



IPv6 Survey Results: Agencies Have Hazy Understanding of Business Case

By Gerald Charles, Jr., Executive Advisor, Public Sector, Cisco Systems

With its technical-looking name, IPv6 (Internet Protocol version 6) is easily mistaken for an issue that concerns only the IT group. Proving the point, in an independently commissioned survey of federal business and IT managers in civilian and defense agencies conducted in June 2006, 35 percent of respondents said that they would be unlikely to implement IPv6 if it were not mandated. One of the top reasons cited was the lack of a compelling business driver. This is a misconception.

ENABLING AN ENVIRONMENT FOR INNOVATION

In fact, IPv6 is a critical requirement to meet the needs of an increasingly mobile and virtual federal workforce. By rescinding previous limits on the number of IP devices that can be connected to federal networks, IPv6 creates an environment for innovation with the potential to transform government. A sampling of applications that IPv6 makes possible includes:

- Mobility applications for emergency responders, field agents, and civilian and military medical personnel
- Dense sensor networks ranging from soil and seismographic conditions to video surveillance and RFID
- Delivering satellite images of crops to farmers' PDAs so that they can assess the need for irrigation or fertilization

TRANSITION STATUS: STEADY BUT SLOW

Despite agencies' hazy understanding of the business case for IPv6, the transition is underway. In the survey conducted by Market Connections, a federal IT market research firm, more than 43 percent of respondents indicated that they have already conducted an inventory of existing devices to assess readiness for conversion. Actual implementation is progressing more slowly. Only 14 percent of respondents have begun their IPv6 implementation process, and almost 38 percent will not complete IPv6 planning or implementation process until the 2007 fiscal year.

HOW IMPORTANT IS THE TRANSITION PLAN?

Fifty percent of survey respondents reported that they are planning the transition to IPv6 internally, while 36 percent intend to collaborate with a third party and 14 percent to outsource planning. Saving money by planning internally might be shortsighted – especially for agencies without the expertise or a clear understanding of the business case for IPv6. Outside experts can advise agencies on the real business benefits they can expect from an IPv6-enabled environment, and what their plan must include in order to achieve those benefits.

Steps should include:

- Building an inventory and risk assessment plan using tools such as IPv6 Posture Assessor from Cisco Systems®
- Aligning expected business strategies and applications for productivity and mobility to the Enterprise Architecture and the resulting network design
- Developing a sound financial strategy that segregates equipment upgrades that are part of normal technology refresh budgets from new budget requests for services and transition planning

An investment in good planning helps minimize risk and complexity, aiding agencies in realizing earlier operational savings.

FINDING THE MONEY

The survey also revealed that agency managers perceive that budget constraints and organizational planning are the biggest impediments to IPv6. The Office of Management and Budget (OMB) has stated that it will not provide budget for the transition to IPv6 because it believes that agencies should be able to upgrade hardware and software within their existing refresh planning. This is largely correct. Cisco® routers, for example, have been IPv6-compliant since early 2001. If an older Cisco router needs a software upgrade to become IPv6-capable, the upgrade is probably covered under existing Cisco SMARTnet® contracts. Hardware upgrades, which might be rarer than agencies expect, can be accomplished during normal upgrade cycles. Unlike Y2K upgrades, which had to be accomplished by a set deadline, IPv6 can be implemented in phases.

A NATIONAL PRIORITY

For government, IPv6 has far greater implications than a bottomless pool of IP addresses. Rather, it enables fundamental changes in the ways agencies conduct business, acknowledging the fact that civilian and defense staff members are increasingly mobile and need to retrieve and send voice, video, and data from wherever they may be.

Asia Pacific is far along in its transition and the CIO of the European Union has stated that IPv6 is a matter of global competitiveness. It is time for the United States, as well, to recognize IPv6 as a matter of national importance.

To find out more about IPv6 Network Assessor, a standalone tool that indicates needed memory, software, or hardware changes for Cisco devices, visit http://www.cisco.com/web/strategy/docs/gov/IPv6_Network_Assessor_DS.pdf.

To find out about IPv6 planning and migration services from Cisco Advanced Services, visit <http://www.cisco.com/go/federal>.



Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

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