Patent Public Advisory Committee Meeting OCIO Update



John B. Owens II Chief Information Officer September 27, 2012



IT INFRASTRUCTURE IMPROVEMENT PORTFOLIO - ROAD MAP

The Business Problem

"[In 2008], The aging IT infrastructure of the USPTO represented a serious challenge, which if not addressed, would continue to degrade IT services to the point that the mission of the agency itself was jeopardized."

source: CIDP August 2008

Major Initiatives Included:

- Organizational Strengthening
- Process Standardization
- Data Center Stabilization
- AIS Stabilization
- Desktop Stabilization
- Service Desk
- Disaster Recovery
- Telecommunications Stabilization
- Enterprise Architecture



IT INFRASTRUCTURE IMPROVEMENT PORTFOLIO - ROAD MAP Cont.

Plan of Action and Execution

- Developed the Road Map CIDP and obtained USPTO management approval in August 2008
- Organized the work to be done in 10 programs, which eventually led to the definition of 163 projects
- Established cross-functional collaboration and status reporting practices
- Completed 111 projects, with another <u>17</u> at various stages of completion. All projects are expected to complete this calendar year.
- Current budget variance from plan is a favorable <u>-7.2%</u>



IT INFRASTRUCTURE IMPROVEMENT PORTFOLIO - ROAD MAP Cont.

Summary Results

Program and Projects Summary

All Years Programs	Active	Cancelled / Suspended	Completed	Total Projects
Organizational Strengthening	0	0	7	7
Process Standardization	0	1	9	10
Data Center Stabilization	3	9	25	37
AIS Stabilization	0	5	14	19
Desktop Stabilization	2	6	17	25
Service Desk	0	2	4	6
Disaster Recovery	1	5	12	18
Telecommunications Stabilization	4	1	13	18
Enterprise Architecture	0	3	6	9
Capital IT Hardware	7	3	4	14
Totals	17	35	111	163

Data as of Sept. 24, 2012



IT INFRASTRUCTURE IMPROVEMENT PORTFOLIO - ROAD MAP Cont.

Summary Results

Financial Summary

OCIO Road Map and Transformation Plan Financial Assessment - Final FY 2008 to FY 2012

Executive Summary - Total for Portfolio (\$'000s)

#	Program Name	Planned Totals	Actual Totals	
1	Organization Strengthening	\$5,015.2	\$3,175.7	
2	Process Standardization	\$1,966.0	\$2,628.2	
3	Data Center Stabilization	\$10,182.4	\$15,480.1	
4	AIS Stabilization	\$23,968.1	\$11,860.3	
5	Desktop Stabilization	\$6,418.5	\$12,351.9	
6	Service Desk	\$1,834.6	\$5,601.8	
7	Disaster Recovery	\$13,900.0	\$9,463.3	
8	Telecommunication Stabilization	\$56,685.6	\$55,724.9	
9	Enterprise Architecture	\$6,740.0	\$2,714.7	
10	Portfolio Support - Planning & Coordination	\$0.0	\$3,566.9	
11	Capital Hardware Replacement	\$63,049.6	\$53,523.8	
	Totals	\$189,760.0	\$176,091.6	
	Portfolio Variance	-7.2%		



Major Successes

Strengthening the OCIO Organization

- Implemented a simplified OCIO organization structure
- Developed a Strategic Human Capital Implementation Plan
- Identified critical staff skill gaps and implemented training programs to address them
- Improved Staff Performance Appraisal Plans
- Implemented Executive Information System (EIS) as the OCIO financial system

Process Standardization

- Implemented an updated Systems Development Life Cycle (SDLC), compatible with both waterfall or Agile development
- ✓ Implemented an Enterprise Project Management System (EPMS)
- Implemented an OCIO Policy Management function
- Developed and implemented IT Infrastructure Library (ITIL) processes for Incident, Problem, Service, and Event Management



Telecommunications Infrastructure

- Implemented PTONet III, the first complete upgrade to the PTO campus, network security infrastructure
- Implemented the CIO Command Center, which established a centralized monitoring, performance and security center dedicated to the rapid diagnosis and response to suspected incidents or outages
- Completed a Voice Over Internet Protocol (VOIP) phone replacement project
- Completing projects to deploy Unified Business Collaboration Tools

Data Center Infrastructure

- Addressed power shortfalls for the Data Center
- Established the architecture, the physical and logical mapping of all components, and migration/expansion plans for the Data Centers
- Replaced a substantial portion of the obsolete infrastructure through Capital Hardware Plans (servers, storage, etc.) 52% replaced, 54%virtual



Desktop

- Adopted the required Federal Desk Core Configuration (FDCC) framework and practices
- Established desktop baselines and architecture
- Established desktop rights management
- Implemented improvements to USPTO's patch management process
- Completed other projects for Windows XP SP3 upgrade, Symantec Endpoint Protection, IE 8 upgrade, PTOFAX 2.0, and the Desktop Management Tool Set.
- Completed projects to implement Universal Laptops with compliant Windows 7 baselines

Service Desk

- Completed selection and implementation of a Service Desk tools suite (Remedy), compliant with established IT Infrastructure Library (ITIL) processes
- Completed implementation of the IT Service Management (ITSM) tool for incident and problem management
- Completed ITSM projects for release, service, governance, change, etc.



Enterprise Architecture

- Developed an enterprise Service Oriented Architecture strategy and plan
- Developed an enterprise architecture governance process and implementation plan
- Completed implementation of enterprise architecture tools such as Troux and GEARS

Disaster Recovery

- Selected an alternate processing site for disaster recovery and implemented infrastructure necessary to support disaster recovery operations, including Internet and network connectivity
- Implemented the data bunkering of USPTO critical data to the Boyers site
- Tested failover capability for some applications to Boyers, and implemented supporting configuration management tool sets



Applications (AIS)



Identified systems for analysis of root cause failures and implemented recommendations for architecture, design, and other enhancements to these systems



Replaced the end of life HP-UX Servers for 22 systems

- Completed numerous projects enhancing existing systems, based on the recommendations of root cause failures analysis
- Implemented an improved USPTO Public Access Internet website, e-Newsletter, Infrastructure Code Table upgrade, metrics, and other enhancements

Other

- Established a strong and very successful OCIO capability for the delivery of large, multi-year, multi-program information technology infrastructure efforts
- Institutionalized portfolio, program, and project management practices (processes, templates, tools); along with practices for cross-functional collaboration, and reporting at the OCIO



Never Again

- The Road Map will end on September 30, with a few balance projects completing by year end
- Management and enhancement of the IT infrastructure portfolio with continue under the auspices of:
 - Capital Hardware IT Replacement Portfolio
 - End User
 - IT Facilities
 - Enterprise Infrastructure Portfolio
 - Multiple Programs
- These portfolios will continue with established portfolio, program, and project management; and cross-functional collaboration and reporting practices
- Foundation is now sound, focus is on system replacement