



Cisco Systems Enabling Governments to Serve, Protect, and Defend

GOVERNMENT AGENCIES GET CONNECTED

As governments around the globe strive to meet the diverse needs of their citizens and protect their national interests, connectivity is emerging as a cornerstone of success. From the smallest municipality working to improve efficiency and deliver on-demand services to constituents, to the largest agency concerned with economic growth or national security, governments require a new level of connected, coordinated and secure information sharing. To assist in achieving their goals of efficiency and effectiveness, economic development, security and safety, and education, governments turn to Cisco for advanced networking equipment and services, strategic IT experience and expertise in process change.

Greg Akers, Cisco's senior vice president and chief technology officer for Global Government Solutions, says, "Government customers have the same concerns as enterprises do, such as security and upgrading to IP networks, so they need much of the same technology. But when you think of the full range of issues governments are involved in—from next-generation space system architectures and technologies to air, land and sea defense—you can see that their requirements can go well beyond a typical corporate scenario. Cisco offers the advanced technologies and expertise needed to solve governments' integration and productivity issues, both business and technological."

The need to get connected is vital to state and local governments. According to John M. Eger, president of the World Foundation for Smart Communities, "Cities that are succeeding in creating 'smart communities' possess a number of common features. One characteristic is collaboration among different sectors to include government, business, academia, nonprofit organizations and others. These collaboratives are becoming the new model for successful urban organization in the global age...."

The Global Information and Technology Report 2004-2005, sponsored by Cisco Systems and written by the World Economic Forum (WEF) and the INSEAD business school, has found a tight correlation between country indices for 'Networked Readiness' and global competitiveness. "Proactive policies and investments by all levels of government such as encouraging broadband network infrastructures, the education and literacy of citizens, and ongoing skills training are all components of the readiness measurement and play an important role in building the foundations of a country's productivity," says John Chambers, President and CEO of Cisco Systems.

THE CISCO GOVERNMENT TEAM

Cisco Systems is a leading provider of internetworking solutions for government agencies at all levels around the globe, from small cities and provinces to the largest civilian and military agencies. Cisco is applying its overall strength in large-scale systems design and deployment to the unique challenges of interconnecting governments with constituents, agencies with other agencies and global networks with each other. Unlike legacy communications vendors or networking niche players, Cisco has networking depth and breadth through its expertise, partnerships and highly interoperable solutions. Cisco works with more than 360 certified resellers, many with an exclusive focus on government networking, to meet the specialized needs of government customers.

CISCO SERVES STATE AND LOCAL GOVERNMENT

The prosperity and wellbeing of a community depends on a number of crucial elements, including economic development, safety, efficient service delivery and educational opportunities. Cisco networking solutions support the advancement of all of these elements by helping state and local governments operate more effectively and efficiently, including increasing the adoption of self-service solutions, and providing constituents with new information and services not previously available or easily accessible. In addition, Cisco solutions help protect the information privacy and physical safety of citizens. Cisco's focus areas in the state and local government segment include:

- Cross-organizational communication and collaboration
- Public safety
- Transportation
- Education

Here are just a few examples of how state and local agencies are creating connected communities with Cisco networking solutions:

Safety, service delivery, and educational opportunities

Arlington County, Virginia, is home to the Pentagon and Reagan National Airport. Events around the September 11 attack on the Pentagon accelerated the need to replace an aging infrastructure with a broadband fiber network, called I-Net, linking every County facility and enabling collaboration across agencies. I-Net gave the County a robust, scalable, secure and reliable network infrastructure that supports voice, data, and video. Arlington's vision of "anytime, anywhere access with no wrong door" ensures that everyone has the opportunity to participate in the new world of technology-driven government services and improved education. For example, IP-based videoconferencing has enabled Arlington County to deliver new services such as security awareness programs for public safety and disaster response triage for hospitals. The County has also extended I-Net to provide instructional materials to schools.

Economic development, service delivery and educational opportunities

The City of Monterey, California, has enhanced citizen services and reversed a steady climb in connectivity costs by implementing a wired and wireless data and voice network. The network enables live broadcasts from schools, the city government and any connected facility, and will be used to connect the city's traffic signals and loop detectors, park irrigation systems, building mechanical systems, athletic facility and security lighting and alarm systems. Higher education and research are major segments of the Monterey economy, and a key participant using the network is California State University, Monterey Bay, one of more than 40 nonprofit organizations and research/education institutions connected to the network. The network provides CSUMB's 3,500 students and 300 faculty with unprecedented opportunities for collaboration and distance learning. For example, the university's business management and information technology departments now offer a joint Master's degree program.

Service delivery

Missouri Office of State Courts Administrator (OSCA) has been working on a program to automate the courts with some of the most advanced information technology available. The Justice Information System (JIS), a software business tool for court case and financial management, connects 145 courthouses back to OSCA. JIS supports all of the transactions within a court process, including traffic, criminal, civil and probate. The goal is to provide improved service, fair and equitable justice and increased public access to the Judiciary. OSCA also provides telephone support for more than 53,000 inquiries from judicial branch employees and the public. In the past, there were too few phone lines, and calls placed through 800 numbers or phone cards resulted in exorbitant costs. In addition, cell phones were subject to interference in old courthouses. Using IP-based SoftPhones, OSCA staff can now place and receive calls and check voice mail on their PCs, increasing staff mobility, flexibility and productivity. The cost savings are also substantial.

Safety and service delivery

Bernalillo County Metropolitan Court (Metro Court), Albuquerque, New Mexico, uses a converged voice, data and video network to reduce telephony costs and improve service to the public. The court now relies on real-time IP video conferencing for conducting arraignments and bonding inmates remotely. Video helps enable intake officers at the court to gather demographic, charge, criminal history and community ties information to determine if a person is eligible for release on his or her own recognizance. The ability to conduct remote interviews and arraignments accelerates the justice process, frees staff for other tasks and reduces the need for costly inmate transport vehicles and extra security. Audio recording of depositions and court communication enables clerks to monitor four courtrooms simultaneously, which helps enable the court to reassign staff for greater efficiency.

Economic development

The City of Fredericton in New Brunswick, Canada, has transformed itself into a world-leading “connectivity” municipality by blanketing almost the entire city with a Wi-Fi network. The Fred-eZone project began as an initiative to empower the city’s 650 employees to work more efficiently. Today, city workers, students, local businesses and even tourists access the Wi-Fi network. The city plans to build on this foundation by giving PDAs to building inspectors, fire inspectors, and other city workers, and even make PDAs available to tourists for multimedia tours of the city. The Fred-eZone project has attracted and maintained business, which has helped Fredericton save jobs and even create new ones. Recently, the city won the Canadian Information Productivity Award of Excellence for Innovation.

CISCO SERVES FEDERAL GOVERNMENT (CIVILIAN AND MILITARY)

Cisco works with technology and integration partners to deliver solutions that help civilian and defense agencies meet their missions successfully. These solutions, based on the Internet Protocol (IP), provide reliable, secure and interoperable communications, enabling agencies at every level to communicate more transparently with one another, with state and local agencies, and with key private sector entities. Cisco’s federal government initiatives focus on the following areas:

- **Civilian:** The Cisco Civilian team helps global governments meet their individual requirements for improving operational efficiency, controlling costs and increasing collaboration.
- **Defense:** The Cisco Defense team works with key leaders and organizations within the global defense community to assist them in developing their vision and requirements for network-centric operations. Defense initiatives managers are subject matter experts in air, land, and sea warfare, including in-depth knowledge of Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR)
- **Space:** The Cisco Space team supports key leaders and organizations within the defense, commercial and civil space establishments in developing their vision of space system architectures and technologies.
- **Homeland Security:** The Cisco Homeland Security team engages with federal, state and local government agencies to provide education, awareness and technology solutions for homeland security initiatives, both domestically and locally. Network-centric communications and technology solutions support established homeland security priorities in their jurisdictions, addressing issues in the areas of public safety and first response, public health, transportation, and critical infrastructure protection.

The following are just a few examples of how civilian and military agencies are creating network-centric operations with Cisco solutions:

Improving daily briefings and family support services

A remote U.S. military base replaced an aging network infrastructure with a converged IP network supporting voice, data, and video. The video capability enabled teams to conduct briefings without traveling from one end of an island to the other. The base also used IPTV to allow briefings by commanders in the U.S. to be archived and viewed at any time by personnel on the base. The base commander realized that the same network could be used as a springboard for a family support initiative for deployed troops and their families in the U.S. families can now send video messages to servicemen and women.

Saving money and improving service

A civilian government agency wanted to position the bureau for the future with a converged network. They realized substantial savings by consolidating separate voice, data and video networks into one network. The bureau's converged network also supports new applications, such as IPTV and the ability to send audio files to radio stations for public service announcements. They use IP-based videoconferencing to save on travel costs between offices, and they are using video-on-demand for training. The bureau's in-house help desk was the first department within the bureau to use voice over IP (VoIP). IP-based call center software routes calls based on agent availability and skills needed to handle a problem. The call center solution also gives the bureau better statistics and reporting to help with training and staffing.

Mobility and inter-agency collaboration

A National Guard unit in one U.S. state is piloting a deployable mobile networking platform that will enable tactical interoperable communications that includes voice, data and video in an environment in which no commercial infrastructure is available in the event there is a complete loss of power. The mobile platform was designed to minimize geographical and situational barriers, and to provide real-time communications between deployed and fixed assets using satellite, wireless, and terrestrial links. The solution will allow officials to extend the National Guard's existing wide-area network (WAN) to first responders, state capitol facilities, state emergency management officials and appropriate federal agencies using satellite communications.

THE VALUE OF THE INTELLIGENT NETWORK TO GOVERNMENT

According to Greg Akers, Cisco's senior vice president and chief technology officer for Global Government Solutions, "As governments transform the way they operate, they are faced with the opportunity and challenges of creating advanced data, voice, and video integrated networks. An intelligent network infrastructure, or what we call a network-centric approach, enables efficient data collection, correlation, and prioritized distribution. The goal of network intelligence and end-to-end information availability is to facilitate the decision-making and self-synchronization in any type of government operation. Cisco's intelligent network solutions are ideal for cost effectively utilizing advanced voice, security, optical, and wireless technologies. Cisco is well-positioned to help government agencies achieve improvements in business processes, operating costs, and the delivery of services to their citizens."