

FDsys Overview

The U.S. Government Printing Office's Federal Digital System (FDsys) automates the collection and dissemination of electronic information from all three branches of the federal government. Information is submitted directly into FDsys, permanently available in electronic format, authenticated and versioned, and publicly accessible for searching and downloading. To accomplish this FDsys relies on three key components, a content management system that securely controls digital content throughout its lifecycle to ensure content integrity and authenticity, a preservation repository that follows archival system standards to ensure long-term preservation and access to digital content, and an advanced search engine that combines extensive metadata creation with modern search technology to ensure a high quality search experience on www.fdsys.gov.

Release 1 Implementation

FDsys is being implemented over a series of releases. The goals of Release 1 were to build a foundational infrastructure, establish a preservation repository, replace GPO's current public site (GPO Access), perform a large scale migration of legacy data, and provide operational continuity for the system.

- The foundational infrastructure for FDsys was put in place with the launch of the public search and access component in January 2009 and the content management system (CMS) component in March 2009. The CMS component provides a place where all available files (e.g. text, locator, HTML, SGML, PDF, XML) are stored and managed in one central location.
- GPO's world-class preservation repository went live in March 2009. The repository was built upon the Open Archival Information System (OAIS) model and provides sufficient control to ensure long-term preservation and access. FDsys uses a package-based approach to managing content, and metadata is expressed in METS, MODS, and PREMIS schema.
- The FDsys public interface launched with the search and access component in January 2009. GPO worked closely with its stakeholders from the library community, federal agencies, and Congress to customize each collection based upon user requirements. Usability studies were conducted to ensure FDsys could meet user needs at all levels. GPO held extensive Beta testing which yielded positive feedback from the user community and resulted in FDsys being named one of the "10 Great Government Websites" by *Government Computer News*.
- A large scale data migration effort began in January 2009 and was completed in September 2010. Over 40 content collections, comprised of over 5 million searchable documents, are now available on FDsys. GPO made significant improvements to the data as part of the migration process. Extensive analysis was performed on multiple data storage servers to identify the full scope of GPO's content universe. An automated

metadata extraction process was developed to support search and preservation, and inconsistencies in the data were handled manually via the metadata editor and programmatically by content parsers. The use of extracted metadata along with dynamically generated browse tables significantly reduced the amount of manual work needed to provide access to publications on a daily basis. Furthermore, as new content collections are released a digital signature is applied to PDF files helping to assure the public that a document has not been changed since it was published by GPO.

- The system continuity and failover implementation is currently in process. The continuity of access site was deployed in September 2010, and full system failover capability is planned to be operational in December 2010.

Program Information

The FDsys Program is managed by the Program Management Office within GPO's Information Technology and Systems organization. Additional Information about the FDsys Program is available at <http://www.gpo.gov/projects/fdsysinfo.htm>.

Key program documents are also available including the following:

- Concept of Operations
http://www.gpo.gov/pdfs/fdsys-info/documents/FDsys_ConOps_v2.0.pdf
- Requirements Document
http://www.gpo.gov/pdfs/fdsys-info/documents/FDsys_RD_v3.2.pdf
- System Design Document
<http://www.gpo.gov/fdsysinfo/designdoc.htm>

About the United States Government Printing Office (GPO)

The U.S. Government Printing Office's core mission, *Keeping America Informed*, dates to 1813 when Congress determined the need to make information regarding the work of the three branches of government available to all Americans. This is the inherent function of government which GPO carries out for federal agencies on behalf of the public. The GPO is a federal legislative agency and is the federal government's primary centralized resource for gathering, cataloging, producing, providing, authenticating, and preserving published U.S. government information in all its forms. GPO is responsible for the production and distribution of information products and services for all three branches of the federal government including the *Federal Register* and the *Congressional Record*. In addition to publication sales, GPO makes government information available at no cost to the public through GPO's Federal Digital System at www.fdsys.gov and through partnerships with approximately 1,220 libraries nationwide participating in the Federal Depository Library Program. For more information, please visit www.gpo.gov.