Updates on the Federal Enterprise Architecture Program

(ISPAB Quarterly Meeting)

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December 7, 2005
Future Direction: Citizen-Centered Services

The Historical Approach …

The Future Approach …

Service for Citizens = Service for Citizens

= Agency-specific Service = Common Service

= Commercial Provider
Transformation to Citizen-Centered Services

• OMB plays role to encourage agencies to become more effective and efficient
  – Public Sector does not have the discipline of profitability

• Agencies need to ask the question, “What functions are core to my mission?”
  – Defines what is fundamental to the organization
  – Build for Excellence, Buy for Competence
FEA Reference Models

**Business Reference Model (BRM)**
- Lines of Business
- Agencies, customers, partners

**Service Component Reference Model (SRM)**
- Service domains, service types
- Business and service components

**Data Reference Model (DRM)**
- Business-focused data standardization
- Cross-agency information exchanges

**Technical Reference Model (TRM)**
- Service component interfaces, interoperability
- Technologies, recommendations

**Performance Reference Model (PRM)**
- Inputs, outputs, and outcomes
- Uniquely tailored performance indicators
### Architector

- Develop and maintain enterprise architecture
- Review, reconcile and approve segment architecture for the agency’s core lines of business and common IT services

### INVEST

- Select IT initiatives to define the agency’s IT investment portfolio
- Control IT investments
- Evaluate IT investments

### IMPLEMENT

- Develop and maintain segment architecture
- Develop IT program management plan
- Execute IT projects

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**END-TO-END GOVERNANCE**
E-Gov Status

Focus is on three main areas:

1. Lines of Business

   Operational Phase
   - Human Resources (HR) Management, Financial Management (FM), Grants Management (GM), Case Management (CM), and Federal Health Architecture (FHA)

   Planning Phase
   - Information Systems Security (ISS)

2. E-Gov Initiatives
   - Driving toward usage and adoption by agencies
   - Self-sustaining fee-for-service model

3. SmartBUY Agreements
E-Gov Future Direction

- Cost-savings
- Improved mission-performance

- Identification and establishment of shared service centers for HR & FM Lines of Business
- Standardization and streamlining of business processes
- Migration to common solutions

- Identify opportunities for common solutions
- Architect common solutions
- Establish governance models
• **CORE.gov**
  - Repository for service components
  - Contains a collaboration tool

Welcome to CORE.GOV - FEA's Center for Components

Welcome to CORE.GOV, the Component Organization and Registration Environment—your government source for business process and technical components. CORE.GOV is the place to search for and locate a specific component that meets your needs, or to find components you can customize to meet your unique requirements. You can also recommend components for inclusion in CORE.GOV.

- Request a Project Management Workspace
- Recommend a Component for Inclusion
- Find a Component for Reuse

CORE.GOV offers numerous components of various types and complexities, including business components, e-forms and technical components. If you would like to become a member, please send an email request to register for an account on CORE.GOV.
CORE.gov Example: E-Authentication

- Provide standards-based authentication for Federal E-Gov applications
- Provide a uniform process for establishing electronic identity
- Eliminate the need for each initiative to develop a redundant solution for identity verification and electronic signatures
- Enable citizens and businesses to use credentials issued by commercial entities to conduct transactions with the government
- First component to be submitted to CORE.gov
- More info at [www.cio.gov/eauthentication](http://www.cio.gov/eauthentication)
IPv6 Implementation

OMB Memorandum 05-22 directs agencies to successfully transition their network backbone to Internet Protocol version 6 (IPv6) by June 2008, and....

1. Identify an IPv6 agency lead

2. Develop a network backbone transition plan for IPv6

3. Complete two (2) inventories of IP-aware devices and technologies
   • First is due in November 2005
   • Second is due in June 2006

4. Complete an IPv6 transition impact analysis

5. Complete an IPv6 progress report

6. Submit to OMB all of these items (with the exception of the second inventory) with their February 28, 2006 Enterprise Architecture assessment
EA Assessment Framework 2.0

• Three Capability Areas
  – Completion
  – Use
  – Results

• EA Assessment Timeline
  – Annual Assessment Process
  – Quarterly Review Process
Transition Strategy

Program A
Projects with Milestones and Dependencies
- Project 1
- Project 2
- Project 3
- Project 4
- Project 5

Program B
- Project 6
- Project 7
- Project 8
- Project 9

Program C
- Project 10
- Project 11
- Project 12
- Project 13

Performance Improvement Plan

Segment Current EA
Segment Architecture
"Baseline"

Segment Target EA
Segment Architecture

Transition Architectures ("Interim Targets")
FEA Principle: Security and Privacy

• **Security and Privacy are Design Standards**
  – Security and privacy are integral parts of government operations, and are designed into the architecture.

• **Rationale:**
  – Government must protect confidential information to increase public trust and improve the security of its resources.

• **Implications:**
  – Security and privacy requirements must be defined in the context of the business, and integrated into the entire architecture.
  – Security and privacy must be implemented consistently government-wide.
Business Reference Model (BRM)

The Business Reference Model (BRM) is a framework for understanding the purpose, mechanisms, and support delivery of government operations. It categorizes government functions into different areas and modes of delivery, focusing on how they support citizens and businesses.

### Purpose of Government
- Defense and National Security
- Homeland Security
- Intelligence Operations
- Law Enforcement
- International Affairs & Commerce
- Litigation & Judicial Activities
- Correctional Activities

### Direct Services for Citizens
- Education
- Energy
- Health
- Transportation
- Income Security

### Mode of Delivery
- Federal Financial Assistance
- Credit & Insurance
- Transfers to States & Local Governments

### Government Operations Support Functions
- Legislative Relations
- Public Affairs
- Regulatory Development
- Planning & Resource Allocation

### Support Delivery of Services
- Controls & Oversight
- Revenue Collection
- Internal Risk Mgmt & Mitigation
- General Government

### Management of Government Resources
- Administrative Management
- Information & Technology Management

### Resource Management Functions
- Supply Chain Management
- Human Resource Management
- Financial Management

### Lines of Business (39)
- Energy
- Homeland Security
- Intelligence Operations
- Natural Resources
- Disaster Management
- Community & Social Services
- Economic Development
- General Science & Innovation
- Credit & Insurance
- Transfers to States & Local Governments

### Business Area’s (4)
- Business
- Education
- Environmental Management
- Transportation

Citizen-Centered, Results Driven Government
Management of Government Resources

- Administrative Management
  - Security Management

- Information and Technology Management
  - IT Security
## Service Component Reference Model

<table>
<thead>
<tr>
<th>Service Domains</th>
<th>Service Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Services</td>
<td>• Customer Relationship Management</td>
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<tr>
<td></td>
<td>• Customer Preferences</td>
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<tr>
<td></td>
<td>• Customer Initiated Assistance</td>
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<tr>
<td>Process Automation</td>
<td>• Tracking and Workflow</td>
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<tr>
<td></td>
<td>• Routing and Scheduling</td>
</tr>
<tr>
<td>Business Management</td>
<td>• Management of Process</td>
</tr>
<tr>
<td>Services</td>
<td>• Organizational Management</td>
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<tr>
<td></td>
<td>• Investment Management</td>
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<tr>
<td></td>
<td>• Supply Chain Management</td>
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<tr>
<td>Digital Asset Services</td>
<td>• Content Management</td>
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<td></td>
<td>• Document Management</td>
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<tr>
<td></td>
<td>• Knowledge Management</td>
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<tr>
<td></td>
<td>• Records Management</td>
</tr>
<tr>
<td>Business Analytical</td>
<td>• Analysis and Statistics</td>
</tr>
<tr>
<td>Services</td>
<td>• Reporting</td>
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<tr>
<td></td>
<td>• Visualization</td>
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<tr>
<td></td>
<td>• Knowledge Discovery</td>
</tr>
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<td></td>
<td>• Business Intelligence</td>
</tr>
<tr>
<td>Back Office Services</td>
<td>• Data Management</td>
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<td></td>
<td>• Human Resources</td>
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<tr>
<td></td>
<td>• Financial Management</td>
</tr>
<tr>
<td></td>
<td>• Human Capital / Workforce Management</td>
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<tr>
<td>Support Services</td>
<td>• Security Management Collaboration</td>
</tr>
<tr>
<td></td>
<td>• Search</td>
</tr>
<tr>
<td></td>
<td>• Communication</td>
</tr>
<tr>
<td></td>
<td>• Systems Management</td>
</tr>
<tr>
<td></td>
<td>• Forms Management</td>
</tr>
<tr>
<td>Service Component</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Identification and Authentication</td>
<td>Support obtaining information about those parties attempting to log on to a system or application for security purposes and the validation of those users</td>
</tr>
<tr>
<td>Access Control</td>
<td>Support the management of permissions for logging onto a computer or network</td>
</tr>
<tr>
<td>Encryption</td>
<td>Support the encoding of data for security purposes</td>
</tr>
<tr>
<td>Intrusion Detection</td>
<td>Support the detection of illegal entrance into a computer system</td>
</tr>
<tr>
<td>Verification</td>
<td>Support the confirmation of authority to enter a computer system, application or network</td>
</tr>
<tr>
<td>Digital Signature</td>
<td>Guarantee the unaltered state of a file</td>
</tr>
<tr>
<td>User Management</td>
<td>Support the administration of computer, application and network accounts within an organization</td>
</tr>
<tr>
<td>Role / Privilege Management</td>
<td>Support the granting of abilities to users or groups of users of a computer, application or network</td>
</tr>
<tr>
<td>Audit Trail Capture and Analysis</td>
<td>Support the identification and monitoring of activities within an application or system</td>
</tr>
</tbody>
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Security and Privacy Profile

- Phase I completed in July 2004
- Phase II currently in progress
  - Being “piloted” at two federal agencies
  - Addresses other guidance released since Phase I
    - To be refined by Spring 2006
- Provides a methodology for agencies to define security and privacy requirements and investments within the context of EA
In more detail, Phase II will include and reflect:

• An enterprise approach linking architectures and reference models to system-level security activities.

• Buy-in from CIOs and other agency stakeholders across the Federal Government.

• Useful implementation tools to assist agencies.

• Lessons learned from real-world implementation of the FEA SPP.

• Integration with FEA and other Federal guidance.
Information Systems Security (ISS) LOB

- Provide government-wide ISS services to be used across agencies
- Four common solution areas have been defined:
  - Training
  - FISMA Reporting
  - Situational Awareness and Incident Response (SAIR)
  - Security Solutions
- Plan is to establish 3 Centers of Excellence (COEs) for each of the 4 common solutions
- Required and optional common solutions will be phased in over 2 to 3 years
For Further Information:

www.egov.gov
## E-Gov Results

<table>
<thead>
<tr>
<th>Government to Citizen</th>
<th>Government to Government</th>
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<tbody>
<tr>
<td>5.1 million taxpayers filed using Free-File</td>
<td>51,000 users registered with DisasterHelp.gov</td>
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<tr>
<td>Recreation One-Stop provided easy access to 3,200 federal parks &amp; other recreation sites</td>
<td>Disaster Management services used in 111 actual emergencies</td>
</tr>
<tr>
<td>4.4 million electronic applications received for Employer Identification Numbers (EIN)</td>
<td>Job-seekers use USAJOBS to create between 90,000 and 100,000 resumes per month</td>
</tr>
<tr>
<td>6.5 million business tax forms filed electronically</td>
<td>E-Payroll consolidating payroll providers from 26 to 4</td>
</tr>
</tbody>
</table>

**LoBs projected to save over $5 billion dollars in the next 10 years.**