Securing government networks with AI and Lumen Private Connectivity Fabric ᔆᴹ

How modern government agencies can leverage AI and PCF to enhance security and efficiency throughout their organizations

Challenges

Navigating Data Accessibility, Legacy Infrastructure, and Scalability Hurdles

Public sector organizations face significant hurdles in achieving secure and efficient connectivity. Data inaccessibility, where decentralized and inconsistently accessible data hampers interoperability, poses a substantial security risk for government organizations.

Fragmented data management from technical debt in agencies often leads to gaps in security coverage, making it easier for unauthorized access to occur. Plus, inconsistent security measures across different systems create vulnerabilities, providing entry points for cyber threats.

Additionally, effective security monitoring and response require comprehensive visibility into all data and network activities, which is challenging with inaccessible data. Interoperability challenges further complicate the implementation of unified security protocols, leading to security silos and increased risk of data breaches.

Solution

Adding wireless layer to end-to-end network makeover

By addressing data inaccessibility and enabling consistent, centralized access to data, government agencies can enhance their security measures.

Lumen offers a comprehensive solution that integrates AI and Private Connectivity Fabric (PCF) to enhance security and operational efficiency. Lumen's AI-powered security solutions provide real-time threat detection and response capabilities, allowing government agencies to monitor network activities continuously, identify suspicious behavior, and respond promptly to potential security threats. Predictive analytics driven by AI can anticipate and mitigate risks before they escalate, providing a proactive approach to security management.

In addition, Lumen PCF offers a robust network architecture designed to meet the specific security and performance needs of government agencies, providing comprehensive

Challenges
- Inconsistent Security Measures
- Interoperability Challenges
- Fragmented Data Management
- Increased Risk of Data Breaches
- Difficulty in Monitoring and Response

Results
- Comprehensive Network Control for a resilient and secure network infrastructure
- Secure Data Handling to protect critical information from unauthorized access and breaches
- Scalability and flexibility with dynamic connectivity and adaptable networks to support AI-driven workloads
- API-driven architecture that enhances interconnectivity and compliance with security standards

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Solution (cont.)

network control, seamless integration with existing systems, dynamic connectivity, and secure data handling.

By implementing Lumen PCF, government agencies can overcome data inaccessibility challenges, streamline data access and interoperability, and provide comprehensive visibility into all network activities to help improve security. The Lumen PCF solution can facilitate smooth and cost-effective migration processes, enabling agencies to transition from legacy systems to modern, secure infrastructures efficiently and securely.

Lumen's team of experts works closely with public sector agencies to design and implement customized solutions that address their unique security and connectivity needs, leveraging Lumen's extensive experience and innovative technologies to enable greater efficiency, agility, and security in their organization's operations.

Results and the future
Paving the way for secure, efficient ecosystem

For organizations that use AI combined with Private Connectivity Fabric (PCF), the result is enhanced security operations, creating a robust security framework for public sector agencies. PCF streamlines data access and interoperability, to help improve data accessibility across various systems.

Additionally, PCF has enabled the building of scalable and flexible network infrastructures to support AI-driven workloads, facilitating smooth and cost-effective migration processes.

Looking to the future, ongoing advancements in AI and PCF will further enhance public sector security and efficiency. Increased adoption of these technologies will see more public sector agencies leveraging AI and PCF for secure and efficient operations. Future developments in AI and PCF promise to provide even greater security, scalability, and flexibility, to help ensure that public sector networks remain resilient and capable of meeting evolving demands.

Lumen Solution Set
- Private Connectivity Fabric (PCF)
- Lumen® MPLS Networks
- Lumen® Managed Network Services

> **"** High-capacity fiber infrastructure is essential for AI-driven networks. Current network protocols and architectures are outdated, making robust fiber infrastructure a necessity."
>
> **— Dave Ward**
> Senior Vice President of Public Sector, Lumen

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