.

Proven expertise in federal IT and networking

Verizon has a long history of delivering secure, reliable network solutions to federal agencies, ensuring seamless connectivity and robust performance in mission-critical environments. With extensive experience working within FedRAMP, DoD security frameworks and other federal IT policies, Verizon is uniquely positioned to support agencies in meeting stringent security and compliance requirements while modernizing their network infrastructure.

End-to-end managed SD WAN services

Verizon offers comprehensive managed SD WAN services, from design and deployment to ongoing management, enabling federal agencies to optimize their networks with minimal disruption. By leveraging its proven expertise, Verizon supports the digital transformation of federal agencies, ensuring secure, efficient and high-performance networks that align with evolving mission priorities.

Partner with experience

Verizon is ready to partner with federal agencies to achieve mission-critical network objectives, offering proven expertise in SD WAN design, deployment and management.

Together, we can accelerate the federal government's digital transformation and ensure that agencies remain resilient and secure, ready to tackle the challenges of tomorrow's digital landscape.

For more information about Verizon's SD WAN managed solution and other FedRAMP compliant solutions, visit us at **verizongov.com**