

Current and Future State of GPO Access

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Depository Library Council Meeting

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Introduction

I appreciate the opportunity to update the Depository Library Council and the library community on the current and future state of GPO Access. Hopefully, you have a copy of our printed GPO Access update. It contains a variety of statistical information on GPO Access, as well as what is new and on the horizon.

The vast amount of information available on GPO Access continues to grow, and more users are finding their way to our applications. Unfortunately, there was a lengthy period where system performance problems were severely limiting the amount of usage possible and frustrating large numbers of users. Time-out and other types of errors were far too common, particularly during the busiest hours of the workday, and even successful transactions took far too long. While I deeply regret this period of poor service to GPO Access users, particularly those who have come to rely on our Federal Register and Code of Federal Regulations applications, I am pleased to report that diligent work by our Production department has resulted in making tremendous progress towards overcoming many of these problems. As a result, system performance has improved dramatically in recent weeks.

Through a performance measurement service contract with Keynote Systems, Inc., we track performance from the user perspective around the clock. We accomplish this by monitoring actual use of the Code of Federal Regulations application by agents located in 10 major cities in the United States. The agents load the main CFR application page, perform a search for "hazardous wastes," and retrieve a Title 40 document from the results list. The computer agents are set up to act as users with common technology performing through connections commonly available through a variety of Internet Service Providers (ISPs), or parts of the Internet backbone. Each agent makes multiple attempts each hour and both the time required for the agent to execute each part of the transaction and any errors encountered are recorded and the data is made available to us for analysis in a variety of ways.

The measurements helped to pinpoint problems being reported by users. Specifically, we found that errors frequently occurred in the search and retrieval portions of the transaction and that most of these errors involved time-outs, particularly during prime usage hours. It is important to note here that Keynote considers a lack of success after two minutes a failure at any of the three points of the measurement transaction. In addition, we found that a significant number of users who succeeded in getting their search completed then encountered an error in

attempting to download the target file. Even successful transactions were taking an unacceptably long time to complete. There were no particular patterns emerging regarding regions of the country or parts of the backbone, so we knew that the problem resided with us.

These findings gave us new tools to add to the feedback we had been getting from disgruntled users and both were shared with our Production department who went to work to use what we had learned to improve performance. I am pleased to say that they have succeeded in eliminating almost all of the error problems and the results are showing dramatically reduced completion times for successful transactions. On average, successful transactions are now taking less than 10 seconds from start to finish, with slightly longer times during our busiest hours. This means that an agent can load the CFR application page, perform a search and receive the results of that search, initiate a download from the results and get the first byte of the target file on their machine very quickly. Much faster than I could do myself, but that can be blamed on my typing skills, not GPO Access.

While these changes should greatly enhance the user experience on GPO Access, we will continue to work towards even more improvement in performance. In addition to adjusting the operation of the current system and adding more resources to make the system deliver better response to users, there are efforts underway to identify a successor platform to the Wide-Area Information Server (WAIS) technology currently in use. Funds have been included in the FY 2003 budget to acquire this, and it is hoped that a rapid deployment of the platform selected can be effected after it has been purchased.

These improvement efforts also include work towards establishing a geographically separate mirror site and backup facility for GPO Access in Pueblo, Colorado. Based on a recently conducted onsite inspection of the facility, work will begin as soon as practicable. This effort will be funded in part by the \$4 million Congress provided to GPO in supplemental transfer authority for emergency preparedness (P.L. 107-117) following the events of September 11, 2001, in addition to other project funding from the Salaries and Expenses appropriation to the Superintendent of Documents. Beginning with the most frequently used GPO Access resources, GPO will steadily add to the resources and data at this facility until it is a complete mirror site for GPO Access. This will include the portion of the FDLP Electronic Collection Archive maintained by GPO.

Search Engine Results

We have continued our work with maximizing our visibility in major Internet search engines. In particular we have been testing paid keyword positioning for the U.S. Government Online Bookstore through the Overture service. While we had some success, the results pointed out that more research was needed. Therefore we contracted with Overture for a detailed analysis and recommendations for maximizing the visibility of the GPO Access main page, the Online Bookstore, and the Code of Federal Regulations main page. The results of these efforts contained the following information:

- A list of keywords to be bid on
- Suggested bidding strategies
- Total amount we could expect to spend each month, based on our

budget and the position in Overture's search results (first or third, etc.)

- Suggested language to appear with the links to GPO Access pages on Overture's search results

We are currently analyzing these proposals and hope to take action on them in the near future.

We have also continued to monitor the latest developments in the search engine industry, including sending staff to participate in the Search Engines Strategies Conference recently held in Boston, Massachusetts. A good example is our examination of the offerings from the newly emergent Teoma engine. Owned by Ask Jeeves, this search engine offers several new ways of searching for information. Along with the regular results, it also provides suggestions for refining your search to obtain more specific results. A list of suggested keywords refining your search will appear on the right side of the screen. Clicking on one of these keywords will add them to the search terms you have entered and provide you with a new set of results. The refinement process they offer and its ability to get at specific GPO Access resources looks promising. In fact, we are adding it to the list of search engines that we regularly examine.

Joint effort with STAT-USA

My staff has been working hand-in-hand with STAT-USA to improve the availability and usability of their information products at depository libraries and as such will be including information on STAT-USA's State of the Nation (SOTN) and Global Business Opportunities (GLOBUS) & National Trade Data Bank (NTDB) products in *GPO Access* training classes. EIDS Staff also worked with STAT-USA representatives on the

development of a special insert for the GPO Access Training Manual and a new flyer to promote the partnership. It is also expected that STAT-USA representatives will participate in *GPO Access* booth exhibits.

It is hoped that these cooperative efforts can promote and improve the use of these products in depositories as well as build a case for the possible addition of other products from STAT-USA in the future.

In addition to the previously mentioned products, two other services are currently available from STAT-USA. These are USA Trade *Online* and EuroTrade *Online*. While there are barriers to offering free public access to these two products at Federal depository libraries, it is hoped that our working relationship will assist in overcoming them. In the meantime, the information contained in USA Trade *Online* is available in the monthly U.S. Imports of Merchandise and U.S. Exports of Merchandise on CD-ROM. Both are distributed through the Federal Depository Library Program.

What's new on GPO Access

There are a number of recent changes to *GPO Access* that should be mentioned. The most notable are:

- The Budget of the United States Government for FY 2003 is now available. It was transmitted to Congress on February 2, 2002, and covers the fiscal year beginning October 1, 2002.
- The new edition of the Congressional Directory for the 107th Congress is also available.

- The 2002 Economic Report of the President is now available on *GPO Access*.
- Volume I of the 2000-2001 Public Papers for William J. Clinton is now available online.
- Two Independent Counsel reports are available:
 - The Final Report of the Independent Counsel In Re: Madison Guaranty Savings & Loan Association Regarding Monica Lewinsky and Others
 - The Final Report of the Independent Counsel In Re: Madison Guaranty Savings & Loan Association (The Madison Guaranty/Whitewater Investigation)
- Riddick's Senate Procedure-Precedents and Procedures are now available via *GPO Access*.
- Two new topics have been added to the New Titles By Topic E-mail Alert Service available through the U.S. Government Online Bookstore:
 - Employment and Occupations
 - Federal Statistics.

What's on the Horizon for GPO Access

As always, work is under way to add more content to GPO Access and to refine access to the materials already provided. Some key examples of current efforts are:

- An interactive site guide is being developed to help users find their way

to the resources of GPO Access. Users will be able to follow a pathway of links in an exploration of the rich set of resources that GPO Access offers. It will provide an augmented assistance tool that lets users learn more about what is available when the regular navigation paths fail to get them where they need to go.

- Making use of what has been learned from our work with users in open forums, usability studies, and through regular feedback channels, work toward an enhanced look and feel for GPO Access has begun. Please play a role in this process by attending the GPO Access Open Forum sessions this afternoon (Monday, April 22, 2002, at 2:00 pm and 3:30 pm) and reacting to some prototype pages created to show our current approach.
- Future enhancements for the U.S. Government Online Bookstore include improved online ordering for foreign customers and providing third-party hand off of orders for those who are unable to directly purchase from the U.S. Government Online Bookstore.

User Survey

It is almost survey time again. In the next few days the annual online GPO Access user survey will become available. I hope you all will assist us by participating and alerting other users to this opportunity to play a role in the ongoing development of GPO Access.

Online Bookstore Enhancements

Several new features have been added to the U.S. Government Online Bookstore in order to enhance usability and expedite orders:

- The various browse features on the Online Bookstore have been enhanced so that price and status information is updated daily. In addition, customers may now use the search and browse features to add publications to their shopping cart for a fully integrated shopping experience.
- While the Online Bookstore has safeguarded a customer's personal information through online encryption since 1999, the service was recently changed so users do not have to enter the secure environment until they have finished shopping and need to enter personal information when completing the order.

As you can tell, change is a constant with GPO Access. As its offerings and popularity continue to grow, our efforts to provide the best possible service will make every effort to keep pace. Once again I remind you that your feedback plays a vital role in this development process. Participation in this afternoon's open forum is an excellent opportunity to add your voice to the process, but a comment or suggestion sent to the GPO Access User Support Team serves well at any time. Thank you and I look forward to talking with you during the conference.

GPO Access Update

Office of Electronic Information Dissemination Services

Spring 2002 Depository Library Council Meeting

April 21-24, Mobile, AL

GPO Access Performance Measurement and Improvement

It has recently become apparent that system performance problems have been severely limiting the amount of usage possible and frustrating large amounts of *GPO Access* users. Time-out and other types of errors were far too common, particularly during the busiest hours of the workday, and even successful transactions took far too long. Through a performance measurement service contract with Keynote Systems, Inc., we are tracking performance of the Code of Federal Regulations from the user perspective from ten major U.S. cities. The findings from this service and problem reports from users were shared with the GPO Production Department, who have begun work to eliminate these problems. They have succeeded in virtually eliminating the error problems, and results are showing that successful transactions during peak times are now taking on average less than 10 seconds from start to finish, down from over 42 seconds previously. We will continue to monitor performance with an eye towards improvement.

***GPO Access* Statistical Measures**

- Since 1994, *GPO Access* retrievals have exceeded 1.2 billion. This is equivalent to over 29 billion typewritten pages.
- *GPO Access* has averaged close to 32 million document retrievals in the last six months, and reached an all-time high of almost 36.5 million document retrievals in October 2001.
- *GPO Access* contains over 133,000 electronic titles and points to over 89,000 others for a total of more than 222,000 titles.
- *GPO Access* provides use of almost 2,400 databases through more than 80 applications.

What's New on *GPO Access*

- The Budget of the United States Government for FY 2003 is now available via *GPO Access* at <http://www.access.gpo.gov/usbudget>. It was transmitted to Congress on February 2, 2002, and covers the fiscal year beginning October 1, 2002
- The new edition of the Congressional Directory for the 107th Congress is available at <http://www.access.gpo.gov/congress/cong016.html>.
- The 2002 Economic Report of the President is now available on *GPO Access* at <http://www.gpo.gov/eop>.
- Volume I of the 2000-2001 Public Papers for William J. Clinton is now available online at <http://www.gpo.gov/nara/pubpaps/srchpaps.html>.
- Two Independent Counsel Reports available at <http://icreport.access.gpo.gov>:

- Final Report of the Independent Counsel In Re: Madison Guaranty Savings & Loan Association Regarding Monica Lewinsky and Others
 - The Final Report of the Independent Counsel In Re: Madison Guaranty Savings & Loan Association (The Madison Guaranty/Whitewater Investigation)
- Riddick's Senate Procedure-Precedents and Procedures is now available via *GPO Access* at <<http://www.access.gpo.gov/congress/senate/riddick/index.html>>.
- Two new topics have been added to the New Titles By Topic E-mail Alert Service. Employment and Occupations and Federal Statistics. To sign up for any of these lists, go to: <<http://bookstore.gpo.gov/alertservice.html>>.

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GPO Access Training Manual Updates

Updates to the *GPO Access* Training Manual were recently posted on the *GPO Access* help page. Approximately 33 pages were changed, including URL updates, new diagrams for tracking legislation, regulations, and Federal publications, and updated U.S. Government Online Bookstore information. In addition, a special insert has been added that discusses Federal depository library access to STAT-USA/Internet, which is provided through a partnership between the U.S. Government Printing Office and the Department of Commerce. These updates may be found at <<http://www.gpo.gov/gpoaccess/help/trainingbk>>.

Changes made to Senate, House and Executive Reports Application on GPO Access

In response to user feedback, the Senate, House and Executive Reports application <<http://www.gpo.gov/congress/cong005.html>> on *GPO Access* now includes the ability to search across multiple Congresses in addition to being able to search for these documents within a particular Congress.

GPO Access User Survey

EIDS staff is in the process of developing a new online *GPO Access* User Survey, which will provide us with valuable feedback and a measure of usability and efficiency. The survey will be available in the near future on *GPO Access* at <http://www.access.gpo.gov/su_docs/survey02.html>.

Under Development

- An interactive site guide is being developed to help users find their way to the resources of *GPO Access*. Users will be able to follow a pathway of links in an exploration of the rich set of resources that *GPO Access* offers. It will provide an augmented assistance tool that lets users learn more about what is available when the regular navigation paths have failed to point them in the right direction.
- Making use of what has been learned from our work with users in open forums, usability studies, and through regular feedback channels, work toward an enhanced look and feel for *GPO Access* has begun. Please play a role in this process by attending the *GPO Access* Open Forum sessions this afternoon (Monday, April 22, 2002, at 2:00 pm and 3:30 pm) and reacting to some prototype pages created to show our current approach.
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Upcoming Outreach

EIDS personnel will be attending and displaying the GPO booth at the following shows:

May 14-16	Info Today 2002	New York, NY
June 13-19	American Library Association Annual Conference	Atlanta, GA
June 30- July 2	National Education Association	Dallas, TX

<http://www.gpo.gov/gpoaccess>