

DGI IPv6 Conference

FAA

IPv6 Project Status and Lessons Learned

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Administration**



IPv6 Transition Plan

- **Collect As-Is**
 - List of external facing servers/services (validate)
 - Impacted physical servers, networks, and security devices
- **Transition to To-Be (Goals and Objectives)**
 - Target network configuration
 - Initial IPv6 address allocations
 - Security configuration
 - Server network configuration

IPv6 Transition Plan (continued)

- **Identify the Issues (Areas of Concern)**
 - Hardware upgrade/replacement requirements
 - Software upgrade/replacement requirements
 - Security tools upgrade/replacement requirements
 - Training requirements
 - Testing/assessment capabilities
 - Funding and resource availability
- **Develop a Sequencing Plan (MS Project)**
 - Early implementation opportunities and schedule
 - Delivery schedule for all identified servers

IPv6 Transition Plan (continued)

- **Test**

- C&A criteria for IPv6 capable environment
- Test environments/capabilities
- Target configurations for
 - DNS, DHCP, Web Servers, E-mail Servers, Firewalls, Routers, Switches

- **Implement**

- Deployment guides
- Implementation readiness reviews
- Installation and configuration
- C&A tests
- Go live
- Lessons learned review sessions

- **Operate and Maintain**

- Help desk procedure(s)

IPv6 Transition Plan (continued)

b. Roles and Responsibilities

- ARD coordinates requirements and compliance reporting activities
- LOBs provide dedicated members to Tiger Team
- Tiger Team members plan and accomplish LOB/SOs implementations
- Tiger Team works and resolves implementation issues
- Identify training requirements and training resources

c. Acquisition

- USGv6 Profile and Test Program designated as core requirements for all networked IT purchases when possible - AIO Memo on USGv6 guidance

d. Communications and Training

- Participate in Federal IPv6 Task Force meetings and provide OMB/DOT requirements and guidance to Tiger Team and LOBs
- Chair FAA IPv6 Tiger Team meetings
- Status reporting (progress and Tech Stat)

FAA IPv6 Transition Plan Accomplishments

FAA collaboration with web content hosting provider, and began testing transition of IPv4 to IPv6 web sites

- FAA has alternative approach for web content hosting to deliver (1) IPv6 only configuration and (2) dual stack (if hardwired IPv4 address)
- FAA IPv6 Working Group re-established, all impacted internal organizations to participate
- IPv6 Tiger Team tasked to implement deployment
- Focused efforts on IPv6 external facing services migration
- FAA completed IPv6 address allocation plan
- FAA revised policy requiring IPv6 capabilities for future IT networks
- USGv6 Test Program provides new guidance



Current Status - FAA IPv6 Transition

- IPv6 Tiger Team established
 - Regularly scheduled meetings hosted by ARD-200
 - Tiger team members from each LOB are responsible for the IPv6 implementation and progress reporting to the ARD-200
 - High level milestones and target dates have been established for implementation of FY2012 requirements
 - Detailed planning within each LOB is underway
- Acquisition policy memo to require IPv6 capabilities based on USGv6 profile and USGv6 Test program for all future networked IT purchases has been signed by the FAA CIO and distributed
- Networks/ Servers/ Services with IPv6 capabilities will be introduced into the FAA environment in the near future
- Security guidance and tools upgrade are needed for the new environment
- Training classes held for IPv6 WG and Tiger Team members

