



# Examples of OSS in E-government

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## Real World Solutions in the US Federal Government

October 18, 2002



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# Perspective - IT Services - devIS

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- Design, develop, and operate custom internetworking applications
- US Federal Clients
  - Department of State
  - Department of Labor
  - General Services Administration (GSA)
  - US Agency for International Development
  - National Center for Health Statistics
- UN Agencies, private consulting firms
- Services in over 50 countries
- Supporting Egov in Jordan



## US Federal Clients - What are they buying?

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- Data collection / sharing applications
- Dynamic Web-sites - controlled user access to content
- Standards based Elearning (SCORM)
- Security / High performance / Hosting (incl. .GOV)
- Flexible design / adapt to changing requirements
- Low cost - lifecycle (3 to 5 year basis)
- Easy to use / minimal training

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Open Source? Who cares...  
Standards Based? Yes! Yes!



## 3 Applications Compared

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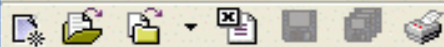
- International Focus - 2 used world-wide
- Distributed data collection - track \$100 Millions
- Secure / private - not public Web sites
- Various connectivity issues
  - From high speed to no speed
- Open source and proprietary tools / practical
- Each has a different architecture
  - Fat client - HTTP/XML - near real time (Web service)
  - Federated - HTTP/XML - messaging (Web service)
  - Web browser - HTTPS/HTML - classic Web forms



# Federal Exchanges Data System/WWW

Interagency Working Group on U.S. Government  
Sponsored International Exchanges and Training

- US State Department - 1999
- Summarizes US sponsored international exchanges
  - US Citizens to overseas
  - Exchange visitors to the US
- All Federal Agencies Report - summary (no names)
- Java Application - "Fat client" - downloaded and installed on local PC.
- Communicates directly with database server using XML formatted data - treated as a Web service
- High performance - only XML data transferred - interface and some look-up tables stored locally



- + Department of Agriculture
- + Department of Commerce
- + Department of Defense
- Department of Education
  - + Office for Civil Rights
  - + Office of Bilingual Education and Minority Languages Affairs
  - + Office of Educational Research and Improvement
  - + Office of Elementary and Secondary Education
  - Office of Postsecondary Education
    - + American Overseas Research Centers Program
    - + European Community-U.S.A Joint Consortia for Cooperation in Higher Education and Vocational Education Program
    - Fulbright-Hays Doctoral Dissertation Research Abroad Program
      - 1998
      - 1999
      - 2000
      - 2001
    - + Fulbright-Hays Faculty Research Abroad Program
    - + Fulbright-Hays Group

## Fulbright-Hays Doctoral Dissertation Research Abroad Program

Information Categories National Interests Notes Summary Contacts Staff Notes Report Caveat Notes

## Section 1

All or a major portion of the program/activity is:

Academic

If academic, which of the following best describes the academic level of the program/activity?

Elementary School

If other, specify:

Designed to impart professional and/or practical experience

Designed as an observation experience or study tour

Research (both academic and non-academic)

If you did not check any of the above, provide a brief characterization of the nature of the program:

## Section 2

If the program/activity falls under one or more of the following specialized categories, check all that apply:

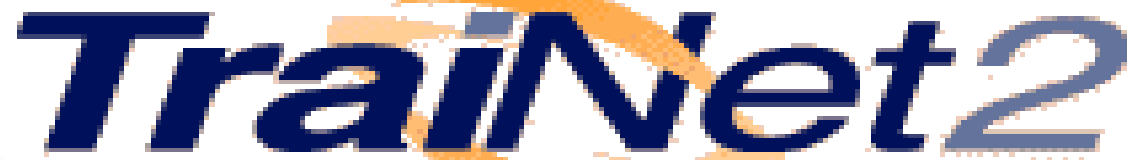
Scientific

Defense/Military

Cultural

Rule of Law (including Law Enforcement and Administration of Justice)

International Visitor Briefings/Tours



# TrainNet2

- US Agency for International Development - 2001
- Plan and monitor details of training programs that happen in a host country or third country
  - Purpose of training / results
  - Estimated cost / dates / logistics
- USAID Missions and hundreds of contractors and grantees in over 50 countries - distributed via CD
- “Federated” application installed locally - Borland Delphi to MS Access database - multi-user
- Shares data between sites and central repository via messaging
- Local control/ownership - no high speed Internet access required



## Training Program Wizard

A Training Program is a learning activity designed to improve the performance of participants by developing knowledge, skills, or attitudes. Training programs are funded separately from technical assistance.

Long-term degree programs, non-degree technical training, seminars, conferences, workshops, and study tours are just a few

### Instructions (\* Indicates required data entry)

- \* 1 Select the Activity that will fund this training.
- \* 2 Enter a Name for this training program. The name will identify this program in your training reports.
- \* 3 Select the Training Type. In rare cases you may need to create a new training type by choosing <Add New Item> from the list.
- \* 4 Select the Training Location. In-Country, Third-Country, or U.S. Training.
- \* 5 Select the Method of Training. If training takes place in a way other than first hand select Distance Learning (example: On-Line College Course), otherwise select Traditional.

\* Activity

\* Name

\* Training Type

\* Training Location

\* Method of Training

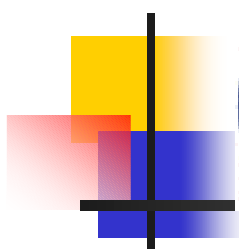
Cancel

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- US Agency for International Development - 2002
- Track development credit activities (\$s and local)
  - Credit agreements / use of funds
  - Losses/claims from default, payments
- USAID, payment agent, and 100s banks worldwide
- Web browser application using standard forms to post data (option MS Excel XML off-line)
- Dynamically generated screens based on role
  - Bank, Mission, payment agent, HQ, Analyst, SysAdmin
- Allows for direct collection of performance data and eliminates hard copy reports



# CMS



## CREDIT MANAGEMENT SYSTEM

The United States Agency for International Development

- Dynamic Content Based on Role
- Depending on User Role appropriate Menus and scope (add, edit, view, etc.) are presented.
- All content is dynamically created for each page

Headquarter User ->

Bank User below

**Main** | **Reports** | **Credit Monitoring** | **User Management** | **Offline Forms**

### User Management

This section controls authorization and the access rights of each user. A brief user profile is created and stored when new users are authorized. The user profile may be edited or deleted. Access rights are divided into classes. Authorization to create, view, and delete users and their roles is permitted only to certain high-level users.

**Available Actions**

- ODC/Staff Users
- Intermediate Financial Institution Users
- Mission Users
- Payment Transfer Agent Users
- Special Users

**Main** | **Credit Monitoring** | **User Management** | **Offline Forms**

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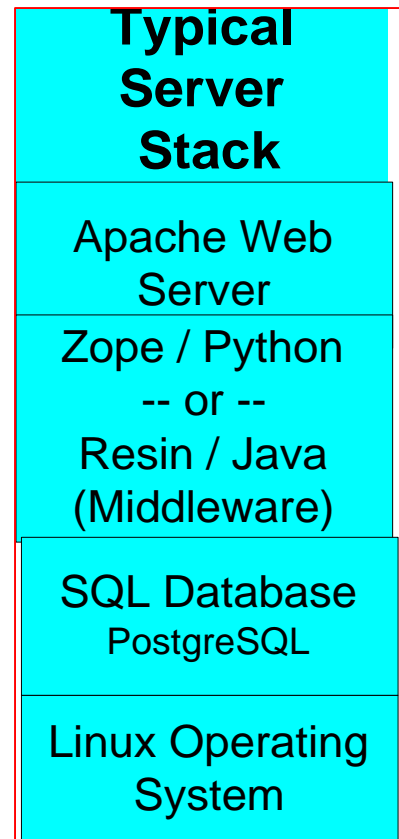
**Available Actions**

- Intermediate Financial Institution Users



# OSS Application Stack

- Utilize XML
- System developed as and with open source tools
- Site uses open source projects:
  - XML Blaster - messaging server
  - Zope / Resin - middleware
  - Apache (Web server)
  - Python/Java
  - HTML/XML/CSS
  - PostgreSQL / MySQL (SQL Database)
  - Linux (OS) / OpenBSD (firewalls)
  - Analog (Web statistics)
  - Intrusion detection/firewalls numerous





# Questions & Answers - Misc

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BTW - Latest launch Oct. 16 - fully dynamic -  
content expert managed - written in  
Python - Zope!

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