

# EVOLUTION

The Department of Veterans Affairs IPv6 Newsletter  
ISSUE 02 July 2011



## this issue

Federal CIO to Leave P.1  
VA IPv6 Directive P.1  
World IPv6 Day Success P.2  
DREN IPv6 P.3

## VA Issues IPv6 Directive

*On March 24, 2011, Principal Deputy Assistant Secretary for the Office of Information Technology (OI&T) Stephen Warren signed a memorandum entitled "Adoption of IPv6 at VA" directing "all OI&T organizations and staff that, along with IPv4, the IPv6 protocol must be integrated into all VA OI&T activities."*

*Continued on page 2...*

## What is IPv6

IPv6 is the next generation Internet protocol developed by the Internet community to replace the current IPv4 protocol. IPv6 provides an almost unlimited amount of address space and has been developed to meet the requirements and performance of today's businesses, governments, and consumers. While IPv4 and IPv6 can operate on the same network, they are not directly interoperable.

## Kundra to Leave Position as Federal CIO

Office of Management and Budget (OMB) Director Jake Lew announced on June 16, 2011 that Vivek Kundra will leave his government post in August of 2011 to become a joint fellow at the Kennedy School of Government and the Berkman Center for Internet and Society at Harvard University.

Vivek Kundra was appointed by President Barack Obama March 5, 2009 as the first Federal Government Chief Information Officer (CIO) a position that had traditionally been only in the Private Sector. Since his appointment Kundra has championed government Information Technology reform through his 25 step program.

Regarding Kundra's departure Jack Lew said in a statement, "Vivek's impact on cutting waste and making government work better for the American people will continue to be felt well beyond his departure from Federal service." Chopra will be remaining in his position as Federal CTO. The White House has not yet identified who will be replacing Vivek Kundra.

*Continued on Page 3...*

# World IPv6 Day a Success for Federal Agencies

The Department of Veterans Affairs Turns on IPv6 for www.va.gov on World IPv6 Day...Becomes a Permanent Operational Capability

On June 8, 2011 World IPv6 Day provided the Internet community with a day to come together and test IPv6 on a global basis. Over 400 organizations signed up to officially participate and made their websites available over the IPv6 Internet to commemorate World IPv6 Day. These 400 organizations were in addition to the over 750 organizations that had already made their websites available over IPv6 prior to June 8th. Considered by the Internet Society (which sponsored the day of testing) and the participants as a resounding success, World IPv6 Day provided major network and content owners with the comfort necessary to begin deploying IPv6 on a wide scale.

The Department of Veterans Affairs (VA) led the US federal testing initiative by being the first agency to sign-up for World IPv6 Day, as well as, one of the first to make its primary website IPv6 enabled. A total of 25 federal agencies signed up and participated in World IPv6 Day. www.va.gov became IPv6 enabled on June 3rd, 2011 under the VA IPv6 Project Management Office's IPv6 Pilot Program, and, with its successful demonstration on World IPv6 Day, has been deemed IPv6 operational.

In addition to VA, the Department of Energy and the Department of Education both have kept their primary websites IPv6 operational. Based on the success of the World IPv6 Day pilot, VA

plans to aggressively move forward with transitioning its more than 300 additional web domains to use IPv6.

A complete list of the federal agencies who participated in World IPv6 Day includes:

- ⇒ Department of Veterans Affairs
- ⇒ Department of Commerce
- ⇒ Census Bureau
- ⇒ National Technical Information Service
- ⇒ Office of Personnel Management
- ⇒ National Telecommunications and Information Administration
- ⇒ Federal Aviation Administration
- ⇒ National Library of Medicine
- ⇒ General Services Administration
- ⇒ Department of the Treasury
- ⇒ Department of Education
- ⇒ Idaho National Laboratory
- ⇒ Department of Agriculture
- ⇒ Department of State, Bureau of Public Affairs
- ⇒ Department of the Interior
- ⇒ Department of Transportation
- ⇒ Department of Homeland Security
- ⇒ Air Force
- ⇒ Navy
- ⇒ Department of Defense
- ⇒ Department of Labor
- ⇒ National Aeronautics and Space Administration
- ⇒ Department of Energy
- ⇒ National Park Service
- ⇒ National Institute of Standards and Technology



## VA Issues IPv6 Directive

*...Continued*

In September 2010, the federal CIO had issued a memorandum for all agencies to move forward with their IPv6 transition activities. This mandate required all agencies' to the new FAR regulations associated with IT acquisition be IPv6 compliant, as well as, identifying specific milestones for IPv6 operability by 2012 and 2015.

The VA OI&T memorandum noted that IPv6 was required to most effectively serve the veteran and that "from this point forward, IPv6 technology must be included in all infrastructure and application design, development efforts, and procurements."

VA has been a leader in the federal IPv6 transition community. The memorandum also directed "By 2015, all computing, application, and network resources must turn off IPv4 as a communication mechanism in VA unless there is a waiver from my office or the device/service runs in an enclave."

For more information or questions, contact Steven Pirzchalski, VA IPv6 Transition Manager, at 202-461-5910.



## Federal CIO to Depart

*...Continued*

Over the last two and one-half years the IPv6 initiative has been led by Vivek Kundra and federal Chief Technology Officer Aneesh Chopra who have worked to ensure that companies are making progress to support the government's IPv6 transition. It is this recognition of the vital importance of the internet to U.S. innovation, prosperity, education, and political and cultural life that lead Kundra to issue an official memorandum to his Chief Information Officers of Executive Departments and Agencies on September 28, 2010 with specific steps for those agencies to expedite the operational deployment and use of IPv6. Kundra and Chopra felt the government must transition to IPv6 in order to modernize, reduce complexity and enable the internet to continue to operate effectively into the future. It was their staunch support of the IPv6 initiative that has enabled the VA to move forward as a leading agency for IPv6 transition.

## DREN IPv6 Knowledge Base Now Publicly Available

Internet Protocol version 4 (IPv4), the protocol on which the current Internet as we know it is based, is nearly thirty years old and is approaching the end of its life. The last five unallocated IPv4 address blocks were delegated to Regional Internet Registries on February 3, 2011.

This "death" will not have an immediate impact on the way people use the Internet, however, both the dwindling IPv4 address availability and the requirement to start using Internet Protocol version 6 (IPv6) will impact the way that Federal Agencies and commercial businesses provide Internet services.

Foreseeing the future, the Defense Research and Engineering Network (DREN) started using IPv6 in 2003, and has provided it users with servers, services, and client applications using IPv6 ever since. As the transition the Internet will be taking from IPv4 to IPv6 progresses, DREN will continue providing a secure, high-performance infrastructure using both IPv4 and IPv6.

Because of its history using IPv6, DREN is also able to provide lessons-learned and an extensive knowledge base.

This knowledge is now publicly available on the DoD's High Performance

Computing Modernization Program website ([www.hpcmo.hpc.mil](http://www.hpcmo.hpc.mil)). In order to read general information regarding DREN's knowledge base, once on the above website, click on "Networking and Security" in the left hand column, click on "IPv6 Information" in the right hand column, and then click on "IPv6 knowledge base" at the bottom of the article.

Or, click on this direct link: <http://www.hpcmo.hpc.mil/cms2/index.php/ipv6-knowledge-base-general-info>. For more information about DREN and IPv6, please contact: John M Baird, HPCMP IPv6 Implementation Manager, (703) 402-9638, [baird@hpcmo.hpc.mil](mailto:baird@hpcmo.hpc.mil).

## The IPv6 Q&A Corner

Q: Why is the VA migrating to IPv6?

Although OMB has mandated that all federal agencies implement IPv6, the transition will allow the Department of Veteran Affairs to better serve veterans and their families by:

- ⇒ Facilitating the transformation of the current health-care culture to be more veteran-centric.
- ⇒ Enhancing Tele-presence and tele-work capabilities.
- ⇒ Designing more secure approaches for Enterprise Networking, Information technology Systems, and communicating with veterans.
- ⇒ Lowering the cost and resources necessary to support communications across VA.
- ⇒ Simplifying the overall OneVA Network.



## VA IPv6 Steering Committee

### **Steve Pirzchalski**

Chairman & VA IPv6 Transition Lead

### **Wes Crum**

IPv6 Transition & Pilots

### **Juan Adames**

IPv6 Security

### **John DelTognoArmanasco**

IPv6 Addressing

### **Rick Shew**

IPv6 Training

## Evolution

**ISSUE 02 JULY 2011**

## Upcoming IPv6 Related Events

### Light Reading's IPv6 2011: The Time is Now!

July 14, 2011 New York City, NY

### SANS Security Impact of IPv6 Summit

July 15-16, 2011 Washington, DC

### FOSE

NGI-2: Upgrading America's Digital Infrastructure with IPv6

July 19, 2011 Washington, DC

### Digital Government Institute: Government IPv6

A Roadmap to Meeting the OMB Directive and Successfully Implementing IPv6 in Your Agency

August 30-31, 2011 Washington, DC

### Internet2 Fall Member Conference

October 3-8, 2011 Raleigh, NC

### VA Interagency IPv6 Meeting

October 11-13, 2011 Washington, DC

## Contact the VA IPv6 Program Office

**Derrick Evans:** [derrick.evans@va.gov](mailto:derrick.evans@va.gov) (202) 560-7299

**Ralph McDonald:** [ralph.mcdonald@va.gov](mailto:ralph.mcdonald@va.gov) (301) 427-2179

Get more information on VA's IPv6 efforts at:

<http://vawww.netops.oit.va.gov/IPv6.asp>