The U.S. Government Printing Office’s initiatives for the Federal Depository Library Program to set the stage for the 21st century

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Abstract

It is estimated that the majority of federal information is born digital. To that end, the U.S. Government Printing Office is transforming into a 21st century electronic information agency. As part of this effort, the Federal Depository Library Program (FDLP) has been investigating new options for the dissemination of Federal information that incorporate digitization, preservation, electronic metadata, and information retrieval. The FDLP’s efforts to find new solutions will improve acquisitions, information access, and collection development for depository libraries. This article describes just a few of the initiatives GPO has undertaken to increase access to electronic U.S. Government information.

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The U.S. Government Printing Office (GPO) has been administering the Federal Depository Library Program (FDLP) for well over a century. The FDLP currently disseminates U.S.
Government information to more than 1250 depository libraries nationwide. It is estimated that the majority of Federal publications are now born digital. “A Strategic Vision for the 21st Century”¹ provides a road map for GPO’s efforts to be distinguished as a leading innovator. Former Public Printer Bruce James was honored in August 2006 by the Council for Excellence in Government for transforming GPO into a 21st century electronic information agency. As part of this effort, the FDLP has been investigating new options for the dissemination of Federal information that incorporate digitization, preservation, electronic metadata, and information retrieval. The FDLP’s efforts to find new solutions will improve acquisitions, information access, and collection development for depository libraries. This article describes just a few of the initiatives GPO has undertaken to increase access to electronic U.S. Government information.

1. **FDsys**

GPO’s Future Digital System, also known as FDsys, is the next generation platform for managing the life cycle of official U.S. Government publications. The system, described in detail (http://www.gpo.gov/projects/fdsys.htm) will

- ingest digitized, harvested, and submitted content;
- verify and track versions;
- assure authenticity; and
- provide permanent public access.

Content may include text and associated graphics, video, sound and other forms of content that emerge. All content will be available for Web searching and Internet viewing, downloading and printing, and as document masters for conventional and on-demand printing, or other dissemination methods. Preservation is integrated into every aspect of the FDsys. Digital content may be preserved by refreshing, migrating, or emulating. The initial system functionality is planned to be operational in 2008. In August 2006, GPO awarded Harris Corporation a contract to be the Master Integrator (MI) for the FDsys. As MI, Harris will work collaboratively with GPO to design, develop, and deploy the FDsys.

Many projects at GPO overlap and connect with the FDsys. The Catalog of U.S. Government Publications (CGP), for example, is fully interoperable with the FDsys.


On March 9, 2006, GPO launched an enhanced version of the CGP (http://catalog.gpo.gov/). The new CGP is the online public access catalog (OPAC) module of GPO’s new integrated library system (ILS) that was procured in 2005. The portal provides access to a vast amount of

U.S. Government information through a fast, one-field search box and modern presentation. The search box accommodates keyword, subject, title, and author searches. At the same time, an advanced search option is also available for information professionals and those who prefer using more post-coordination strategies and Boolean operators. Libraries can encourage patrons to use the CGP by providing the URL through reference service or promotional brochures. Additional services will be delivered through the new CGP in the future, including Z39.50 access and other record distribution vehicles. Z39.50 access is attractive to many depository libraries that are reducing their tangible collections and building their electronic collections. A federated search option and an improved online library directory, to be called the Federal Depository Library Directory, will also be provided. GPO has created and archived a presentation on the CGP, including instruction on the various features (http://www.opal-online.org/archiveGPO.htm). Additional methods for training and outreach are under consideration.

The CGP is designed to be easy to use and the overarching goal of the new service is to take GPO’s mission of making U.S. Government information readily available to the citizenry one step further. The new CGP contains more than 500,000 records to both historical and current U.S. Government publications and will become more far reaching in the future. Although the CGP is currently limited to records dating back to July 1976, planning is underway to include records for publications created as far back as the late 1800s. Separate bibliographic records will eventually be provided for each format in which a publication is distributed. These formats can include paper, microfiche, CD-ROMS, and electronic formats. The CGP is being heavily used, with an average of 53,724 successful search requests per day and close to 27 million and a half search requests since the launch, as of the end of July, 2007.

The success of the new CGP indicates that Phase One of a larger modernization plan to replace outdated legacy systems that have been managing information for years is complete. GPO is committed to leveraging the most current and effective information retrieval technology and making it available to the public and libraries.

3. Authentication

GPO is engaged in a major authentication initiative designed to assure users that the information made available by GPO is official and authentic. The increasing use of electronic publications poses special challenges in verifying authenticity because technology makes such documents easy to alter or copy, which can lead to the creation of unauthorized versions. There is a necessity for reliable information and the ability to certify that content is free of unauthorized modification or substitution of information. GPO has now completed the process of establishing an operational Public Key Infrastructure (PKI). PKI includes the hardware, software, personnel, and operational policies that can be used to ensure document authenticity and integrity, authenticate users, and secure financial transactions. This authentication initiative will allow users to determine that the files are unchanged since they were authenticated by GPO.

The process of authentication will include an integrity mark that will have certification information and may include a seal. Integrity marks will allow users to determine if files
have been modified since GPO authenticated them and help establish a clear chain of ownership for electronic documents. Seals may be presented to users in various ways, such as a logo used in conjunction with a digital signature. GPO is investigating emerging technologies related to the certification and authentication of non-digital content formats (e.g., digital watermarking of GPO publications downloaded and printed by users).

GPO will provide a Seal of Authenticity to notify users of the authentication status of a publication in accordance with the required approval, when feasible, of the content originator. Different content formats (e.g., audio, video, etc.) will require the use of seals that are appropriate for each format. Users may be required to initiate additional procedures to access seals associated with different content formats. GPO has begun applying its “Seal of Authenticity” to various print publications. This seal helps give the user assurance that their publication is coming from an official source and reinforces the integrity of the publications.

The GPO Seal of Authenticity, as seen below, notifies users that a document has been authenticated by GPO. By using digital signature technology to add the Seal to a PDF document, GPO attests that the document has not been altered since it was authenticated and disseminated by GPO.

When a seal is visibly displayed, it will contain the official GPO authentication seal and/or official seal for the publishing agency. Our goal is to have the seal placed in the same location on every document. This location will not interfere with the contents of the publication (e.g., the visible seal should not obstruct the title or content of the document).

Ensuring customers that the U.S. Government information made available through GPO is official and authentic is of paramount importance for the future. Authentication means that GPO will be able to assure their users that they are using authentic versions of Government publications and unauthorized changes will be prevented.

4. Web Harvesting pilot project

GPO has taken its first step in learning about technologies that will discover, assess, and harvest content that falls within the scope of the FDLP.

Increasingly over the past few years, official U.S. Government publications are being published directly to the Web. As a result, many of these publications are never included in the Federal Depository Library Program, though they are in scope. In fact, it has been estimated that up to 50 percent of U.S. Government publications that are in scope are not included in the program. Most online publications are brought into the program through time intensive techniques such as “mining” agency Web sites and monitoring newspapers and media outlets for references to new publications.
GPO has begun to research automated Web Harvesting technologies and also incorporated the requirement to build harvesting capability into FDsys. GPO envisions tools that will discover content on Federal Agency Web sites, assess whether that content is in scope for the FDLP, and then capture (harvest) copies of in-scope publications.

As a first step in learning about technologies and methodologies available, GPO has conducted a pilot project with private sector firms that specialize in providing these services. The Web Harvesting pilot project was conducted between April 2006 and September 2006. Two vendors participated in the project, which consisted of three separate crawls of the Environmental Protection Agency’s (EPA) Web site. EPA Information Technology personnel were involved throughout the pilots to ensure that the harvesting technologies did not overwhelm the system. Following each crawl, samples were reviewed, statistics were recorded, and rules were adjusted. The Web crawler sifted through many documents that were out of scope of the FDLP, including duplicates of content that are already available such as Federal Register notices and internal administrative documents such as schedules, registration forms for conferences, and meeting notes. The first crawl provided the first opportunity to adjust and modify the rules that the crawler was operating on.

Although Web crawlers are available as off the shelf models and are algorithm based, each customer works closely with vendors to customize the rules to create the most effective tool. A number of companies provide off-the-shelf models to the library and information science community and different approaches and designs are available.

With the completion of the pilot, GPO is developing an overall plan to manage the acquisition, classification, cataloging, and storage of all Web harvested content. The long-term vision is that content harvested by GPO will be made accessible to the public through bibliographic control and a persistent identifier. Although patrons can search online for U.S. Government publications, this option saves the time and effort of users because online U.S. Government publications will show up on search results alongside tangible ones that are available in the brick and mortar library.

GPO plans to leverage the learning and experience gained from the pilot to further define requirements and specifications for harvesting capabilities to be implemented in conjunction with FDsys. Automated Web Harvesting capabilities will allow GPO to further realize its goal of providing libraries and the public with a more comprehensive collection of U.S. Government information through the FDLP.

5. Enhanced Biennial Survey

GPO is working on an enhanced version of the existing Biennial Survey, which is an outreach mechanism that all depositories are required to submit every 2 years. The survey asks in-depth questions about the operations of each depository, as well as more general questions about their interest in remaining in the FDLP. From this survey, Depository coordinators may tell the GPO the kinds of training they would like to receive at conferences such as better utilizing Census Bureau materials. By adjusting some of the questions, the Biennial Survey could be used to generate substantial statistical data that would help GPO recognize when a
library is having difficulty meeting the requirements of the program and would benefit from personalized assistance. In the past, GPO has arranged formal inspections and required labor-intensive self-studies, but the Biennial Survey is currently the main information-gathering tool in use. The enhanced Biennial Survey will hopefully provide enough additional data about depository libraries to assist GPO in making a good plan for effectively administering the FDLP in the future.

6. Redesigning educational content and PR strategies

GPO continues to explore avenues to provide distance education opportunities, particularly Web-based, to meet the training needs of the Federal depository library community. As a result of a successful demonstration conducted with volunteers from the community, GPO procured OPAL (Online Programming for All Libraries) in 2007.

OPAL is an interactive Web-based meeting and conferencing service which offers a method for creating Web-based training modules as well as a way to facilitate communication with and among FDLP participants. The OPAL service was purchased in response to community requests for FDLP and government documents training. Web-based training sessions presented on OPAL will be stored and archived for repeated viewing in the OPAL archives located at http://www.opal-online.org/archiveGPO.htm.

Other GPO education and outreach efforts include GPO participation in library association meetings and in regional depository workshops, on-site visits to individual depository libraries, and distribution of leaflets and brochures highlighting the Federal Depository Library Program and U.S. Government information. GPO’s ongoing efforts to keep America and the general public informed about the vast information resources of the FDLP include brief radio spots promoting the FDLP and public service announcements to radio stations nationwide. These media efforts are designed to raise public awareness of the FDLP and increase the number of people visiting depositories, the CGP, and the U.S. Government Web sites for the first time to seek Federal publications.

7. FDLP Desktop redesign

GPO unveiled its FDLP Desktop redesign to the depository community for beta testing at the Spring 2007 meeting of the Depository Library Council. The current FDLP Desktop2 will remain operational pending the public launch of the new site, which is a specialized site within the GPO’s parent Web site, gpo.gov.

The new Web site will offer interactive tools, a more user-friendly layout and be easier to navigate with shorter URLs under the new domain of fdlp.gov. The FDLP Desktop is being transformed into a modern community and news site for FDLP stakeholder groups, including depository coordinators and directors, Depository Library Council members, library association groups, and researchers and members of the general public seeking U.S. Government

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information. The site should be intuitive enough to use without training or instruction and is being designed for fast pointing and clicking.

Now near completion, the redesigned FDLP Desktop incorporates several new and improved features, including a site search, rotating news articles, a calendar and schedule of GPO events, a private messaging system, automated news pushes, registration and submission forms, surveys, and photo galleries, with other exciting new features to come.

Content from the FDLP Desktop will be moved methodically to the redesigned interface, with careful attention given to timeliness, accuracy, and relevancy of information, while maintaining pertinent information for historical research. Some routine procedures, such as submitting the Biennial Survey or registering for a conference, will be simplified and made more user-friendly.

The redesign of all parts of gpo.gov, including the FDLP Desktop, is a priority for GPO. It will offer increased functionality and be flexible enough to adapt to future needs.

8. Partnerships

Since 1997, GPO has developed partnerships with Federal depository libraries, library consortia, other Federal agencies, and institutions to increase access to electronic Federal information. Generally, partnerships have been formed to either provide permanent public access to electronic content not housed on GPO Access or to provide access to services that enhance the FDLP.

With an increasing amount of Federal information available electronically, these partnerships allow GPO to ensure permanent public access to electronic information as well as increase the services available to assist depositories with providing access to electronic information and managing their depository collections. These partnerships also allow GPO to take advantage of the expertise of Federal depository librarians and services developed at their libraries. Additionally, the development of permanent public access partnerships allows GPO to focus its harvesting efforts on at-risk material.

Currently GPO has fourteen of these partnerships. The most recent focus on providing permanent public access to material from the U.S. Commission on Civil Rights in cooperation with the Commission and the University of Maryland Thurgood Marshall Law Library and preserving digitized publications distributed through the FDLP during World War II with Southern Methodist University.

9. Staying current on the Web

The redesigned FDLP Desktop offers numerous features for staying current with the FDLP. A rotating news banner highlights items of interest to depository library staff; current news is prominently featured either in the primary news panel or in sidebars; and the latest news and most popular news items are just a click away. An events calendar and events countdown box make it easy to see what future events are scheduled. And anyone can subscribe to FDLP Express, an email news service in which recipients can designate which subject categories they wish to receive.

The redesigned FDLP Desktop can be accessed at: http://www.fdlp.gov.
10. The future of the FDLP

In Spring 2003, the Public Printer of the United States, Bruce James, and the Superintendent of Documents, Judy Russell, began discussions with the FDLP community regarding a new, cutting edge information dissemination model that fully incorporates and capitalizes on the many benefits of the digital environment. The Depository Library Council (DLC) followed this with a series of vision statements and scenarios describing the FDLP in the year 2021 that were posted to a wiki for public comment. A comprehensive vision statement, “Knowledge Will Forever Govern,” was released in March 2006 that further articulates the ideas of the depository community. The document identified seven goals to achieve in the future, and many of the recommendations focused on making Federal electronic information accessible. GPO has been collaborating with the depository library community to discuss the future of U.S. Government information dissemination, and the Council’s vision statement states that any “future Federal Depository Library Program will not be born in a vacuum.” Some projects, such as the Federal Depository Library Handbook, are being written collaboratively with depository librarians who have volunteered across the country.

Over the past 2 years, the FDLP has received more inquiries from libraries that want to become mostly electronic depositories and from existing depositories who want to decrease their tangible selections and increase the electronic ones. Reasons for wanting to transition to a more electronic depository include space limitations and a desire to provide remote access to patrons. While paper is still important and easier on the eyes, many patrons are looking for digital information first and supplementing their findings with a trip to the library stacks, rather than the other way around. For libraries interested in becoming a more electronic depository, GPO has also gathered recommendations on how to effectively transition to a more electronic depository.

Amidst the growing popularity of electronic Federal publications, experienced U.S. Government information professionals and FDLP administrators alike realize that simply relying on a search engine to provide access to Federal publications is not sufficient. Integrating the publications into an environment such as a library means that students will retrieve bibliographic records on OPACs for U.S. Government information alongside copyrighted information. Incorporating electronic files into the FDsys also make preservation and authentication possible.

The FDLP is committed to making Government information available to the public, free of charge, and this purpose will continue in an ever-changing, increasingly technological environment. Public interest seems to demonstrate that the electronic environment is actually

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5 “Tips to Effectively Transition to a More Online Federal Depository Collection” is available at http://www.access.gpo.gov/su_docs/fdlp/coll-dev/online_coll_tips.pdf.
offering more exposure to Federal information and highlights the importance of successfully addressing the new challenges and opportunities that the digital government information brings.

Ted Priebe is Director of Library Planning and Development, Library Services and Content Management (LS&CM). His division conceptualizes, plans, evaluates, designs, and implements new GPO programs and projects. LPD determines the scope, content, and objectives of specific tasks for new and existing initiatives for tangible, electronic, and Web collections within Library Services and Content Management (LS&CM).

Prior to his current position, Ted Priebe was Assistant Chief of Staff at the U.S. Government Printing Office. His responsibilities include project development, operations management, and business management for Digital Conversion Services (DCS). DCS will increase access and visibility for government documents and foster remote access to legacy materials, while providing a training vehicle for GPO employee’s to develop 21st century workforce skills.

Priebe was manager of GPO’s Hampton Regional Printing Procurement Office. Responsibilities included performing supervisory personnel management functions, fostering relationships with industry leaders and government agencies, developing end-to-end procurement solutions, and representing the agency at meetings, conferences, and trade shows.

Earlier in his career, he developed policy, guidance, procedures, and instructions for processing of agencies electronic content dissemination requirements. Responsibilities included instruction at Federal training classes, on-site consultations, and publishing technical reports on current industry trends for electronic publishing. He developed GPO’s initial Web-based (on-line) specialty item term contract for 300 nationwide customers—Army ROTC Cadet Command.

He also was the lead customer support representative for the cross-functional team that developed the FDsys ConOps for GPO.

Priebe received his Bachelor of Science in Industrial Technology, with a major in Graphic Arts Management from the University of Wisconsin—Stout in 1991.