Presents

Command Ready:
Getting your products approved for the Federal technology market

By: Yurie Rich & Chad Connally

Creating Competitive Advantage with IPv6

Are your products IPv6 ready? Are your company and people ready? The next generation Internet Protocol, version 6 (IPv6) has been in the works for decades – its time has finally arrived. No longer just a topic for "techies," IPv6 has become a major strategic force for businesses, governments, and consumers across the globe. In Asian markets such as China, Japan, Korea, and Taiwan, IPv6 has become a vital technological imperative with significant government and commercial support. Factor Europe and India into the equation and approximately 60% of the global technology market is interested in IPv6 capable products and services.

Domestically, the United States federal government has been a major driver of IPv6 adoption with the entire federal government – the Department of Defense (DoD) and all Civilian agencies – mandating IPv6 adoption by June 30, 2008. With a number of federal agencies already IPv6 compliant, government procurement standards now give preference to and will subsequently require IPv6 capable hardware and software products, as evidenced by GSA changes to Federal Acquisition Regulations (FAR) (FAR case 2005-41). Some vendors have already attained this certification and enjoy competitive advantages in the procurement process. Others are in various stages of IPv6 integration and may lack the IPv6 subject matter expertise and/or insight into federal IPv6 standards to ensure product compliance. Vendors who fail to obtain IPv6 capable certification risk losing competitive advantage in federal contracts bidding and will see revenue losses from missed federal contracting opportunities, such the Army's Infrastructure Modernization (IMOD) contract.

The U.S. federal government began its commitment to IPv6 five years ago. In June of 2003, the DoD announced IPv6 as a fundamental technology to support the Netcentric Warfighter concept. The DoD further mandated that all DoD agencies will integrate IPv6 by 2008. Two years later, the US government extended the scope of IPv6 integration to all DoD and Civilian agencies via the Office of Management and Budget (OMB) memorandum 05-22. OMB5-22 stated that **US agencies must integrate IPv6 into the core network by June 30, 2008**, with additional guidance supplied by the Federal CIO IPv6 Working Group.

To assist IT vendors with product readiness and federal compliance standards, Command Information – a top 20 IPv6-influencer according to Government Insights and the leading provider of IPv6 integration services in the United States -- has developed the Command Ready program. Command Ready is a suite of services designed to accelerate the IPv6-related initiatives of IT vendors and expedite time-to-market. With Command Information's extensive experience in IPv6 integration (both into the network and into hardware and software products) and active role in developing the US government's IPv6 capable standards profiles, Command Ready offers an adaptive framework to enable your products for the federal technology market.

Command Ready is a customizable service offering geared toward accelerating the integration of IPv6 Capable features into technology products. While this paper focuses on IPv6 integration for the United State federal government, the principles and tools developed for Command Ready apply equally to enterprise, government, and consumer product development initiatives. For more information on how Command can help you transform your product offering for the next generation of internet services, please contact us at CommandReady@commandinformation.com.

IPv6 and the U. S. Federal Government

Despite the U.S. government's dedication to IPv6 adoption, the vendor community supporting the DoD and US civilian agencies is still not prepared to meet the integration timelines in place. To be a successful supplier of IT assets to the government, vendors must address the following three challenges:

- Conformity to IPv6 Capable Standards
- Meeting Federal Demand
- IPv6 Product Parity

Conformity to IPv6 Capable Standards:

Despite the complexity and magnitude of the transformation generated by the shift to IPv6, the US government remains committed to integration. The DoD and the National Institute of Standards & Technology (NIST) have generated standards profiles to define what "IPv6 Capable" means for different types of IT assets. Government purchasing practices are being modified to give preference to "IPv6 Capable" vendors in the DoD; IPv6 integration and product support will soon become a requirement as federal agencies fulfill the broader IPv6 mandate. Vendors wishing to sell to the federal market will need to ensure their products conform to IPv6 Capable standards established by the federal government.

Who determines that a product is "IPv6 Capable?" Federal agencies under the leadership of the DoD and the Defense Information Systems Agency (DISA) have developed a testing protocol to determine a product's IPv6 compliance. In August of 2007, DISA released the IPv6 Master Test Plan v3. In addition to providing guidance on testing IPv6, the Master Test Plan identified that DoD program managers should give procurement preference to IT assets that are on the DoD Approved Products List (APL). To achieve placement on the APL, a product must have passed IPv6 testing at the Joint Interoperability Test Command (JITC), thus being deemed as "IPv6 Capable".

Meeting U. S. Federal Demand:

John Grimes, Assistant Secretary of Defense, reiterated the DoD and federal government's commitment to IPv6 in February 2008: "DoD Components shall reprioritize funds necessary to meet FY 2008 and FY 2009 IPv6 transition requirements to support respective network and program implementation schedules." With the DoD's strong commitment to IPv6, it is clear that demand for IPv6 capable products is imminent. Some vendors reason that IPv6 integration can occur "when our customers ask for it." The federal government, as noted by Secretary Grimes's statement, is asking for IPv6 integration now. As a January 31, 2008 article by Federal Computer Week reports, the General Services Administration (GSA) has begun a review process of over 600 vendors on the IT schedule to ensure they are offering IPv6 Capable products.

Despite continued pressure from the US government for IPv6 Capable products, many products still do not meet federal requirements. Federal clients may not be willing to wait through a standard 12 to 24 month R&D cycle. They want IPv6 capable products now or in the very near future. If incumbent products do not offer certified IPv6 Capable products, competitor products will have increased opportunity to seize federal contracting revenue streams under new government procurement rules.

IPv6 Product Parity:

Federal clients also demand parity between products for legacy IPv4 and IPv6 products. In short, they want to know that IPv6 Capable products will run, operate, and secure a production environment. Federal clients also want assurance that required product support will be available.

Many vendors, particularly those providing routing and switching products are already IPv6 capable; companies such as Cisco and Juniper support IPv6 and can claim support back to the turn of the millennium. In the server and desktop operating system space, there is an equal level of support, whether the OS is from Microsoft, Redhat Linux, Sun Solaris, or HPUX. Generally, "good" support stops here. In the areas of security, network management, identity management, communications, or other common enterprise applications, the level of IPv6 product parity is almost non-existent. Vendors providing these services have significant opportunity to take advantage of federal demand by conforming to IPv6 standards and obtaining IPv6 Capable certification through JITC testing.

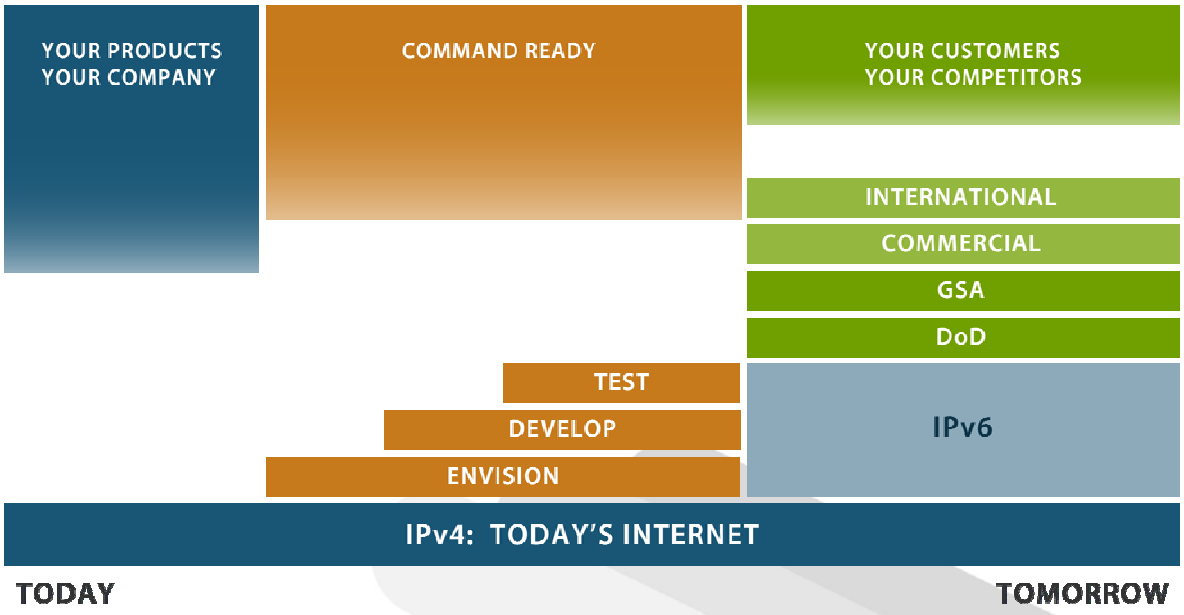
Command Ready

So what does all this mean? There are three questions you should be asking:

- Are your products ready?
- Is your company ready?
- Are your people ready?

For those vendors facing the US government market, a bright spot exists: federal budget issues have slowed the IPv6 integration rate, providing more time to prepare. While a number of agencies have met the OMB5-22 mandate, many are just starting. Further, agencies leading the IPv6 integration effort are moving into the next stage of their integration and are starting to evaluate products and services in all the IT areas mentioned earlier. If vendors want to capitalize on the churn sparked by the IPv6 integration effort, the time to act is now.

The Command Ready program will help you transform your products to meet U.S. federal standards. Command Ready encompasses three steps: **Envision**, **Develop**, and **Test**.



Envision: Command collaborates with clients to discover what "IPv6 Capable" means for their products and services. The process delivers:

- An IPv6 development roadmap
- Placement into a government-defined or custom IPv6 product profile
- Education for management and engineers on IPv6
- A clear understanding of how products will change and benefit in an IPv6-enabled environment

A Command-led Envision determines not only IPv6 capability but will guide your products toward conforming to standards set by agencies (e.g. NIST, DoD, and JITC) governing IPv6 integration.

Develop: Once a client understands the changes needed to be IPv6 Capable and has its roadmap, the development and integration process must begin to meet target federal timelines. Whether you develop in-house, nearshore, or offshore, Command can provide critical development services to shorten your time to market. Command's clients accelerate through the learning and development curve, yielding faster time to market with lower overall development costs. Develop support services include:

- Program Management Office (PMO)
- Agile Coaching
- Specialty Software Development
- IPv6 education and training
- IPv6 subject matter experts (SME)
- Software Feature and Performance Testing

Command Information has been a catalyst for agile acceptance since 2001; and for more than seven years we have been helping clients across diverse industries adopt agile practices. Using our custom VALID methodology (Value through Iterative Development), Command has successfully delivered large, complex development projects and has provided leadership and coaching in agile development techniques and best practices. For more information on how Command can help you with agile development practices related to IPv6 product transformation, please contact us at: agile@commandinformation.com.

Test: The goal of your entire development effort is to ready your products for IPv6 and to achieve status on the DoD Approved Products List. To get there though, vendors need to certify their products at the Joint Interoperability Test Command (JITC). The process can be challenging and costly for those who've never been through it. With emerging federal testing profiles and IPv6 standards, companies may feel overwhelmed by the rules and protocol leading to successful placement on the Approved Products List. Command has both experience working through the JITC process and intimate familiarity with IPv6

standards (from the IETF through DoD and NIST). Our test offering prepares your products and people for the federal JITC testing process. The Command Ready Test offering includes the following services:

- Testing Conformance to federal IPv6 Capable definitions
- Creation and Filing of Test Profile with JITC
- Pre-JITC testing
- JITC test support

Capturing Markets with Command Ready

The global technology market is ready for IPv6-enabled products and services. Technology products and service providers now face tremendous opportunity to gain competitive advantage in upgrading existing products and in launching new IPv6-ready services – or wait, and let competitors move ahead. In the United States, mandates from the federal government alone present significant opportunity for technology providers to exploit this new technology and secure revenue streams from federal contracting. Only companies with certifiable IPv6 Capable products will win in this space. The question remains: Are your product, people, and company ready?

Command Information is ready to assist your company in meeting the challenges of tomorrow's technology marketplace. As experts in IPv6 technologies and leading-edge software development techniques, we are uniquely equipped to assist you in this transformation. For more information, please contact us at: CommandReady@commandinformation.com.

About Command Information

Command Information is the largest and fastest growing IPv6 company in America, offering strategy, tactical direction, and application development services for Fortune 1000 companies and government organizations seeking to move to the fast-emerging new version of Internet protocol. Backed by investments from global private equity firm The Carlyle Group, Paladin Capital, and Novak Biddle, Command Information has quickly established itself as the leading IPv6 services company in the U.S.
http://www.commandinformation.com

About the Authors

Yurie Rich is Vice President of the IPv6 Integration Service Group at Command Information. Prior to his involvement with Command Information, Yurie founded Native6, a leading provider of professional services focused on IPv6 knowledge enhancement and integration for some of the largest organizations in IT and government. The company provided IPv6 training services and critical integration services designed to accelerate the IPv6 adoption process and provide customers with a distinct competitive advantage. In 2006, Yurie spearheaded the integration of Native6 business lines with Command Information's strategic plans, resulting in the development of a unique line of products and services for IPv6.

In addition to his work with Command Information and Native6, Yurie has served as both program director for the professional service group and program manager for VoIP services at Zama Networks, Inc., an IPv6 ISP startup. He developed expertise in business system analysis, technology integration and implementation from his work with companies such as 3M, L3 Communications, and Huntington Memorial Hospital. He also has provided educational services in both academic and vocational settings for several universities and private training companies.

Yurie serves on the advisory council of the North American IPv6 Task Force. He is also an active participant in the IPv6 Forum and frequent speaker on the subject of IPv6.

Chad Connally is a Program Manager at Command Information with 10 years of consulting experience for clients in the telecommunications, internet services, cable, financial services, and consumer products industries. He has helped clients in adopting management techniques and tools to achieve business results from emerging technologies. Chad has functional and business expertise in digital online advertising, mobile application development, and mobile commerce.