

ArchivalWare 4.0 Product Technical Specification

ArchivalWare opens new dimensions in digital information retrieval.

The exponential growth of the Internet and rapid advances in technology has caused a proliferation of digital information. PTFS' digital archiving solutions offer advanced, affordable tools and services to manage and rapidly search valuable expanding digital collections. ArchivalWare, in its latest release, combines a suite of high-volume digital capture and production tools with a sophisticated web-based retrieval engine.

Features and Benefits

ArchivalWare is made up of several modules including Search, Browse, Editor, Administrator, Reporting and Import/Export components.

SEARCH MODULES

Document Content Full-Text Search

Using sophisticated search engines, users can access online digital libraries via a variety of search techniques: Boolean, pattern, concept, cross lingual, proximity, wildcard, truncation, and date/range. Searches can be executed against both the full text and the associated metadata, or against the metadata alone. All search hits are highlighted directly to the document and metadata.

Pattern Search

Pattern searches tolerate spelling errors in either the body of the text or the keyword search. It automatically performs pattern expansion on all keywords based the number of words set by the user, and then ranks the retrieved documents. Pattern searching overcomes spelling differences and deficiencies in OCR quality.

Concept Search

This type of search expands your search term to include semantically related terms. It uses a network of word associations enabling the expansion of search terms by using variations, synonyms, antonyms, and other relationships to search the entire document text. This allows users to have the most relevant documents delivered to the top of the result list.

Cross-Lingual Search

This type of search uses automatic translation to find related terms in documents containing different languages. This powerful capability allows multi-language document collections to be searched quickly and easily as a single source of information.



BROWSE MODULE

Browse

This functionality allows administrators to create a rich hierarchical structure to organize archived documents. This web-based navigation tool allows users to walk through a folder structure to retrieve content. Browse can be invoked from a search result screen to allow users to quickly find documents related to their searches that may not contain any of the desired search terms.

EDITOR MODULE

Web Editor

Performs necessary maintenance, editing, and cataloging as well as manages metadata associated with digital documents from both hard copy source materials to electronically published materials. The web editor allows privileged users to create and edit descriptive metadata right from the search results without loading a client application or installing an ActiveX control.

ADMINISTRATOR MODULES

Web Administrator

Administration of ArchivalWare is simple with a web-based user interface to manage system functionality including system settings, fields, labels, indexing, reporting, and import and export of content. This allows ArchivalWare to be managed virtually anywhere through a standard browser interface. The interface also provides for complete management of all system users and groups, including access privileges, passwords, and default settings.

Application Programming Interface

A complete API exposes all system functionality to facilitate customization and integration of ArchivalWare with 3rd party and legacy enterprise applications. Communication with the backend Enterprise Java Beans is done via RMI and JNDI over HTTP/SSL, allowing any Java application either local or remote access to system functionality. ArchivalWare can be installed as a complete turnkey application. ArchivalWare can also be customized and integrated with other third party technologies such as document capture, forms processing, workflow, and document management systems using ArchivalWare's powerful API services.

IMPORT/EXPORT MODULE

Archive Management

ArchivalWare's archive management features provide all of the necessary tools to import, export, and modify the content of the digital archive. Exclusive locking features prevent simultaneous edits and preserve previous versions of the descriptive metadata. Multiple import formats are supported including XML, CSV, Delimited Text, and RDBMS to quickly merge digital documents with existing electronic metadata.

ARCHITECTURE

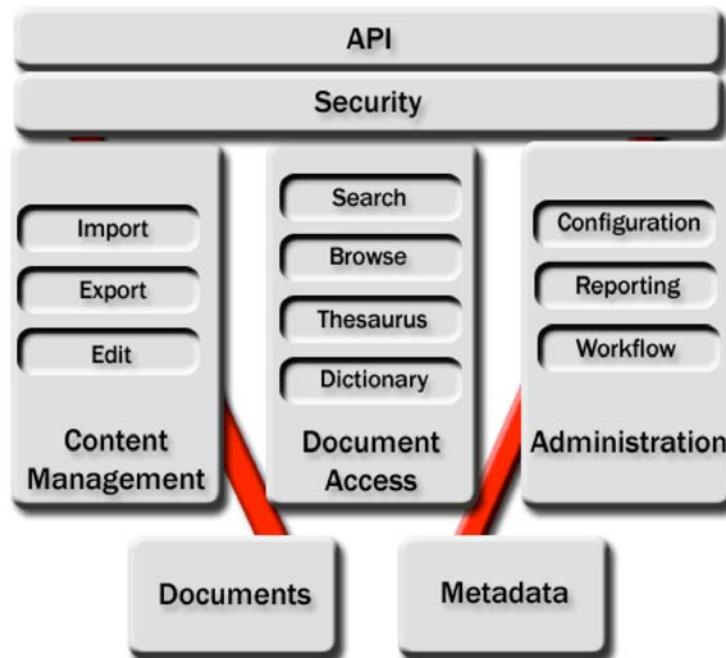
Scalable Architecture

ArchivalWare's scalable multi-tier J2EE architecture is built for consistent and fast response time over local and wide area networks. The design supports a distributed system configuration that can be tuned to maintain performance regardless of size. The default web based client is implemented with JSP and Servlet technology allowing for simple customization and web integration.

Technical Design

The core of the ArchivalWare design is the underlying database structure that defines the fundamental relationship of the digital document to its descriptive metadata. The Dublin Core standard is used to describe the metadata of the document represented as XML and stored in the database schema. A best-of-breed full-text search engine is pre-configured to index and retrieve documents from the digital archive based on full text and metadata queries against the complete data repository. For added flexibility, the Dublin Core metadata framework can be expanded to accommodate an additional 50 customer-defined fields.

Business services implemented as Enterprise Java Beans (EJB) provide extensible APIs for content management, access and administration. These data objects provide full lifecycle management of digital documents in the archive. Role based security wraps the entire system providing granular levels of access to the business objects and the documents themselves that can be tightly controlled by system administrators. The extensible security model can be configured to use LDAP for authentication and directory services, allowing existing enterprise policies to be migrated to the digital archive.



Standards Supported

ArchivalWare supports many of the popular web and archive standards. These include:

- Dublin Core metadata schema (commonly used in digital library applications)
- Extensible Markup Language (XML)
- J2EE (v 1.5), EJB 2.0
- Open source web and application servers (Tomcat 5.5, JBOSS 4.0.3)
- HTML, CSS, HTTP, HTTPS
- Java and Javascript
- Popular RDBMSs
- Windows and Sun Solaris operating systems
- Client access entirely through industry standard web browsers

System Requirements

Server

- 800 MB disk space for application installation. Additional space required for document storage.
- 2 GB RAM
- Windows 2000 or 2003 Server; Solaris 8, 9 or 10
- Dual processor or better recommended
- Microsoft Internet Information Services 5.0 or 6.0 or Apache Web Server 1.3 or 2
- Java 2 Standard Edition 1.5
- Microsoft SQL Server 2000, 2005 or Oracle 8, 9 or 10

Client

- Internet Explorer 5.5 and newer
- Netscape 7.1 and newer
- Mozilla Firefox 1.2 and newer
- Adobe Acrobat Reader 6 and higher
- Viewers for specific document types

Languages Supported

The interface can be localized for Arabic, English, French, and Spanish. Support for different languages can be easily added by modifying property file. The search capabilities allow users to search over 40 languages ranging from Portuguese, Chinese, and Russian.

Cross-Lingual Concept Searching

English, French, Dutch, German, Spanish, Italian, Portuguese (Brazilian and (European)), Arabic



Mono-Lingual Concept Searching

English, French, Dutch, German, Spanish, Italian, Catalan, Basque, Japanese, and Russian

Mono-Lingual Boolean and Pattern Searching

English, French, Spanish, Italian, Catalan, Basque, Portuguese, Italian, Albanian, Dutch, German, Danish, Swedish, Norwegian, Finnish, Faroese, Icelandic, Irish, Scottish, Afrikaans, Swahili, Czech, Hungarian, Polish, Romanian, Croatian, Slovak, Slovenian, Serbian, Esperanto, Maltese, Latvian, Lithuanian, Greenlandic, Lappish, Bulgarian, Byelorussian, Macedonian, Russian, Serbian and pre-1990 Ukrainian, Greek, Turkish, Hebrew, Arabic, Japanese, Korean, and Chinese (Simplified & Traditional)

File Formats Supported

ArchivalWare can natively support over 225 different types of digital documents and can be configured to support any type of document that can be viewed with a web plug-in or helper application. An example of some of the file types supported is listed below:

- PDF
- GIF
- Word processing documents including Microsoft Word, Excel, PowerPoint and WordPerfect
- Photographs: JPG, TIF, RAW
- Video clips: AVI, MPG, WMV, RM, SMIL
- Audio clips: MP3, WAV, MID, AU, RA
- Multimedia presentations
- Spreadsheets
- Zip archives

If your data is not digital yet, PTFS offers Digitization and Content Conversion Services.

Our Offices:

For more information about PTFS, please schedule a demo or for a visit from one of our account managers.

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