INFORMATION
Management Conference

Department of Energy Architecture Review Board

Transformation through Partnerships

Communicate, Collaborate, Coordinate

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U.S. DEPARTMENT OF ENERGY | Office of the Chief Information Officer

INFORMATION Management Conference

Agenda

- DOE EA Modernization Roadmap Planning
- Status of Troux Solutions Implementation
- ICAM Architecture Working Group
- PowerPedia
- Implementing PortfolioStat
- Federal IT Shared Services Strategy
- The Common Approach to Federal Enterprise Architecture
- Success Story Sharing
- Energy.Data.gov

DOE Architecture Review Board

- **Architecture Review Board (ARB)**
  - 14 Primary Reps (various Programs Offices)
  - CISO, CTO and Operations Participate
  - Six ARB meetings since Oct 2011
  - Various subjects and discussion related to improving DOE's mission
    - ICAM
    - NNSA – 2NV / RightPath
    - OMB Chief Architect (Dr. Scott Bernard)
  - All about developing partnerships, exchange of information, transparency, and improving DOE's mission

EA Modernization Roadmap Planning

- Agency-wide view of IT capabilities:
  - Strategic
  - Business and
  - Technology perspective
- Living document includes current, future and transition architecture strategy
- Required by OMB as part of the new “Common Approach”
- Submissions to OMB will continue to grow with increasing importance on “data”
- Due to OMB August 31, 2012

Troux Solutions Implementation

- Troux Solutions status:
  - OCIO implementing Troux solutions for business decisions, BI, etc.
  - All Troux modules installed and data review in progress
  - Implementing an Enterprise Level Agreement (ELA)
  - Enables joint Business/IT decision making, supported by EA principles
  - Realize better execution, risk control and financial performance
  - NNSA, EM, and nine (9) labs currently using Troux
  - Data Calls goals using Troux –
    - Use technology to improve efficiencies while reducing errors
    - Reduce overall efforts related to Data Calls

Troux Solutions Implementation

- The Troux solutions will be used to build DOE's EA program that further enhance analysis capabilities through:
  - Linking information technology to the corporate mission
  - Improving interoperability and integration across systems, people and processes
  - Greater project agility and responsiveness
  - Reduction of IT costs
  - Reduction in technical risk
  - Strategic planning based on reliable and current information

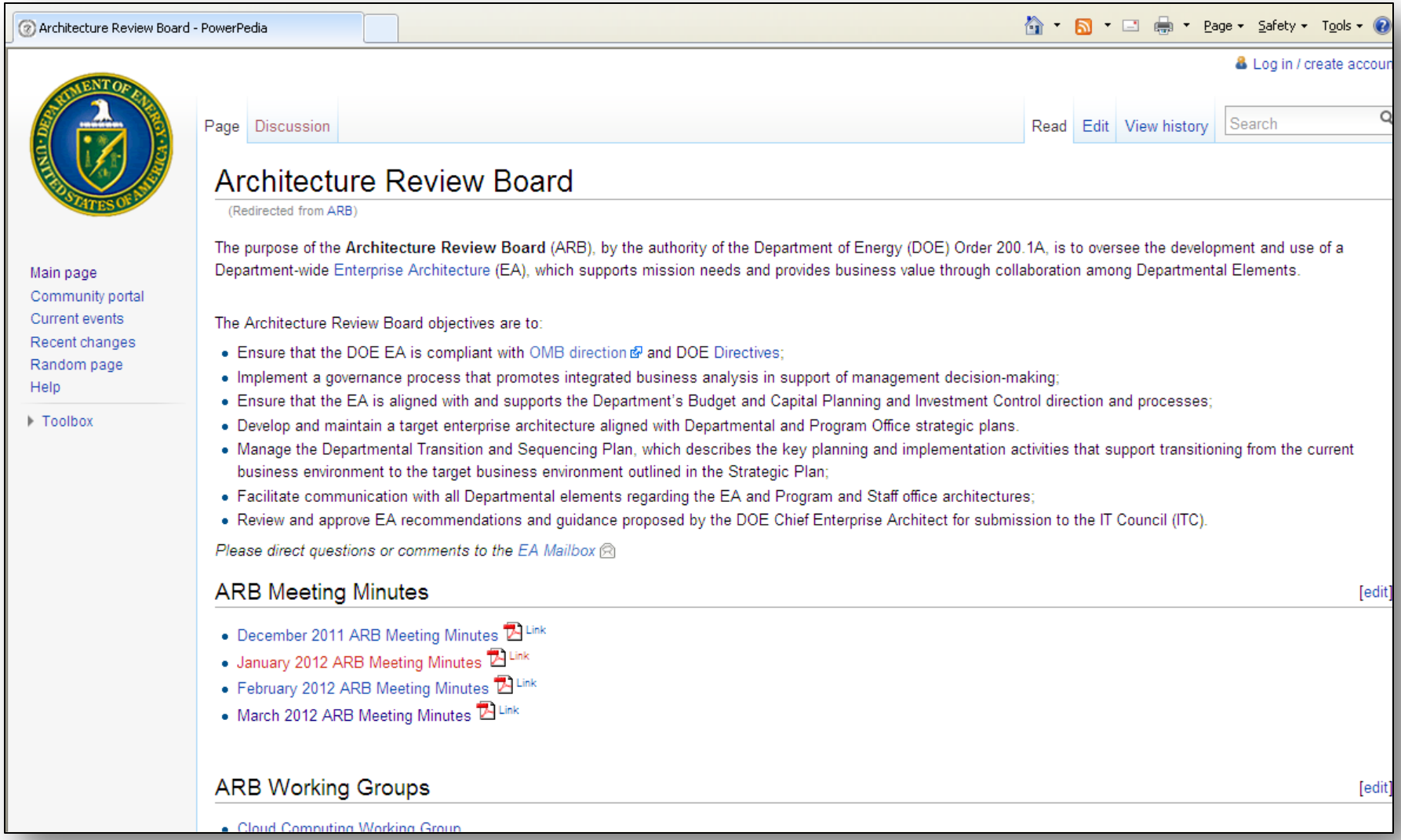
ICAM Architecture Working Group

- The DOE Identity, Credential and Access Management (ICAM) initiative satisfies HSPD-12, OMB mandates M-04-04, M-05-24, and M-11-11, and Federal CIO Council Federal ICAM Roadmap and Implementation Guidance.
- The DOE ICAM goals:
  - Sharing of identity information across DOE organizations as well as with external DOE entities
  - Embracing identity credentials at all Levels of Assurance as defined in M-04-04 (to include DOE and other Federal Agencies' HSPD-12, PIV-I , non-PIV, and external credentials approved by GSA's Trust Framework Provider Adoption Process) for access to DOE facilities and information systems
  - Fostering an enterprise and interoperable access management approach that links DOE physical access control systems (PACS) and logical access control systems (LACS) to a federated access management infrastructure
  - Streamlining the provisioning, updating, and deprovisioning of access to DOE systems to ensure DOE personnel have access to facilities, application, and information to which they are entitled

ICAM Architecture Working Group

- ICAM Architecture Working Group (IAWG) proposal:
  - bring together enterprise architects via the ARB, lead by the DOE Chief Architect:
  - digest the DOE Federated ICAM Framework and
  - incorporate into the overarching enterprise architecture roadmap
  - develop and recommend technical standards to facilitate ICAM implementations that conform to the DOE ICAM Framework and
  - align with the Federal ICAM Roadmap and Implementation Guidance
  - recommend transitional processes to facilitate migration to the ICAM target state
- Initial tasks include:
  - Approval of ICAM Working Group charter
  - Membership / Roles & Responsibilities
  - Establish work products and timelines

ARB Page on Powerpedia
https://powerpedia.energy.gov/wiki/ARB



Coming soon: DOE Enterprise Architecture Powerpedia Page!

Implementing PortfolioStat

- OMB M-12-10, “Implementing PortfolioStat” March 30, 2012
- Directs agencies to weed out duplicative and low-value IT by holistically evaluating the entire IT portfolio

Phase	Deadline
Phase 1: Baseline Data Gathering	Initial survey by May 31, 2012 Commodity IT specific survey by June 15, 2012
Phase 2: Analysis and Proposed Action Plan	Draft plan to OMB by June 29, 2012
Phase 3: PortfolioStat Session	First session held by July 31, 2012
Phase 4: Final Action Plan Implementation	Final plan to OMB by August 31, 2012
Phase 5: Lessons Learned	Document submitted to OMB by February 1, 2013

Federal IT Shared Services Strategy

- The Federal IT Shared Services Strategy helps drive Federal IT ROI:
  - Take a Shared-First approach to all agency service delivery models
  - Eliminate wasteful spending that results in duplicative systems
  - Reduce support costs of redundant IT resources
  - Improve cost efficiencies and streamline through shared commodity IT
  - Improve transparency of available shared services across government
  - Leverage future-first principles in designing shared services to:
    - Improve interoperability
    - Establish common standards

Federal IT Shared Services Strategy

- The Shared Services efforts are estimated to save the government approximately $1B over the next five years.
- DOE submissions:
  - **eCPIC** - planning to migrate our internally hosted eCPIC application to a cloud-based, shared service model managed by GSA this summer. An information flyer is available for those who wish to learn more.
  - **ServiceNow** – a Web 2.0 IT service management solution which allows the creation of semi-autonomous instances for the programs, as well as DOE. To learn more, consider attending “Service Now ITSM (and PPM) Implementation at DOE” later this week.

Service Now Opportunity

- Several agencies in federal government (DOE, DoC, GSA, HHS, etc.) are planning implementation of a new management tool that is capable of handling all of our help desk needs, our change management processes, all IT portfolio and project tracking and reporting, our enterprise architecture priorities, employee on-boarding, document management, and self-service and service catalog capabilities.
- The tool is fully configurable to allow us to set a new standard at the federal level to enable standardized management reporting and metrics of commodity IT for the first time.
- Now is the opportune time to set a federal strategy that will minimize further investment in other solutions that would need to be migrated over and to instead set a joint strategy for federal-wide implementation of this powerful solution.
- Because the tool is built in Web 2.0, implementations are shorter than ever before and organizations will be able to manage effectively customization to meet their individual needs against updates of the new federal standard we create.

Service Now Business Case

This solution is optimal for federal implementation for a number of reasons:

- Multi-tenancy solution meaning we can provision “tenancies” to our programs but have one database for the agency allowing full management reporting.
- 40% cost savings per year vs. our Remedy solution (which has only incident and asset capabilities) and a less than 1 year payback. We have estimated $500,000 annual savings for our first migration and a total of $7,500,000 per year as this becomes a DOE enterprise standard.
- Cloud Software as a Service (SaaS) solution with full replication of all data to a second DR site.
- Simplified cost model – cost per process user per month regardless of the amount of storage we require.
- Ability to roll out solution quickly and ability to define and preserve a core standard while allowing customization as well.

ServiceNow – an Integrated Management Tool

Some Highlights from the tool:

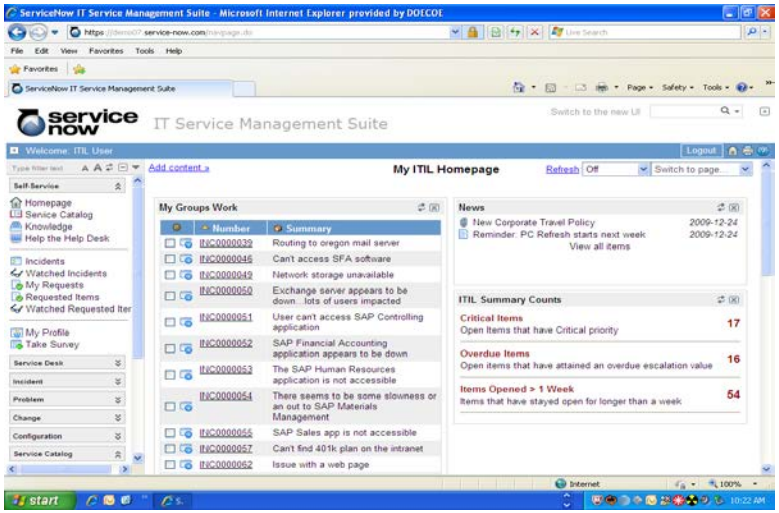
• ***Actionable Service Catalog*** with Pricing and integrated billing

• ***Change Management***, Problem Management, Knowledge Base, Configuration Management, License Management, ***automated capture of technical architecture***

• ***Project Portfolio Management*** (PPM) Module with ***all projects***, their ***Risks and Issues***, Resource Management, and ***goal mapping***

•Access to More ***Management Reports*** that can be scheduled to email automatically

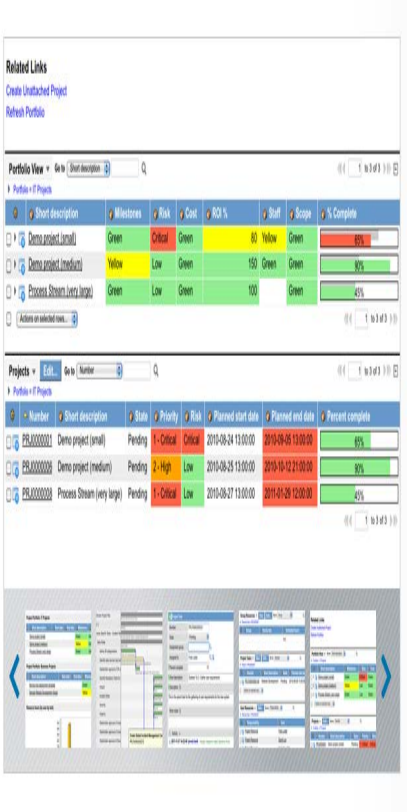
•***Programs able to add customization such as new fields, scrolling News***, and custom reports (using drag and drop functionality) while maintaining an overall standard



• * ***Self-Service Interface for end users to enter requests directly*** (without charge for licenses) with a survey of experience

• * ***Totally customizable view for each user*** to view only what they use and value

• * ***Totally customizable view for management*** to view what metrics / activity they like to watch including risk watch lists



The Common Approach to Federal EA

- The Common Approach to Federal Enterprise Architecture accelerates Agency business transformation and new technology enablement by providing
  - Standardization
  - Design principles
  - Scalability
  - An enterprise roadmap
  - An agile and repeatable architecture project method
- Enterprise Architecture should be a source of authoritative information for intra- and inter-Agency planning, decision making, and management

The Common Approach to Federal EA

- "Collaborative Planning Methodology" (CPM) replaces the Federal Segment Architecture Methodology (FSAM)
- Minimum, or "core" artifacts required for each architecture layer (Strategic, Business Services, Data and Information, Enabling Applications, Host Infrastructure, Security Controls)
- New / updated reference models:
  - Performance Reference Model
  - Business Reference Model (former BRM & SRM merged)
  - Data Reference Model
  - Application Reference Model
  - Infrastructure Reference Model
  - Security Reference Model

EA Success Vision

- Document DOE EA success stories
- Establish EA panel to formulate EA Success Charter
- Document EA success stories within the EA Modernization Roadmap – submitted to OMB annually
- Recognize various offices / individuals with efforts related to EA
- Become an model for other agencies and resulting EA successes
- Establish a EA knowledge base to enable EA methodologies
- Goal is to have EA success charter in place by April 2013

Success Story Sharing

1. Collaboration Portal
2. Enterprise Portfolio Analysis Tool (EPAT)
3. ePerformance
4. Geospatial
5. Green IT
6. Joint Cybersecurity Coordination Center (JC3)
7. Records Management
8. Records Management Revitalization
9. Spectrum
10. Televideo Expansion
11. Y-12 MOMentum Project

Engery.data.gov Overview

- Energy.data.gov community
  - Part of Data.gov
    - www.data.gov
    - www.openei.org
  - Energy.data.gov teleconference once a week
  - Participants include: NREL / EIA / FE / OSTP / GSA / EPA / USGS / Interior / Agriculture
  - Focused on Shale Gas / Apps Energy Challenge / Green Button / SmartGrid / Information Exchange
  - Shale Gas web site launch date - May / June 2012

Energy.Data.gov

Participants include: NREL / EIA / FE / OSTP / GSA / EPA / USGS / Interior

Dilbert – Enterprise Architecture

- Dilbert - January 29, 2006