Modernizing Federal Network Infrastructure:
Addressing Mission-Critical Challenges with Secure, Compliant, and Scalable Solutions

CTG FEDERAL
Cohesive Technology Group

Federal agencies face unprecedented challenges in securing and modernizing their network infrastructures to meet the demands of an increasingly digital and mobile workforce. With the evolving threat landscape, agencies must transition from legacy perimeter-based security models to a Zero Trust architecture that ensures security, resilience, and compliance with federal mandates, such as Executive Order 14028, the Office of Management and Budget (OMB) memorandum M-22-09, and CISA's Zero Trust Maturity Model. These policies set the direction for a fundamental shift toward identity-centric security, micro-segmentation, encrypted communications, and advanced threat detection. To support these initiatives, agencies require scalable, software-defined, and policy-driven network solutions that provide agility while maintaining operational security in the most demanding environments.

CTG Federal is committed to helping U.S. federal agencies modernize their network infrastructure in alignment with Zero Trust Network Architecture (ZTNA) principles. Our solutions integrate advanced security models and innovative networking technologies to deliver a secure, compliant, and high-performance network framework.

Comprehensive Network Modernization Solutions

We provide a full spectrum of modernization capabilities to address the federal government's most pressing networking challenges:

ZERO TRUST NETWORK ARCHITECTURE (ZTNA)

Ensuring that all access requests—whether from users, devices, or workloads—are authenticated, authorized, and continuously verified before granting access to network resources. Our ZTNA implementations align with federal mandates, reducing attack surfaces and limiting lateral movement of threats.

SOFTWARE-DEFINED PERIMETER (SDP)

Providing an identity-aware and dynamically adaptive security perimeter that conceals critical assets from unauthorized access. SDP enhances security posture while offering flexibility to deploy across hybrid and multi-cloud environments.

NETWORK DETECTION AND RESPONSE (NDR) WITH EXTENDED DETECTION AND RESPONSE (XDR) INTEGRATION

Enabling real-time visibility, threat detection, and automated response capabilities through AI-driven analytics. NDR is a foundational component for cyber resilience and compliance with evolving federal cybersecurity frameworks.

VPN REPLACEMENT WITH SECURE ACCESS SERVICE EDGE (SASE)

Transitioning from traditional VPNs to a cloud-native SASE model that consolidates security functions, optimizes performance, and enhances user experience for remote and hybrid workforces.

NETWORK AUTOMATION AND MOBILITY

Leveraging AI-driven automation to reduce manual configuration errors, streamline operations, and enhance network adaptability. Our solutions ensure seamless mobility and secure connectivity across agencies and mission-critical environments.

DDIL NETWORKS AND SATCOM SOLUTIONS

Supporting operations in Disconnected, Disrupted, Intermittent, and Limited (DDIL) environments with resilient network architectures. We provide secure and scalable satellite communication (SATCOM) solutions to maintain connectivity in austere environments.

Foundational Capabilities for Federal Networks

CTG Federal delivers next-generation networking capabilities designed to provide secure, reliable, and efficient connectivity:

MACRO-SEGMENTATION VS. MICRO-SEGMENTATION
Implementing both macro- and micro-segmentation to enforce granular access controls and reduce unauthorized lateral movement within federal networks.

ENCRYPTED DATA PLANE AND FULLY ENCRYPTED TRAFFIC
Ensuring that all network traffic—both control and data plane—is fully encrypted, meeting stringent federal security standards for data in transit.

APPLICATION BINDINGS
Binding security policies to applications to enforce least privilege access and prevent unauthorized data exposure.

CENTRALIZED MANAGEMENT AND CONTROL
Providing a unified, policy-driven approach to managing federal networks with visibility, compliance reporting, and automated security enforcement.

API PROGRAMMABILITY AND SOFTWARE-DEFINED NETWORKING (SDN)
Enabling seamless integration and network programmability through API-driven architectures that improve automation, scalability, and policy enforcement.

SD-WAN FOR OPTIMIZED NETWORK PERFORMANCE
Deploying software-defined wide-area networking (SD-WAN) solutions to enhance connectivity, improve application performance, and reduce costs while ensuring compliance with federal cybersecurity requirements.

Industry Leading Technology Partnerships

CTG Federal collaborates with top-tier networking and security technology providers to bring best-in-class solutions to federal agencies. Through these partnerships, we integrate advanced innovations in Zero Trust security, AI-driven network automation, and cloud-native architectures. Our approach ensures agencies stay ahead of evolving cyber threats while optimizing performance, scalability, and compliance with federal mandates.

Why CTG Federal?

CTG Federal is the trusted partner for federal agencies seeking to modernize their networks while ensuring compliance with Zero Trust principles and federal cybersecurity mandates. Our expertise, strategic partnerships, and commitment to mission success enable us to deliver tailored, high-performance networking solutions that meet the stringent security and operational demands of the U.S. government. We combine deep technical knowledge with a consultative approach to help agencies transition seamlessly to a modern, secure, and resilient network infrastructure. Contact us today to learn how CTG Federal can help your agency achieve its network modernization goals.

Contracts

DUN & Bradstreet: 080932836
UEI: G2D4Q7UKR5P5
CAGE Code: 7ZHE9
NAICS Code(s): 541519

NASA SEWP V
Contract Number: NNG15SD12B
Group: Group B_Small Business

GSA Multiple Award Schedule (MAS)
Contract Number: 47QTCA25D003P

DOE ICPT
Contract Number: ICPT CISCO BOA 4I-30062-0008A

Dell Technologies ICPT Agreement
Contract Number: 4I-31841 Small Business

Horizon ELA
Contract Number: W519TC-25-D-A005

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