



U.S. GOVERNMENT PRINTING OFFICE I KEEPING AMERICA INFORMED

GPO's Future Digital Content System

October 17, 2004



Background

GPO's Future Digital System will be a world-class system for managing official Government content.

The system will verify and track versions, assure authenticity, preserve content, and provide permanent public access.

The system will be:

- Rules based
- Policy neutral
- Modular and adaptable



Agenda

- Functional Reference Model
 - Critical Functions of the system
 - Digital Standards
 - Content
 - Content Delivery
 - Content Management
- User Classes



Functional Reference Model

Content Management Content Delivery Queries **Digital Content** Version Control Hard Copy Ingest Converted packages Authentication Electronic Harvested Packages Preservation Presentation Deposited Packages • Digital Media Results Access Reporting **System Administration**



Critical System Functions

Content Management

- Version Control
- Authentication
- Preservation
- Access

System Administration

- Version Control
- Authentication
- Preservation
- Access



Version Control

Version control will be the process of establishing the version of the content.

- The system will evaluate and track versions throughout its entire life cycle based on GPO established best practices.
- Capabilities include tracking:
 - Editions
 - Revisions
 - Relationships to other versions of the same content
 - The chain of responsibility (i.e., who created it, when, etc.)



Authentication

The Authentication function will verify that digital content within the system is authentic or official, and certify this to users accessing the content.

- Capabilities to support Authentication:
 - Verification of content authenticity
 - Determination whether content is official
 - Provides users who access content with a token of certification that the content is certified to be official or authentic as required
 - A means by which sections or small pieces of a document can be digitally certified. This concept is otherwise known as granularity



Preservation

Preservation is maintaining information products over time for use in their original form or in some other verifiable, usable form.

- Preservation capabilities include:
 - Storage
 - Preservation Processes
 - The Collection of Last Resort (CLR), a permanent collection of the final published, official versions of U.S. Government publications in all formats intended to support comprehensive, timely, permanent public access.



Access

Access consists of 5 components: Finding, Ordering, Retrieval, User Support, and Data Mining.

Finding: Search, Reference and National Bibliographic tools.

Retrieval: Provides instructions for content retrieval from storage

and ultimately delivered to End Users.

<u>User Support:</u> Assists in delivering services to End Users (e.g., CRM

tools, knowledge bases, and stored user preferences).

Ordering: Capability for users to place orders and submit payment

electronically.

Data Mining: Locates, aggregates, and associates business process

information (e.g., document retrieval statistics and

agency billing information).



Finding Tools

Finding: comprised of three tools:

Search Tools:

Perform queries on content and metadata.

Reference Tools:

• Lists and resources that point to content.

National Bibliography (or Cataloging) Tools:

• Process of adding descriptive metadata to content in the form of library standard bibliographic records.



Digital Standards

Standards are the means for our participation in the communities we serve, making information available and usable. Best practices include:

Metadata:

Data that describes the content, quality, condition, or other characteristics of other data.

Preservation Digital Master:

A faithful, high quality version of content which is created in a controlled environment, bound together with information which supports long-term preservation.

Style Tools:

Tools that help customers create and provide content to the system.



Content

Digital Content

- Converted packages
- Harvested Packages
- Deposited Packages

Content is divided into three categories:

- Converted Content
- Harvested Content
- Deposited Content



Content

Deposited Content:

 Electronic content that is pushed to the system by originating agencies for preservation and access.

Harvested Content:

 Electronic documents that are first published directly to agency Web sites and then pulled into the system consistent with digital standards.

Converted Content:

 Electronic files created from tangible documents which can then be preserved and derived into new digital products.



Content Delivery

Content is delivered to meet user needs. Examples of delivery methods include:

Hard Copy:

Tangible printed content

Electronic Presentation:

A delivery mechanism for dynamic and temporary representation of digital content

Digital Media:

A delivery mechanism consisting of storage devices, (e.g., data storage devices, wireless handheld devices, storage at user sites)

Content Delivery

- Hard Copy
- ElectronicPresentation
- Digital Media
- Reporting



Content Management

Content Management

- Version Control
- Authentication
- Preservation
- Access

System Administration



D

S

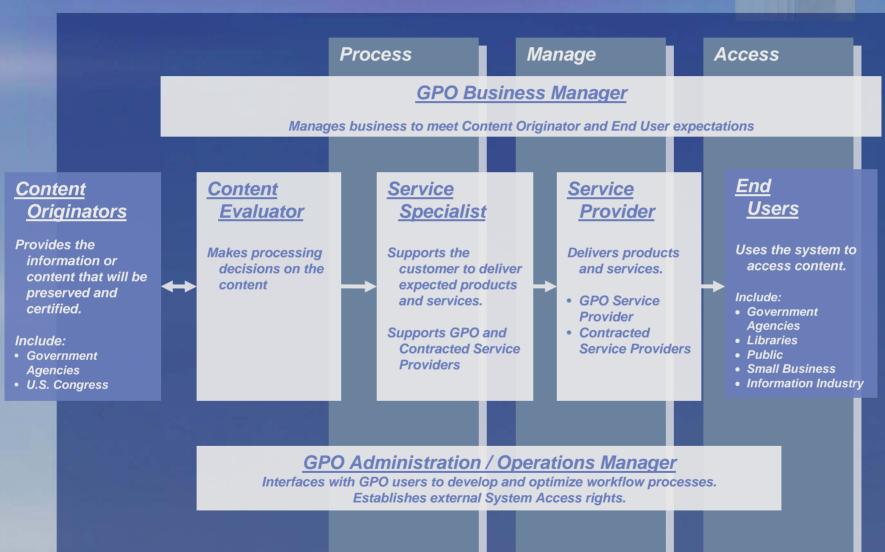
S

Content Management

0 **System Administration** G **Content Management** N Version **Authentication Access** Digital Content **Control** Content **Delivery** 0 **Content Processing Preservation**

our strategic vision in progress







Summary

GPO's Future Digital System will be a worldclass system for managing official Government content, which will verify and track versions, assure authenticity, preserve content, and provide permanent public access.