

Government Agencies and the Edge

The Power of Virtualization

IT infrastructure at the edge is essential to day-to-day government operations. Application servers, firewall devices, switches, routers, and wireless access points keep remote agency locations connected to the citizens they serve as well as the rest of the organization. But when IT infrastructure is made up of disparate physical devices, it can create challenges that impact end-users.

Clearing the clutter: The trouble with physical IT infrastructure

Physical IT and network devices are limited in their flexibility and can raise operational costs. The need to replace or repair physical devices—or change vendors—means dispatching IT staff to service equipment at every agency location, often on different cycles. The time your branch staff spends troubleshooting diverts attention away from delivering a quality user experience and ultimately contributes to operational disruptions.

Virtualization is the answer

Agency branch staff play a foundational role in providing a positive customer experience. They do not always have the time or expertise to focus on managing IT equipment—they should instead be leveraging the latest technology to deliver services. Yet these employees directly face the impact of downtime caused by failing network devices.

Consolidating your IT infrastructure with virtualization simplifies how government business applications are updated, reduces maintenance costs, and minimizes agency disruption while taking the burden off local staff.

Optimizing centralized staff

If your IT staff operates from a central office, troubleshooting an individual agency's physical network devices requires dispatching technicians to remote locations. Multiplying that time and cost by hundreds of locations on rotation can create immense pressure to use the expertise of your technicians more effectively.

Reducing the time IT staff spends on maintenance allows more time for tasks that benefit the agency, such as bringing new locations online and meeting new mission requirements with Virtualized Network Function (VNF) implementation, including SD-WAN, vRouters, vFirewalls, 5G stack, and other virtual functions.

These challenges are why more organizations are investing in virtualization. VNFs consolidate network and business applications onto a single device with more powerful computing power.

What is Ciena's Virtualized Edge Solution?

Ciena's Virtualized Edge Solution is a complete and open approach to meeting an agency's remote IT infrastructure needs. Virtualization offers simplicity, efficiency, and agility as organizations adapt to changing IT technology for better operational outcomes. This is made possible by Ciena's vendor agnostic approach to technology, which enables you to switch vendors when needed. Government agencies now have the freedom to change edge capabilities and functions at any time via software, minimizing disruptions to their enterprise.

Making the switch to virtualization can be daunting when organizations lack experience or resources. But Ciena offers field-proven systems integration experience and a tailored approach to help organizations in their unique virtualization journey.

Ciena's Virtualized Edge Solution
Learn more



What are the benefits of Ciena's Virtualized Edge Solution?

Remote agency colleagues and IT staff can experience the benefits of Ciena's Virtualized Edge Solution with:

1. Fewer devices to maintain
2. Less frequent interruptions to service
3. Automation and analytics, resulting in a higher quality experience
4. Systems integration support by a team with unique in-field experience to reduce complexity and risk
5. Automated service lifecycle management that provides end-to-end operational efficiencies spanning both service fulfillment and service assurance
6. Remote troubleshooting off-site IT issues via software
7. Lower power and space requirements
8. Choices from multiple VNF vendors with the flexibility to change vendors at any time

The value of virtualization

The investment in virtualization promises operational efficiencies and agility that ultimately equal cost savings. These benefits can be felt throughout the organization. Minimizing downtime and operational disruption caused by IT and network infrastructure gives your agency colleagues—and ultimately your end-users—a better experience.

Additional opportunities of virtualization include the ability to support up-and-coming applications such as Radio Frequency Identification (RFID), facial recognition, smart devices, and IoT. Virtualization allows your agency to evolve with these new technologies.

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