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Harnessing the power of 5G networks

5G provides the robust infrastructure needed for innovative civilian services and enhanced defense capabilities

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"5G EMPOWERS MILITARY FORCES TO DEPLOY CLOUD-BASED SOLUTIONS AND TACTICAL EDGE COMPUTING, STRENGTHENING THEIR ABILITY TO MAKE QUICK DATA-DRIVEN DECISIONS IN COMPLEX, FAST-PACED SCENARIOS."

5G is playing a crucial role in advancing the federal government's digital transformation and IT modernization efforts. By providing high-speed, low-latency connectivity, 5G facilitates many of the central goals of modernization, including the ability to improve efficiency, enhance data-driven decision-making and boost citizen engagement through the secure delivery of government services. Moreover, 5G connectivity is essential for taking full advantage of technologies such as artificial intelligence, data analytics, edge computing and cloud services.

With 5G, agencies can process data more quickly to support mission-critical operations in real time, which is crucial for effective disaster response and is a game-changer for the military's operational readiness. For example, 5G can enhance the performance of drones, robotics and other unmanned systems, allowing for improved surveillance, reconnaissance and operational coordination.

Additionally, 5G empowers military forces to deploy cloud-based solutions and tactical edge computing, strengthening their ability to make quick data-driven decisions in complex, fast-paced scenarios. In terms of cybersecurity, 5G offers highly secure, resilient networks capable of supporting classified operations while enabling continuous connectivity for military personnel across various domains.

Continuous connectivity and operational effectiveness

Beyond facilitating the near-instantaneous transfer of data, 5G gives agencies the ability to connect a massive number of devices. As a result, data can be collected from an exponentially larger number of sensors, devices and systems for feeding into advanced analytics and AI models. This creates opportunities to gain insights that were previously out of reach.

In modern warfare, military units must be able to share real-time intelligence, coordinate movements and respond to changing conditions quickly. To highlight just one of many use cases, 5G can significantly improve military operations by enabling autonomous drones to:

- Transmit high-definition video, sensor data and other intelligence to command centers or other military assets in real time to allow for immediate analysis and actionable insights.
- Communicate with one another in real time, allowing for more sophisticated swarm tactics in which multiple drones work together to carry out surveillance, search and rescue, or even strike missions.
- Process some data locally and only send critical information back to command centers, reducing the risk of data interception or loss.

Furthermore, 5G can provide a reliable and secure network that enables continuous connectivity and operational effectiveness even in remote or hostile areas where traditional communication infrastructure might not be available.

Taking full advantage of 5G's speed and agility

At Dell Technologies, we provide the necessary infrastructure, solutions, and expertise to deploy and manage 5G networks and edge computing effectively. We offer scalable hardware solutions such as servers and storage systems that can adapt to the government's expanding 5G needs and ensure that performance is maintained as the infrastructure grows. In addition, our high-performance computing systems can handle the large data volumes necessary to support government operations in areas such as defense and public safety.

Dell's hybrid cloud solutions take full advantage of 5G's speed and agility so the government can manage data across diverse environments and access real-time analytics, helping decision-makers respond quickly to evolving situations. To protect sensitive information across 5G networks, Dell provides government-grade security solutions that meet compliance standards and include hardware encryption and advanced threat detection.

Finally, Dell's expertise in consulting and our integration services help the government navigate the complexities

of 5G deployment, ensuring optimal performance and ongoing support.

By partnering with Dell, government agencies can build a secure, scalable 5G infrastructure that enhances operational efficiency while streamlining real-time decision-making in fast-paced, complex environments. ■

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