Washington, DC www.egov.gov fea @omb.eop.gov

Case Studies

OMB collects successful EA practice stories and publishes them at the www.egov.gov website. (Click here to be taken directly to the case study page) These case studies are for informational purposes only and can be used by the architectural community to highlight specific examples from Federal agencies throughout their agency or organization. Detailed below are four case studies currently published on the EGOV website.

FDA Case Study

Demonstrates how the Food and Drug Administration used Enterprise Architecture to standardize business processes and achieve considerable cost savings for their IT Consolidation initiative.

Final Case Study (PDF, 137kb) **Executive Summary (PDF, 103kb)**

CBP Case Study

Details how the U.S. Customs and Border Protection (CBP) uses EA to improve system support at lower cost to more than 20 agencies with missions tied to Internal Trade and Transportation.

CBP Case Study (PDF, 125kb)

HUD Case Study

Reveals how the Department of Housing and Urban Development (HUD) used Enterprise Architecture to implement a streamlined electronic grants application process that provides better service to customers and business partners.

HUD Case Study (PDF, 33kb)

FFIEC Case Study

Exhibits how several banking oversight agencies used Enterprise Architecture to implement a streamlined data collection process reducing costs, increasing productivity and improving oversight of financial institutions.

FFIEC Case Study (PDF, 25kb)



If an agency would like to share an account of a successful EA practice implementation, please contact OMB at fea@eop.omb.gov for further details.



FEA CRM Version 2.3 XML Document Available

This XML document contains the content of the FEA relating to the Consolidated Reference Model (CRM) Version 2.3. It includes the various layers of the FEA Reference models (including the PRM, BRM, SRM, and TRM) with their detailed descriptions, as well as associated 3 digit codes. CRM Version 2.3 was released in October 2007. Download Now (XML, 444kb)



EA Assessment Frequently Asked Questions

The Q2FY08 EA Assessment is fast approaching. Agencies' Self Assessments and EA materials are due to OMB by February 29, 2008. This issue of the Federal Architect provides you with the answers to this year's most frequently asked questions about the assessment.

COST SAVINGS/COST AVOIDANCE

- **Q:** Where can an agency find guidance on how to demonstrate cost savings, cost avoidance?
- A: Attachment A of U.S. Office of Management and Budget (OMB) Memorandum M-06-22 presents an IT cost measurement framework which provides guidance for agencies to use in identifying the total cost of projects, including both government and contractor costs, and is based on costing methodologies provided in Attachment C of OMB Circular A-76. You can find M-06-22 at the www.EGOV.GOV website or click here to find the M-06-22 PDF.
- Q: M-06-22 asks for baseline costs in order to calculate cost savings. However, if an agency did not compute baseline costs for a particular alternative (because it was self-evident that an alternate approach was a less costly solution), what should the agency report for baseline costs?
- A: The purpose of the Cost Savings/Cost Avoidance criteria in the EA Assessment Framework is to ensure agencies are using their enterprise architectures to help the agency make better, more cost-effective investment decisions. Part of determining what makes an investment decision cost-effective is to compare the estimated cost and risk of various investment alternatives. Agencies are required to complete this type of alternatives analysis for all major IT investments as per OMB Circular A-11, the results of which are included within the agency's investment requests (Exhibit 300). Agencies therefore should have already done baseline cost estimation as part of this alternatives analysis. This is particularly true for large (major) investments, where the cost differential of various alternatives is likely significant.

In order to achieve an acceptable score in the Cost Savings/Cost Avoidance criteria in the EA Assessment (score of "4"), agencies must demonstrate they used the enterprise architecture to inform investment decisions which led to a cost savings/cost avoidance of at least 3% of the agency's total IT budget. To earn a score of "3" in this category, the agency must demonstrate savings of at least 1%. At this relatively high level of cost savings/cost avoidance (i.e. high impact), capital planning practices would dictate baseline costs will have been estimated and used to inform the investment decision.

SEGMENT ARCHITECTURES

- **Q:** How many segment architectures must an agency declare in their EA submission to satisfy the requirement in the Completion Capability Area?
- A: To obtain an Integrated Maturity level (Level 4), an agency should complete one new segment architecture (since the last EA assessment) for a core mission line of business, business service, or enterprise service. The intent of this requirement is to ensure agencies are driving the use of enterprise architecture as a strategic planning tool throughout the agency one business segment at a time. OMB is looking to see the agency is achieving results in a particular segment (based on previously completed architectural work), and then moving on to apply the practices and lessons learned from this effort in another area of the organization. Appendix B of the OMB EA Assessment Framework 2.2 defines the different types of segment architectures and is located at www.egov.gov.
- Q: Are there examples where segment architectures are being used today?
- A: Yes. The Program Manager, Information Sharing Environment (ISE) released the ISE Enterprise Architecture Framework (EAF) in August of 2007. The ISE EAF establishes a long-term approach for information resource planning and management, and promotes terrorism-related information sharing business process transformation and structure that can be leveraged within segment architectures of Federal departments and agencies. The Department of Justice and the Department of Homeland Security have now defined their information sharing segment architectures that will identify and interface agency-wide information sharing architectures to the ISE consistent with the ISE EAF. More information on the ISE architecture program and the ISE EAF may be found at the organization's website, www.ise.gov.

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EA FAQs Continued from Page 2

EA TRANSITION STRATEGY

- **Q:** Now that agencies are focusing on segments, as opposed to trying to re-architect the whole agency at once, does the agency still need to maintain (and submit to OMB) an enterprise-wide EA Transition Strategy?
- A: Yes. Agencies are expected to both maintain an enterprise-wide EA Transition Strategy and complete a segment architecture. The EA Transition Strategy is the "mile-wide/inch-deep" view of the IT plans and investments at the agency. The EA Transition Strategy identifies all of the IT investments the agency plans to make in the coming year(s), and provides a timeline (or sequencing plan) for the change occurring in the organization. In contrast, the segment architecture is the "inch-wide/mile-deep" or "deep dive" into a more narrowly scoped business function. It reflects a more extensive amount of detail typically required by this type of indepth, re-engineering effort.
- **Q:** The EA Assessment requirements tell agencies to include the achievement of performance targets (from the target performance architecture) as milestones in the EA Transition Strategy. What does this mean?
- A: The sequencing plan within the EA Transition Strategy should show implementation milestones for the various IT projects ongoing within the agency, as well as dates on which performance improvements will be achieved and realized within the agency (as a result of implementation). This allows project managers and agency leadership to gauge when the tangible benefits of a re-engineering effort will actually been seen within the agency's business operations. Although it is important to track implementation goals, it is equally, if not more, important to track the achievement of performance goals. This ensures agencies are focused on the outcomes (improved business performance), not just outputs (systems implemented).

MEASURING EA PROGRAM VALUE

- **Q:** Are agencies required to perform surveys in order to demonstrate their EA value?
- A: No, Agencies are not required to perform surveys. Actual stakeholder survey instruments can use different formats and techniques to solicit stakeholder responses, e.g., on-line or email survey forms. Other techniques recommended by OMB to measure EA value include performing stakeholder interviews, and coordinating workshops to collect feedback on EA products and services. Please refer to section 5 of the FEA Practice Guidance for further assistance on establishing an EA Value Measurement program.
- **Q:** Does OMB assess the EA program value results?
- **A:** OMB does not assess the results (i.e. feedback from stakeholders) of an agency's EA program value measurement process. Rather, OMB assesses whether or not the agency has a process in place to measure how well the EA is serving the business needs of its stakeholders.



If you have other questions or comments, please get in touch with your agency FEA PMO point of contact or email the FEA PMO at fea@omb.eop.gov.

Federal Government Ipv6 Transition Update



Background

In August of 2005, the Office of Management Budget issued Memorandum M-05-22, establishing the goal of transitioning all Federal government agency network backbones to the next generation of the Internet Protocol Version 6 (IPv6), by June 30, 2008.

OMB Memorandum M-05-22 requires the agency's network core to be capable of supporting both IPv4 and IPv6 (addresses and traffic) by June 30, 2008. Agencies need to be able to demonstrate they are capable of performing at least the following success criteria, without compromising IPv4 capability and network security:

- 1. Transmit IPv6 traffic from the Internet and external peers, through the network backbone (core), out to the Internet and external peers;
- 2. Transmit IPv6 traffic from the LAN, through the

- network backbone (core), out to the Internet and external peers:
- 3. Transmit IPv6 traffic from the LAN, through the network backbone (core), to another LAN (or another node on the same LAN).

For these demonstrations, the term "LAN" represents IPv6-configured PCs/laptops (with associated cabling and switching as needed), directly connected to IPv6 devices (e.g. routers, switches) in an agency's operational core backbone network. The term "Internet and external peers" refers to an external network (i.e. a network owned and operated by an organization different from that agency) chosen for the demonstrations, and which may be from a partner agency, ISP, or other IPv6 organization. The external network contains equipment outside of the agency's own

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IPv6 Transition Update Continued from Page 3

control or purview. Connectivity between the agency's demonstration network and the external peer(s) may be established from either a dedicated circuit, such as a leased line, or via the public Internet. It is emphasized that the demonstrations of

compliance with the M-05-22 memorandum must be performed on the agency's $\underline{\text{operational core network}}$.

Further Information on IPv6 Requirements

These requirements are described in further technical detail in the CIO Council document, "Demonstration Plan to Support Agency IPv6 Compliance." The Demonstration Plan includes a description of the evidence agencies should generate to document successful completion of these tests. This document is currently undergoing review and approval processes, and will soon be available at www.cio.gov (See section: Documents; IPv6).

NIST Special Publication 500-267, A Profile for IPv6 in the U.S. Government

In January 2007, the National Institute of Standards and Technology (NIST) released a draft IPv6 standards profile for the Federal government ("NIST Special Publication 500-267, A Profile for IPv6 in the U.S. Government - Version 1.0"). This draft profile was open for public comment through March 2007.

Version 1.0 has been updated based on this feedback, and was released again for a final, 30-day public comment period on January 2, 2008. After this 30-day public comment period,

Version 1.0 of the profile will be released by NIST in its final format.

Next Steps: Declaration of Conformity

At the recommendation of NIST, the Federal government will be facilitating the establishment of a lab accreditation and product testing program which will allow any accredited public and private testing lab to test and certify products for conformance with the Federal government IPv6 standards profile. This will allow product vendors to use any accredited test lab to "selfcertify" its products meet the requirements of the standards profile (and hence, the requirements of M-05-22). Upon successful testing, vendors will maintain a Supplier's Declaration of Conformity (ISO/IEC 17050-1:2004). Agencies will interpret this Declaration of Conformity as compliance with the Federal government IPv6 standards profile. The Federal government will control the technical content of the NIST standards profile and the attributes of the testing program. NIST will not conduct any product conformance testing. Rather, NIST will identify the lab accreditors and establish the testing requirements (e.g. test suites). The actual product testing will be done by the public and private test labs accredited by a lab accreditation body. Under this plan, any public or private test lab can become accredited to test IPv6 products against the Federal government IPv6 standards profile. This includes test labs already operating within the Federal government.

NIST to Host Lab Meeting for Accreditors

NIST will host a lab accreditors meeting on February 19, 2008. Any lab accreditation body with interest in participating should attend this meeting. THIS MEETING IS ORIENTED TOWARDS LAB ACCREDITORS – NOT TEST LABS. The meeting will be announced

in the Federal Register shortly after the release of the standards profile in January 2008.

GSA to Host IPv6 Industry Day in March 2008

Since the February 19, 2008 meeting is for lab accreditors only, the General Services Administration (GSA) will be hosting an IPv6 Industry Day in the March 2008 timeframe for all other interested parties (e.g. vendors, agencies). The date and details of this meeting will be announced by GSA in the Federal Register in the coming weeks.

The Federal Register

The Federal Register is the official daily publication for rules, proposed rules, and notices of Federal agencies and organizations, as well as executive orders and other presidential documents. Its contents can be accessed at www.regulations.gov.

Recommendations

It is estimated it will take NIST 12 to 24 months (from January 2008) to fully establish the lab accreditation program and test suites. Therefore, agencies should expect at least this amount of time before vendors are able to test their products against the Federal government IPv6 standards profile in accredited test labs. During this timeframe, agencies should develop procurement language supporting this longer-term goal. Vendors should continue to develop products in alignment with the Federal government IPv6 standards profile, in anticipation of the accredited test labs.



UPCOMING MEETINGS

Mark Your Calendars!



SIGN UP AND STAY INFORMED

Anyone wishing to participate in the Chief Architects Forum and/or ArchitecturePlus, or to be added to their membership lists should contact Stephanie Powers at stephanie powers@sra.com
. Or Ira Grossman at IGrossman@fdic.gov



CIO COUNCIL: ARCHITECTURE AND INFRASTRUCTURE COMMITTEE (AIC)

<u>Date</u>: February 21, 2007 Time: 3PM to 5PM



Location: Environmental Protection Agency

Ariel Rios Building

1200 Pennsylvania Avenue, N.W.

Washington, DC 20460

Directions: EPA Headquarters is located next

to the Ronald Reagan Building. By metro, take the blue or orange line

to Federal Triangle.

ARCHITECTUREPLUS

Date: May 18, 2008

Time: TBA, please check the Federal Chief

Architects Forum Wiki page at

http://semanticommunity.wik.is/Federal C

hief Architects Forum

Location: Main Graduate School:

USDA Training Location at Capital

Gallery

600 Maryland Avenue, S.W.

Washington, DC 20024-2520

Directions: Take the Metrorail Orange, Blue, Yellow

or Green Line to the L'Enfant Plaza Station. Take the 7th and Maryland

Avenue exit.

CHIEF ARCHITECTS FORUM

Date: May 1, 2008

Time: 9:00am to 12:00 pm

Loaction: The Graduate School, USDA

600 Maryland Ave. SW

Washington DC

Directions: The Capital Gallery building is conveniently

located with access to the Metrorail and one block from the Washington Mall and the Smithsonian's Air & Space Museum. Metro: Take the Metrorail Orange, Blue,

Yellow or Green Line to the L'Enfant Plaza Station. Take the 7th and Maryland Avenue

exit.