

Case Study: Office of Personnel Management

The U.S. Office of Personnel Management (OPM) needed to meet budget reduction and applicable legislative compliance requirements, including FISMA and FIPS standards. Additionally, OPM wanted to position itself for growth in information processing needs while keeping costs at a minimum. DC-Net provided a comprehensive, cost-effective solution that enabled OPM to meet these needs.



OPM requested a new Voice over IP (VoIP) system of approximately 5,000 phones to replace an out-of-date, expensive to maintain phone system at its four main locations (Washington, DC; Boyers, PA; Macon, GA; and Fort Meade, MD). OPM also sought to upgrade its data network to a new high capacity converged voice, video, and data network capable of handling VoIP, video conferencing, and other QoS-enabled applications.

In its initial market analysis of prospective vendors, OPM found the cost estimates considerably higher than its budget would allow. By partnering with the District of Columbia Government's fiber optic network, DC-Net, OPM was able to realize its immediate and future network requirements while meeting the budget limitations for the project.

"DC-Net provided innovative approaches; proven experience, and a partnership to get the mission done on time and within budget,"

Matthew E. Perry,
Chief Information Officer, OPM

The partnership has resulted in several benefits for OPM:

- Cost savings and cost avoidance
- Ability to leverage expertise of DC-Net in VoIP implementations of a similar size
- Open communication between partners with similar missions
- Ability to leverage DC Government's \$80+ million investment in its government-owned fiber infrastructure, avoiding the costs of investing in new network infrastructure

DC-Net Solution

DC-Net provided a solution that leveraged OPM's existing network investments while establishing a platform for unified communications.

Key features include:

- Physically diverse connectivity and logical redundancy on all voice and data circuits, ensuring continuous operation in the event of a site failure
- Gigabit Ethernet connectivity to, and wireless coverage at, OPM headquarters location

- Guaranteed 99.999% availability backed by a Service Level Agreement
- Unified communications features, including active directory and unified messaging

DC-Net provided OPM with a scalable, converged VoIP solution that offers high-availability, collaboration, presence, a corporate directory, and end-user mobility. The core architecture is built on industry standards using a customer-selected Cisco Systems hardware platform. It uses the Cisco Unified Communications Manager (UCM) to offer extended capabilities of converging voice, data, and video into a seamless user experience. The network is optimized for voice, while maintaining adequate bandwidth for data, video, multimedia, or other requirements.

The voice architecture also takes full advantage of OPM's local area network (LAN) deployments by leveraging Power over Ethernet (PoE). PoE allows for a single power source and enables a centralized power management strategy, reducing the overall cabling infrastructure within the building.

Next Steps

The project has successfully completed its Phase 1 rollout, including the entire core infrastructure and 2,500 phones in OPM's DC office. Planning is underway for the next three locations as well as expansion to smaller OPM offices across the country. Once the partnership agreement was signed, Phase 1 of the project was completed in less than nine months including design, planning, procurement of equipment and implementation.

Cost Savings

OPM saved over \$500,000 in up-front costs based on initial estimates. There were no cost overruns. OPM believes that the open partnership contributed to keeping costs down even when unexpected issues came up. Furthermore, DC-Net was able to provide some services (such as CAD work) at no additional cost to OPM.

OPM anticipates saving \$1.5-2 million annually as a result of implementing VoIP. A significant portion of these savings will be from utilizing DC Government's fiber infrastructure for data transport. DC-Net makes GSA Networx cheaper by eliminating last-mile costs for OPM.

Total cost savings over six years is estimated at \$9.25 million.

DC-Net Contact

For pricing and additional product information, contact DC-Net at **202-715-7793**.

Visit DC-Net online at: www.dcnet.dc.gov/federal.

