GPO’s
Federal Digital System

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U.S. Government Printing Office
Challenges in the Digital Age

• Access to government published information is now widely expected to be electronic
• Digital information needs to be authentic and verified to be the correct version
• Digital information needs to be available for access almost immediately
• Information needs to be preserved, making it available for generations to come
GPO’s Federal Digital System (FDsys)

• A customer-driven advanced digital information system.

• Automates the collection, management and dissemination of electronic information from all three branches of government.

• Information will be:
  – Submitted directly into FDsys
  – Permanently available in electronic format
  – Authenticated and versioned
  – Publicly accessible for searching and downloading
  – Available for conventional and on-demand printing
What is FDsys?

- FDsys is a *Content Management System*
  - FDsys securely controls digital content throughout its lifecycle to ensure content integrity and authenticity
- FDsys is a *Preservation Repository*
  - FDsys follows archival system standards to ensure long-term preservation and access of digital content
- FDsys is an *Advanced Search Engine*
  - FDsys combines extensive metadata creation with modern search technology to ensure the highest quality search experience
FDsys and Submission

FDsys content will come from three sources:

• Submitted directly into FDsys
• Harvested automatically from official Federal websites
• Converted from previously printed publications into digital files
FDsys and Access

The FDsys search philosophy:

• Provide simple search with advanced results
• Provide advanced search features so users can efficiently retrieve specific documents
• Provide relevant results fast
FDsys and Authentication

Challenges

• How can an agency be assured that their content is not altered after it is submitted to GPO?
• How can a user be sure that accessed content is the correct version?
• How can a user be certain that the accessed content is unaltered?
Authentication Tools and Processes

- Cryptographic hashing to detect unauthorized modification (SHA-256 algorithm)
- Digital signature tools for content originators
- Digital signatures for access copies of content, utilizing Adobe LiveCycle
- Metadata capturing content provenance information
  - PREMIS data dictionary
FDsys and Preservation

Digital preservation processes will:

• Safeguard digital content and relevant metadata
• Assess the condition and needs of collections of digital information
• Meaningfully render content despite continually changing technology
Program History

• Program started in 2004
• Released FDsys Requirement Document in May 2005
• A Program Management Office was created in October 2005
• System design and technology selection started in 2006
• GPO launched the first public release of FDsys in January 2009
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