



Federal IPv6 Panel: Deployment Activities, Success Stories, and World IPv6 Day Experiences

2011 DREN Conference

Moderator: Steve Pirzchalski

VA IPv6 Program Manager

Outreach Chair, Federal IPv6 Task Force

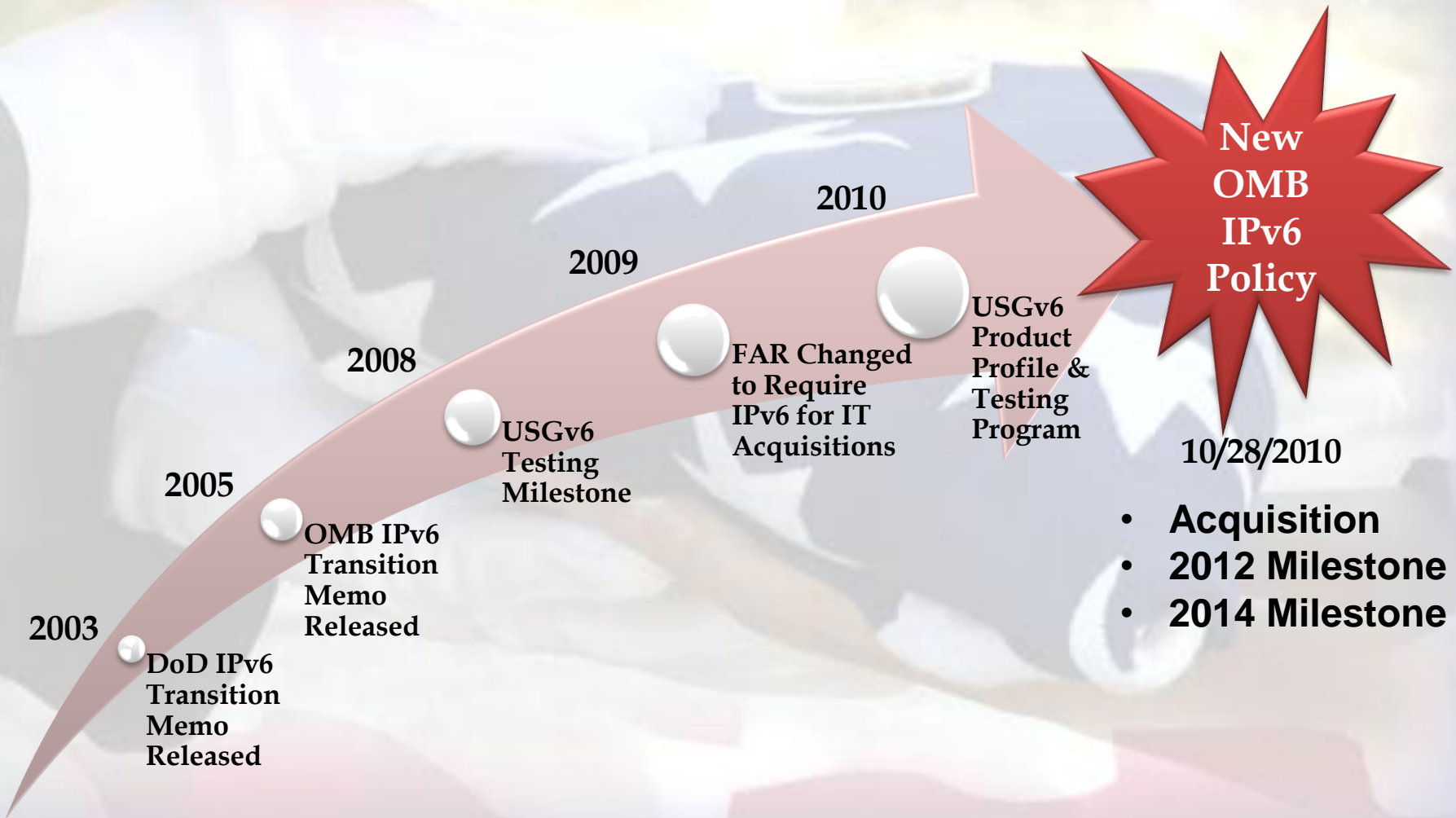


Agenda

- **Panel Kick-Off & Introduction – Steve Pirzchalski**
- **NASA IPv6 Progress – Kevin Jones**
- **DOI IPv6 Progress – Tim Quinn**
- **VA IPv6 Progress – Steve Pirzchalski**
- **DREN/SPAWAR/DOD Progress – Ron Broersma**
- **Overall Federal Transition Progress - Pete Tseronis**
- **Q&A**



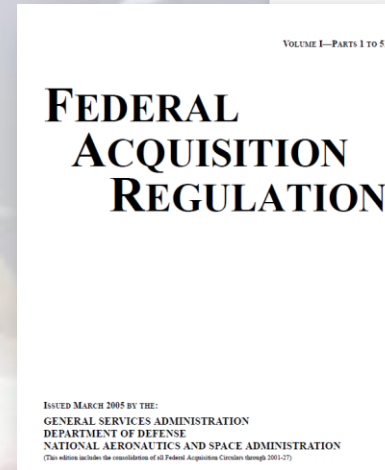
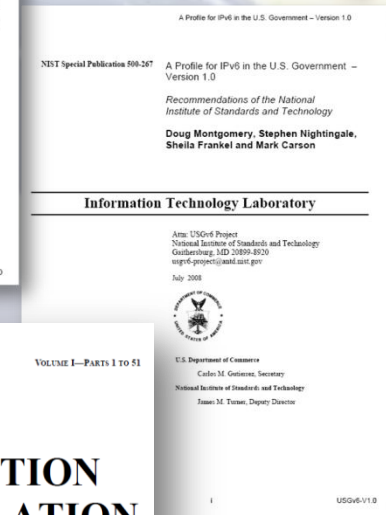
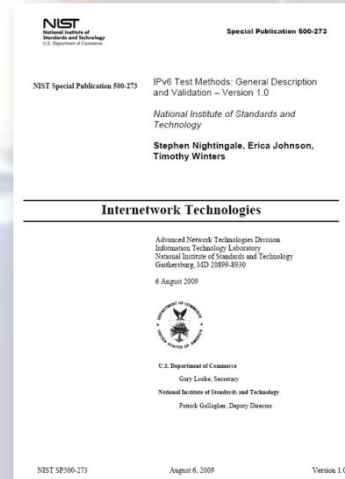
USG IPv6 – The History





OMB IPv6 2010 – IPv6 Acquisitions

- Comply with FAR requirements
- Use of the USGv6 Profile and Test Program
- Ensure completeness/quality of IPv6 capabilities





OMB IPv6 2010 – 2012 Milestone

- External Services:
 - Public/external facing servers and services
 - e.g. web, email, DNS, ISP services, etc
 - Operationally use native IPv6
 - End of FY 2012 (September 30, 2012)

UNITED STATES
DEPARTMENT OF VETERANS AFFAIRS

Home Veteran Services Business About VA Media Room Locations Contact Us

VA Sets New Regulations for Vets Exposed to Agent Orange in Korea

Veterans who served along the demilitarized zone (DMZ) in Korea will now have easier access to quality care and benefits. Vets belonging to units that were near herbicidal spraying from 1 Apr 1968 to 31 Aug 1971 qualify for Agent Orange presumption. [Learn more](#)

1 2 3 4 5

In The News

VA's National Cemeteries Lead Nation in Satisfaction Survey

For the fourth consecutive time in 10 years, the system of national cemeteries operated by the Department of Veterans Affairs has bested the nation's top corporations and other federal agencies in a prestigious, independent survey of customer satisfaction. [More information](#)

VA Publishes Final Regulation to Aid Veterans Exposed to Agent Orange in Korea

Veterans exposed to herbicides while serving along the demilitarized zone (DMZ) in Korea will have an easier path to access quality health care and benefits under a Department of Veterans Affairs (VA) final regulation that will expand the dates when illnesses caused by herbicide exposure can be presumed to be related to Agent Orange. [More information](#)

VA Office Developing Innovative Patient-Centered Model of Care for Veterans

The Department of Veterans Affairs (VA) is creating a new office to develop personal, patient-centered models of care for Veterans who receive health care services at VA's more than 1,000 points of care across the Nation. [More information](#)

VA Adds Chat Feature to Online Application for Health Benefits

Veterans will find it easier and faster to apply for their health care benefits now that the Department of Veterans Affairs has enhanced and streamlined its online Form 10-10EZ, "Application for Health Benefits." [More information](#)

Hot Topics

Enhanced VA Health Care Enrollment FAQ

Certain combat Veterans who were discharged from active duty service before Jan. 28, 2003 have until Jan. 27, 2011 to take advantage of their enhanced health care enrollment opportunity through VA. If you are unsure whether you qualify, read over these [frequently asked questions](#).

VA Publishes Its Fiscal Year 2010 Performance and Accountability Report

On November 19th, VA published its FY 2010 Performance and Accountability Report (PAR). The PAR is VA's report card and describes 2010 performance results achieved compared to performance targets. It enables the President, Congress, Veterans Service Organizations, and the public to assess VA's performance on behalf of America's Veterans. [View the report](#) for more information.

Marine Veterans Stationed at Camp Lejeune: Register for Drinking Water Notifications

If you were stationed or worked at Camp Lejeune before 1987, you may have been exposed to dangerous contaminants in the drinking water supply. To register for water testing notifications, read about previous studies and receive more information, [visit the Camp Lejeune Historic Drinking Water website](#).

Download Your MyHealthVet Personal Health Record

On August 2, 2010, President Obama announced the "Blue Button" capability that allows Veterans to download their personal health information from their MyHealthVet account. Having control of this information enables Vets to share the data with health care providers, caregivers, or people they trust. [Download yours now.](#)

Connect with VA!

Blog Facebook Twitter MyVA YouTube

Quick List

- Veterans ON-line Application (VONAPP)
- Enroll/Update Medical Benefits (10-10EZ)
- MyHealthVet
- eBenefits
- Life Insurance Online Applications
- VA Forms
- Federal Jobs for Veterans
- Notices

Highlights

- State and Local Resources
- Post 9/11 GI Bill
- Prescriptions
- VA Strategic Plan FY 2011 - 2015
- VA 2011 Budget Submission
- National Suicide Prevention Lifeline 1-800-273-TALK (8255)

Special Programs

- Returning Service Members (DEF/OIF)
- Vocational Rehabilitation & Employment
- Homeless Veterans
- Military Service Benefits
- Minority Veterans
- Surviving Spouses and Dependents
- Women Veterans

Voter Assistance

VA Home | Privacy Policy | MHA | Web Policies | Notices | No PEAR Ad Data | Site Index | USA.gov | White House | National Resources Directory | Inceptor General

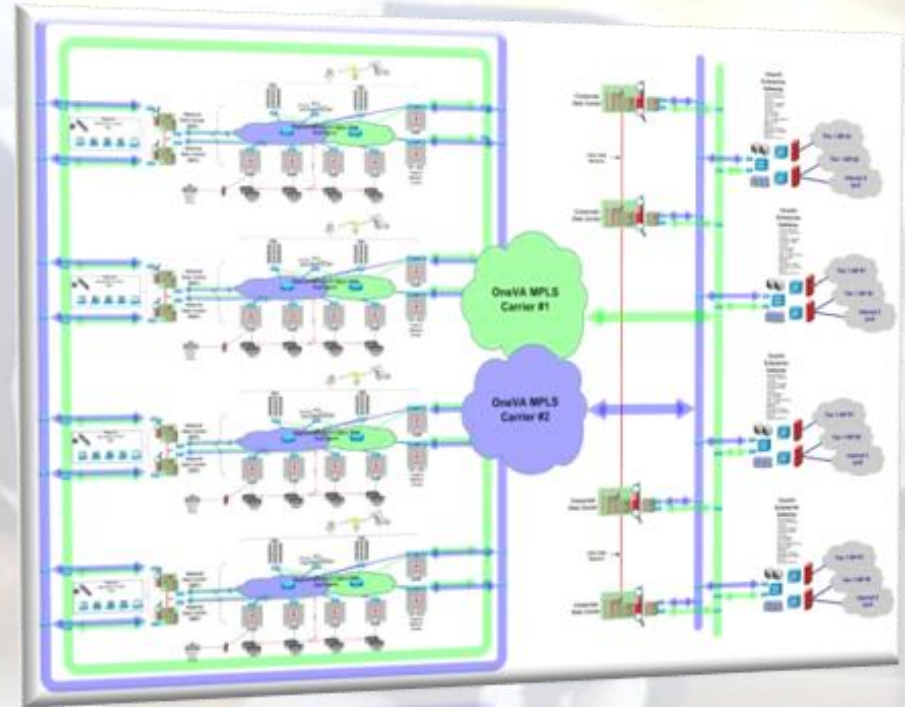
U.S. Department of Veterans Affairs • 810 Vermont Avenue, NW • Washington, DC 20420

Reviewed/Updated Date: January 27, 2011



OMB IPv6 2010 – 2014 Milestone

- Internal Services:
 - Applications that communicate with public Internet servers
 - Supporting enterprise networks
 - Operationally use native IPv6
 - End of FY 2014 (September 30 2014)





2012 Progress Measure

- **NIST USGv6 Deployment Status Website**
 - <http://usgv6-deploymon.antd.nist.gov/cgi-bin/generate-gov.dept>
- **Provides a central place to track the status of the Departments and Agencies**
- **Currently focused on progress in meeting the 2012 Mandate for all public/external facing services to use operationally use IPv6**
- **Provides a status for Web, E-mail and DNS (and DNSSEC)**
- **Updated Weekly**



What Does it Look Like?

- Detailed USG Department Service Interface Statistics for 2011.08.07 -

Domain	Agency	DNS	Mail	Web	DNSSEC
gov.defense.	Department of Defense	[14] 0/0/0 [O]	[A] 0/0/0 [I]	[2] 0/0/0 [O]	U/-/-
gov.dhs.	Department of Homeland Security	[4] 0/0/0 [I]	[3] 0/0/0 [I]	[1] 0/0/0 [O]	S/V/C
gov.doc.	Department of Commerce	[6] 5/3/3 [M]	[2] 0/0/0 [O]	[1] 0/0/0 [I]	S/V/C
gov.doe.	Department of Energy	[3] 1/1/1 [M]	[1] 0/0/0 [O]	[1] 0/0/0 [O]	S/V/C
gov.doi.	Department of the Interior	[6] 4/4/4 [O]	[2] 0/0/0 [O]	[3] 0/0/0 [O]	S/V/C
gov.dol.	Department of Labor	[3] 0/0/0 [I]	[4] 0/0/0 [I]	[1] 0/0/0 [O]	S/V/C
gov.dot.	Department of Transportation	[3] 2/0/0 [I]	[3] 0/0/0 [I]	[9] 0/0/0 [O]	U/-/-
gov.ed.	Department of Education	[4] 0/0/0 [I]	[4] 0/0/0 [O]	[1] 1/1/1 [O]	S/V/C
gov.hhs.	Department of Health and Human Services	[2] 0/0/0 [O]	[1] 0/0/0 [O]	[2] 0/0/0 [O]	S/V/C
gov.hud.	Department of Housing and Urban Development	[2] 0/0/0 [I]	[3] 0/0/0 [I]	[1] 0/0/0 [O]	S/V/C
gov.state.	Department of State	[4] 0/0/0 [O]	[2] 0/0/0 [I]	[2] 0/0/0 [O]	S/V/C
gov.treas.	Department of the Treasury	[2] 0/0/0 [I]	[A] 0/0/0 [I]	[2] 0/0/0 [O]	U/-/-
gov.usda.	Department of Agriculture	[2] 0/0/0 [I]	[2] 0/0/0 [O]	[2] 0/0/0 [O]	U/-/-
gov.usdoj.	Department of Justice	[4] 0/0/0 [I]	[1] 0/0/0 [I]	[1] 0/0/0 [I]	S/V/C
gov.va.	Department of Veterans Affairs	[4] 0/0/0 [I]	[4] 0/0/0 [I]	[1] 1/1/1 [I]	S/?/B
mil.af.	United States Air Force	[7] 0/0/0 [O]	[A] 0/0/0 [I]	[2] 0/0/0 [O]	U/-/-
mil.army.	United States Army	[3] 0/0/0 [I]	[A] 0/0/0 [I]	[1] 0/0/0 [O]	U/-/-
mil.navy.	United States Navy	[4] 0/0/0 [I]	[3] 0/0/0 [O]	[2] 0/0/0 [O]	U/-/-



The Easy Way to Read It

Red: No IPv6 Service at all.	[A] 0/0/0 [I]
Yellow: IPv6 deployment started, but not operational (or there is a problem)	[3] 3/3/0 [I]
Green: IPv6 Operational	[6] 5/5/5 [M]



Federal IPv6 Task Force Outreach

- **Facilitate Collaboration & Communications**
 - **Between agencies**
 - **With industry**
 - **Share information & results**
- **Activities**
 - **Semi-annual federal IPv6 conferences**
 - **Monthly IPv6 round-table discussion**
 - **IAC Roadmap updates & whitepapers**
 - **Direct agency interaction & discussion**
 - **Resource & support identification**
- **Next Interagency IPv6 Meeting**
 - **October 12th, Arlington VA**
 - **October 13th, Washington DC (DGI IPv6 Conference)**



Detailed Reading Instructions

NIST USGV6 DEPLOYMENT STATUS WEBSITE



How Do I Read DNS?

Estimated number of IPv4 servers/ interfaces found. If no name servers are found, the SOA Record (name server) of the parent domain is used and a (P) is indicated. In this example, the agency utilizes 8 DNS servers.

Servers/interfaces with IPv6 address assignments. In this example (5) of the (6) DNS servers have IPv6 addresses.

Servers/interfaces with IPv6 addresses that respond to pings. In this example (4) of the (6) DNS servers respond to IPv6 pings.

DNS		
[8]	0/0/0	[O]
[4]	0/0/0	[I]
[6]	5/3/3	[M]
[3]	1/1/1	[M]
[6]	4/4/4	[O]

Location of service related to the domain:
(I) = Internal to domain
(P) = Parent of domain
(O) = Outside of domain
(M) = Mix of locations
In this example the DNS servers are located in a mix of locations.

Servers/interfaces that are fully operational over IPv6. In this example (1) of the (3) DNS servers are operational over IPv6.



How Do I Read Mail?

Estimated number of IPv4 MX records found. If no mx records are found the (A) record is used for the domain. In this example, no MX record was returned so an (A) was used..

Servers/interfaces with IPv6 address assignments. In this example (0) of the (2) Mail (SMTP) servers have IPv6 addresses.

Servers/interfaces with IPv6 addresses that respond to pings. In this example (0) of the (1) Mail (SMTP) servers respond to IPv6 pings.

Mail			
[A]	0/0/0	[I]	
[3]	0/0/0	[I]	
[2]	0/0/0	[O]	
[1]	0/0/0	[O]	

Location of service related to the domain:
(I) = Internal to domain
(P) = Parent of domain
(O) = Outside of domain
(M) = Mix of locations
In this example the Mail (SMTP) servers are located internal to the domain.

Servers/interfaces that are fully operational over IPv6. In this example (0) of the (2) Mail (SMTP) servers are operational over IPv6.



How Do I Read Web?

Estimated number of IPv4 web servers/interfaces found. In this example, (2) web servers were found.

Web servers with IPv6 address assignments. In this example (1) of the (1) Web servers have IPv6 addresses.

Web servers with IPv6 addresses that respond to pings. In this example (0) of the (1) Web servers respond to IPv6 pings.

Web servers that are fully operational over IPv6. In this example (0) of the (1) Web servers are operational over IPv6.

Location of service related to the domain:
(I) = Internal to domain
(P) = Parent of domain
(O) = Outside of domain
(M) = Mix of locations
In this example the Web server is located outside the domain.

Web			
[2]	0/0/0	[0]	
[1]	0/0/0	[0]	
[1]	1/1/0	[I]	
[1]	0/0/0	[0]	



DNSSEC – A Little Different

DNSSEC

<u>U</u> /-/
s/V/C
s/V/C
s/V/C
s/V/C
s/V/C
<u>U</u> /-/

Represents the certificate signature status. Is the certificate signed?
 (S) = Signed
 (U) = Unsigned

Represents the certificates overall status.
 (V) = Valid
 (I) = Invalid
 (?) = Unknown
 (-) = Not Applicable

The 4 States of DNSSEC

Unassigned: No DNSSEC	U/-/-
Error: Potential attack or misconfiguration.	U/I/C or S/I/C
Island: No DNSSEC material in the parent (.gov)	S/?/B
Good: Operational	S/V/C

Displays if the certificate has the proper chain of trust.
 (C) = Chained
 (B) = Broken
 (?) = Unknown