

Banner Document Management Suite Introduction to BDMS Training Workbook

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12/22/2008	Revised to support Banner 8.1.

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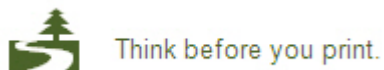


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Introduction



Course goal

This training workbook is designed for new users of ApplicationXtender. The course will cover all basic functionality of ApplicationXtender.

This workbook also serves as a reference tool, and offers instructions for using the Banner Document Management Suite system.

Course objectives

At the conclusion of this course, participants will be able to:

- Navigate the views and toolbars of ApplicationXtender
- Create new documents
- Create documents in batch
- Index documents
- Scan documents
- Retrieve documents
- Query applications for specific documents
- Query by index values, full-text values or both
- View documents within ApplicationXtender

Intended audience

Participants in this course will be new users of ApplicationXtender. These users will be working with documents and involved in the scanning and indexing of existing documents, as well as the creation of new documents.

Users who need only to access and view data will also benefit from this course.

Prerequisites

To complete this section, you should have completed the Education Practices computer-based training (CBT) tutorial "Banner 8 Fundamentals," or have equivalent experience navigating in the Banner system.

Other prerequisites include:

- Familiarity with your version of Windows
- General understanding of scanning and indexing procedures on a user level

Introduction to Document Imaging



Introduction

This section discusses the steps involved in document imaging.

Objectives

At the conclusion of this section, participants will be able to:

- better understand the basics of document imaging.

Introduction

Introduction

Document imaging is the conversion of paper documents into electronic images stored on computer. Once stored, these electronic duplicates should be catalogued for quick retrieval.

Organizations generate masses of paper. Systems are developed for storing and retrieving these paper documents, but they are far from foolproof. Everyone knows the frustration of not being able to find a document when you need it. It is invariably misfiled, on someone else's desk, shredded or just plain lost.

Components

Document imaging revolutionizes the archival of documents and provides rapid access to those documents. All document imaging systems provide five basic components:

- Scanning and importing tools for bringing paper documents into the system
- Archival methods for storing the documents
- Indexing system for organizing the documents
- Retrieval tools for finding the documents
- Access control to provide security to authorized people

Popularity

Document imaging has exploded in popularity with the advent of cheap electronic storage. 100-gigabyte hard drives are fast becoming affordable devices. The capability of storing 300,000 scanned images on a single drive, the ease of access to systems through the Internet, and the standardization of document types have all contributed to making document imaging a viable solution to a substantial problem.

OCR

Document imaging is also capable of reading the text on the page via Optical Character Recognition (OCR). Once the documents have been read and catalogued, searches may be made of the text within the documents. Imagine standing next to a traditional filing cabinet and, in a matter of moments, locating all the documents within the cabinet that contain a certain set of words!

You are not restricted to the index key under which a document was filed, (e.g. date, last name or organization).

What document imaging should do

- Allow management of millions of records
- Allow for retrieval of records within seconds
- Allow information to be shared while maintaining confidentiality
- Conform to your working practices, rather than change them
- Be a pleasure to use, whether managing the system or using it

The following sections will explain the five basic components of document imaging.

Step 1: Bringing in Documents

Scanning

A scanner is a device that digitizes documents (converts them into digital information). A scanner converts a document line-by-line and column-by-column. It uses a light sensor to tell it what color the dot on the page beneath the head is. This dot or area that the head is looking at is then converted into a number, which is associated with a corresponding color for display. Stringing all of the numbers together and displaying their corresponding colors composes an image.

The number of lines and columns the scanner digitizes determines the resolution. Therefore, the more lines and columns that the scanner analyzes, the higher the detail captured. On the flip side, the more detail that is captured, the more space the resulting image requires for storage. The user of the system will need to determine the best resolution for capturing images to reach the best balance of image detail and storage space required.

Document imaging commonly refers to resolution as *dots per inch (DPI)*. Higher DPIs indicate images with more detail. The human eye can define detail down to 300DPI. This, coincidentally, is the resolution that OCR software prefers to work at. Therefore, when scanning documents that are to be OCRed, the resolution used should be 300DPI. If documents are scanned for simple archival purposes, a lower resolution may suffice.

Changing the dimensions of a scanned image will alter its resolution. For example, an image that is scanned at 600DPI and then enlarged from 400x300 to 800x600 will no longer be a 600DPI image; the same amount of information is spread over four times the image size. This image would now be 150DPI.

Scanners used for document imaging should also have an Automatic Document Feeder (ADF). This allows batches of documents to be processed. When processing batched documents, they are fed into the scanner one at a time. Scanners that do not have an ADF are normally concerned with graphical-type applications.

A mark of a quality document imaging application is its ability to utilize multiple types of scanners.

The speed of a scanner is also important when selecting a scanner. Faster scanners allow users to process more documents and avoid backlogs, while offices with light scanning needs may be able to use a slower scanner. If there is a large back file process to be carried out, it may be advisable to get an outside agency to do the work.

Conversion

Conversion is the process where electronic documents are added to the document imaging system. Many programs, such as Microsoft Word, Microsoft Excel and others, can print directly to a file. This file does not need to be scanned, as it is already in the computer. The document imaging system becomes the backbone for all documents within the organization. Any document generated within the organization can be collected and stored centrally within the system.

Importing

Up until now, we have discussed the conversion of paper documents to electronic images. There is no reason why this system could not store other types of information, as most document imaging systems can treat any computer file as a document. Therefore, a video file or a sound file can be stored within the imaging system. These files are not converted, but remain in their native format. To view these files, either the originating software is launched or a viewer is employed.

Step 2: Archival Methods

Databases

The document imaging system needs to store these images somewhere, which creates a need for databases. Another mark of a good document imaging system is its ability to utilize multiple database types.

The SunGard Higher Education solution to document imaging can leverage the investment in databases you have already created and store their data in your main systems database under a different name space. This reduces purchase costs and maintenance costs and provides enhanced security for accessing the system, as well as data integrity through backups.

Security

Accidents happen and files get lost. With a document imaging system in place, measures can be taken to dramatically reduce the possibility of ever losing a file again. Images are held electronically, and with that come all the other benefits and tools developed over the years to keep your data secure. Raid servers can be employed to mirror data over distances. Hierarchical backup systems can be utilized for long-term storage. Security can be put in place to prevent accidental or malicious damage. Journaling can be instigated to recover errors. Auditing can be utilized to uncover problems.

Step 3: Indexing

Indexes

An index is the means by which documents are associated in the system. In many ways, the index in the document imaging system works like the card index you may have on your desk. It is a method for associating images with a key for retrieving the image.

Your filing cabinets already use indexes; for instance, a drawer may be labeled "A-F," with the last names "Abbot" through "Fusco" on the files therein. In ApplicationXtender terms, indexing is a method of applying a sticky tab to the top of each electronic document and enabling the system to retrieve them accurately.

The key to a good index is to keep it simple and only include the necessary information to uniquely identify a document. For example, a typical student may have a number of documents in the system. You would create a simple index for the student's documents with the following keys:

- Student ID = the unique identifier for a particular student
- Document type = the document stored here (invoice copy, admission form, etc.)
- Date = date that the document was added to the system

In document imaging terms, an index is also referred to as an *application*.

You may have multiple indexes/applications within the system. Each application can store anything you desire. You could create indexes for storing admissions letters, test scores, financial forms, or just about anything else where multiple documents need to be stored.

Step 4: Retrieval Tools

Queries

Information that is not easily retrieved is of little use to you; if you can't find the information you stored, you might as well have never stored it at all. Hence, this document imaging system will provide a means of retrieving its documents quickly and accurately.

When a document is indexed, you have a key by which it is identifiable and that you can query for. With multiple documents in the system, you may query the system for specific documents or sets of documents that fulfill your query parameters.

Sample

This index was used in an earlier example:

- Student ID = the unique identifier for a particular student
- Document type = the document stored here (invoice copy, admission form, etc.)
- Date = date that the document was added to the system

With this index, you could query the system for all documents belonging to a particular student, all admissions forms, or all invoices added to the system between a certain date ranges.

Query engine

The query engine is the tool that allows you to build queries and run them against the documents in your system. It is even possible to run cross-application queries (for example, finding a student's admissions forms from the student application, but only if the student's tuition payments are a month overdue in the finance application).

Full text search

With an OCR engine in your document imaging system, you can also enter all the words within your documents into a database. You may then search for keywords or phrases as well as index terms. This provides unprecedented retrieval and analysis opportunities that a traditional filing system could never hope to compete with. For example, you could pull all the documents from your system across applications that contain certain strings of characters (e.g. all the documents in the system containing a particular number or name), even if the document was incorrectly indexed or in an incorrect application!

Step 5: Access Control

Privileges

Every document imaging system will provide user access security, but some go a stage further. SunGard Higher Education's solution provides for users to be grouped and assigned certain privileges within groups. These privileges can range from the ability to only view certain documents to having full add/delete/modify rights to the system across all groups and applications.

Annotations

Along with standard user/password security, security can be placed within a page of a document via annotations. An annotation is a mark that can be made on a page, like a rubber stamp. You can design annotations to look like anything you wish. These annotations can be designed to block out areas of text so that only authorized persons can read them, or they can be placed on a page to signify a significant event. (For example, an "Invoice paid" annotation could be designed to be placed or removed only by authorized persons in the Finance office.)

Getting Started



Introduction

This section provides an introduction to ApplicationXtender and its components.

Objectives

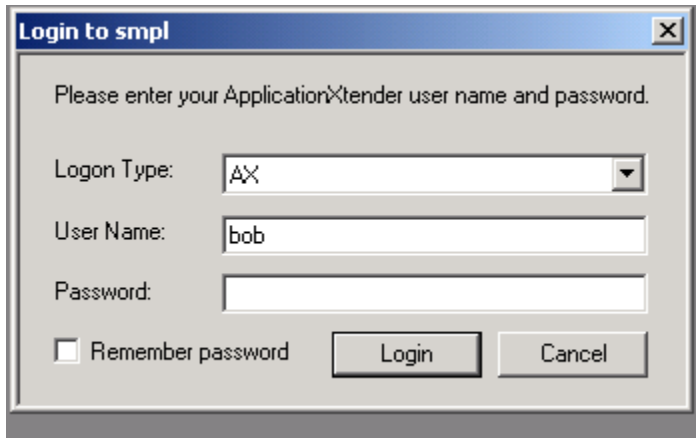
At the conclusion of this section, participants will be able to:

- log onto ApplicationXtender and recognize its icons and basic functions.

Introduction

Introduction

When you first start ApplicationXtender, you will be prompted for your user name and password.



The screenshot shows a standard Windows-style dialog box titled "Login to smpl". The dialog contains the following elements:

- Instructional text: "Please enter your ApplicationXtender user name and password."
- "Logon Type:" dropdown menu: The selected value is "AX".
- "User Name:" text box: The entered value is "bob".
- "Password:" text box: The box is currently empty.
- Checkbox: "Remember password" is unchecked.
- Buttons: "Login" and "Cancel".

The **Logon Type** field lets you specify which types of data you are licensed to view. Choose *AX* if you have an ApplicationXtender license, *CX/ERMX* for CX/ERMX data, or *AX & CX/ERMX* for both.

New Login

Introduction

The New Login function (from the File pull-down menu) allows you to change your username in mid-session.

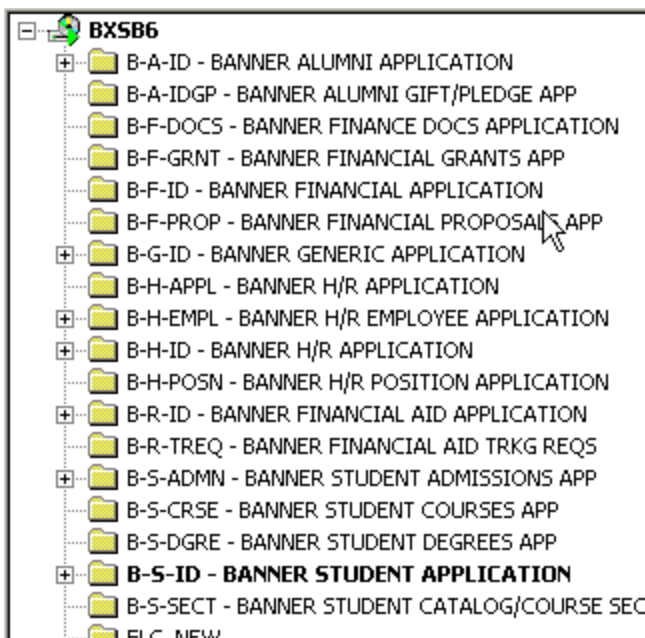
When you have selected this function, another login box will appear. Change your logon type, user name and password as appropriate, then click **Login** to continue. (If you click **Cancel**, the application will close.)

ApplicationXtender Views

View modes

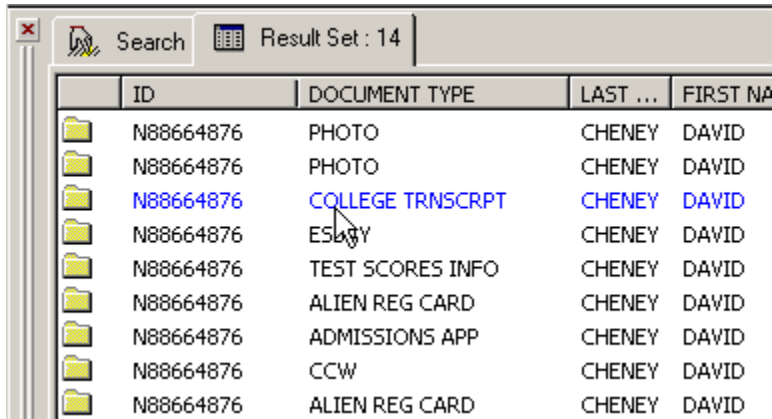
The view modes of ApplicationXtender allow you to manipulate images in several different ways.

Application view



The Application view lists applications and queries in a tree structure, much like that found in Windows Explorer. You may expand or collapse applications to view or hide their associated lists of queries.

Query view



The screenshot shows a window titled "Search" with a "Result Set : 14" indicator. The window displays a table with the following columns: ID, DOCUMENT TYPE, LAST ..., and FIRST NA. The table contains 10 rows of data, all with the same ID (N88664876) and last name (CHENEY). The document types are: PHOTO, PHOTO, COLLEGE TRNSCRPT (highlighted in blue), ESSAY, TEST SCORES INFO, ALIEN REG CARD, ADMISSIONS APP, CCW, and ALIEN REG CARD. The first name for all entries is DAVID.

ID	DOCUMENT TYPE	LAST ...	FIRST NA
N88664876	PHOTO	CHENEY	DAVID
N88664876	PHOTO	CHENEY	DAVID
N88664876	COLLEGE TRNSCRPT	CHENEY	DAVID
N88664876	ESSAY	CHENEY	DAVID
N88664876	TEST SCORES INFO	CHENEY	DAVID
N88664876	ALIEN REG CARD	CHENEY	DAVID
N88664876	ADMISSIONS APP	CHENEY	DAVID
N88664876	CCW	CHENEY	DAVID
N88664876	ALIEN REG CARD	CHENEY	DAVID

The Query view allows you to search for desired documents using keywords. You may search for documents via index information or via full-text information.

Document display view

APPLICATION FOR EMPLOYMENT

PERSONAL INFORMATION Complete all applicable information

Name (Last - First, Middle Initial)		Truman, Chris	
Position(s) applied for:	Are you willing to work:	Full Time	Part Time
Professor of Computer Science	Temporary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Street Address:	City:	State:	Zip:
123 Phyllis Street	Princeton	NJ	08540
Home Phone:	Business Phone:	Have you previously been employed by our company?	
555-555-5558		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Where?	
Are you legally authorized to work in the United States? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		When could you start employment?	
Have you ever applied for employment with our company?		As soon as possible	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Where?			

EMPLOYMENT HISTORY (List below last three employers, starting with the most recent one first)

Employer (Last, First, Middle Initial)	Name of Company	City	State	Zip	To Month/Year	From Month/Year
Professor of Computer Science	Princeton University	Princeton	NJ	08540	Present	
6 University Park						
Position	Reason for Leaving					
Professor of Computer Science	Change of location					
Starting Annual Salary	Final Annual Salary	Hours	Continued	May we contact your supervisor? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
150,000	150,000	X	X			
Name of Supervisor	Title and Department of Supervisor	Phone Number of Supervisor				
Dr. Michael Dell	Dean Computer Science	555-555-5588				
New Employer Address:	Name of Company	City	State	Zip	To Month/Year	From Month/Year
6 University Park	Princeton University	Princeton	NJ	08540	June 1998	June 1998
6 University Park						
Position	Reason for Leaving					
Adjunct Professor	Promotion					
Starting Annual Salary	Final Annual Salary	Hours	Continued			
75,000	75,000					
Name of Supervisor	Title and Department of Supervisor	Phone Number of Supervisor				
Dr. Michael Dell	Dean of Computer Science	555-555-5588				
New Employer Address:	Name of Company	City	State	Zip	To Month/Year	From Month/Year
6 University Park	Princeton University	Princeton	NJ	08540	June 1995	June 1995
6 University Park						
Position	Reason for Leaving					
Adj. Full Time Professor	Promotion					
Starting Annual Salary	Final Annual Salary	Hours	Continued			
90,000	90,000					
Name of Supervisor	Title and Department of Supervisor	Phone Number of Supervisor				
Dr. Michael Dell	Dean of CAS	555-555-5588				

EDUCATION INFORMATION

High School or GED	Address	City	State	Degree	Subjects Studied
College	Princeton	Princeton	NJ	MS	CS
College	6 University Park	Princeton	NJ	MS	CS
College	Princeton	Princeton	NJ	MS	CS
Graduate School	Princeton	Princeton	NJ	PhD	CS
Other	6 University Park	Princeton	NJ	PhD	CS

GENERAL

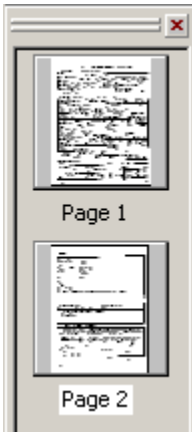
The Document Display view calls up the stored image of your selected document. Within it, you may pan around the image's dimensions or select a portion of the image and manipulate it in various ways.

Index view

Fields	Values
ID	N88664876
PIDM	2129
DOCUMENT TYPE	ADMISSIONS APP
LAST NAME	CHENEY
FIRST NAME	DAVID
SSN	
BIRTH DATE	14-MAR-1963
TERM CODE	200610
APPLICATION NUMBER	1
ADMISSIONS REQUIREMENT	{Null}
INSTITUTION NUMBER	
ROUTING STATUS	CAMPUS B
ACTIVITY DATE	2004-08-05 10:12:15

The Index view lists index terms for a document. You may enter index information for new documents here, or view or change index information for existing documents.

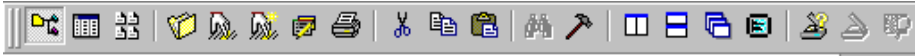
Thumbnail view




The Thumbnail view shows your image in greatly reduced scale. It is typically used when working with multiple documents or batch documents containing multiple images (typically pages), allowing you to quickly locate and select the precise image you need.

ApplicationXtender Toolbars

Main toolbar



The Main toolbar contains the following functions:

Function	Icon
Toggle the Application View	
Toggle the Query View	
Toggle the Thumbnail view	
Create a new document	
Run a query	
Create a new query	
Create a new cross-application query	
Print	
Cut to Clipboard	
Copy to Clipboard	
Paste from Clipboard	
Text search	
Configuration	
Tile windows horizontally	
Tile windows vertically	
Cascade windows	
View full screen	
Select a scanner	
Scan a document	
EmailXtender Search	

Annotation toolbar

The Annotation toolbar allows you to add annotations to your documents and manipulate them. Annotations allow users to add notes to a page, block areas from view, or highlight selected information. Annotations can be configured so that only certain logins have access to certain annotations.



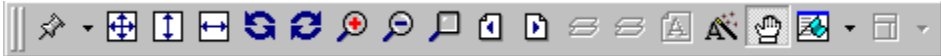
Functions

The Annotation toolbar contains the following functions:

Function	Icon
Toggle selection of annotations	
Text annotation	
Highlight annotation	
Freehand line annotation	
Line annotation	
Arrow annotation	
Rectangular annotation	
Rounded rectangular annotation	
Oval annotation	
Polyline annotation	
Polygon annotation	
Erase annotation	
Toggle filled/hollow annotation	
Toggle annotation redaction	
Select default annotation group	
Select all annotations	
Bring selected annotation to front	
Send selected annotation to back	
Toggle showing/hiding annotations	
Select line width	
Select annotation colors	
Delete selected annotation(s)	
Save annotations	
Cancel changes	
Rubber Stamp annotations	



















Image toolbar

The Image toolbar allows you to manipulate images that have been imported or inserted into ApplicationXtender.



Functions

The Image toolbar contains the following functions:

Function	Icon
Display settings (zoom, rotation, scale-to-gray, form overlay) for image	
Fit entire page to Document Display view	
Fit page vertically to Document Display view	
Fit page horizontally to Document Display view	
Rotate image 90 degrees to left	
Rotate image 90 degrees to right	
Zoom in	
Zoom out	
Use Magnifier	
Navigate to previous page	
Navigate to next page	
Display previous version of a page	
Display next version of a page	
Show text/image for document	
Perform OCR (optical character recognition)	
Toggle pan mode/selection mode	
Toggle Index view	
Toggle form overlays on COLD/ERM documents	

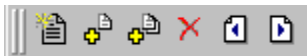
Script toolbar

The Script toolbar allows the user to perform up to twenty administrator-defined script functions. If the administrator has not assigned ApplicationXtender functions to these buttons, they will be grayed out.



Batch Index toolbar

The Batch Index toolbar contains functions involved in indexing batch documents.



Functions

The Batch Index toolbar contains the following functions:

Function	Icon
Create a new document	
Add current page to most recently indexed document	
Add all batch pages to most recently indexed document	
Delete a page from the batch	
Navigate to the previous page	
Navigate to the next page	

Scan toolbar



Function Keys

Keys

The following function keys perform one-keystroke functions in ApplicationXtender:

Function Key	Action
[F1]	Opens an online help window.
[F3]	Opens the Search box, for use with text documents.
[F4]	Searches for existing document indexes.
[F5]	Displays the List of Values for the selected index field, when searching.
[F7]	Auto-indexes, during document creation.
[F8]	Displays the Search Expression box for the selected index field.
[F9]	Copies index data from the last saved document index. Used during document creation.
[Shift-F4]	Searches for existing names

Create Documents



Introduction

This section discusses how to create and index new documents.

Objectives

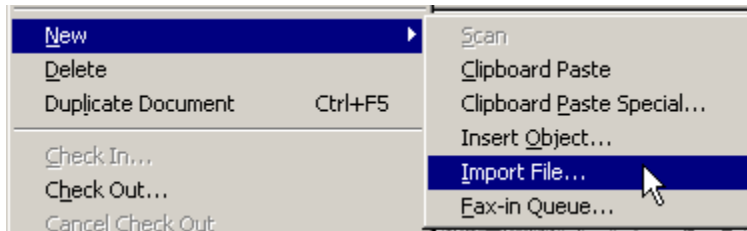
At the conclusion of this section, participants will be able to:

- create documents in ApplicationXtender.

Create a New Document

Input methods

There are several methods for creating new documents in ApplicationXtender. Which one you choose will likely depend on the type of document you want to archive.



Scanning

The Scan function creates a document from the image your scanner generates. This method is best used with paper documents that are not yet in an electronic file format.

Windows Clipboard

If you have a file in the Windows Clipboard, you may paste it to an ApplicationXtender document directly. This allows you to create documents from a wide variety of file types, as the Clipboard can contain multiple types of information. Data pasted from the Clipboard will be inserted as OLE objects.

If there is no valid or usable data in the Clipboard, this option will be grayed out.

Clipboard Paste pastes the data in the default format; Clipboard Paste Special allows you to specify the format of the data.

Insert objects

With this function, you may insert files from a variety of other applications, such as Microsoft Office documents, media clips, image files or sounds. The file may be displayed as an icon, or as the beginning of the file (for files with visual components).

You may insert an object from an existing file, or create a new object of a particular file type within a new document.

Double-clicking the file calls up the application associated with the file type. For example, double-clicking an inserted .doc file would likely call up Microsoft Word or WordPad, depending on the file type associations on your system.

Import files

Importing a file into a new document allows the file to be manipulated directly within ApplicationXtender.

The following importable file types are supported by ApplicationXtender:

- most image file types (TIFF, GIF, JPEG, BMP, PCS, DCX, TGA)
- HTML files
- Adobe Portable Document Format (PDF) files
- Rich Text Format (RTF) files
- plain text files

Other file types may be imported, but will be viewed within ApplicationXtender's Outside In Viewer:

- Microsoft Word, Excel and PowerPoint documents (most versions, up to and including Office for XP)
- Corel WordPerfect for Windows files (through version 9)
- Lotus WordPro and 1-2-3 files (through SmartSuite Millennium)
- Corel Draw files (through version 8.0)
- AutoCAD Native Drawing Format files (versions 12 through 14)
- Adobe Illustrator File Format (versions through 7.0)
- Adobe Photoshop File Format (version 4.0)
- Windows Metafiles
- VISIO files (multi-page Page Preview mode only) (through VISIO 2000)
- Microsoft Project (text only)

If a file type is not supported by ApplicationXtender or Outside In, it will be displayed as an icon within the Document Display view. These unsupported files will be inserted as objects, and will require a third-party viewer to be displayed.

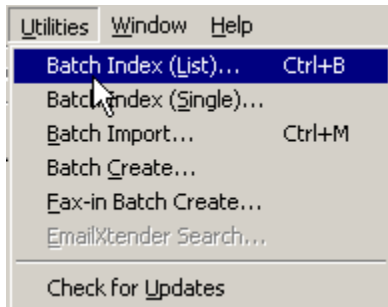
Note: When you use Import File or Insert Object to create a new document, keep in mind that ApplicationXtender treats the file as a single entity. An imported Microsoft Word document may contain 50 pages, for example, but the ApplicationXtender document it is imported into will start with only one page. You may scroll through the imported/inserted file and view all of its content, but its pages are not automatically mapped to separate ApplicationXtender document pages.

Fax-in queue

This function allows you to capture an incoming document from your fax source (such as a faxmodem) as an image within an ApplicationXtender document.

Create Documents in Batch

Introduction



ApplicationXtender allows you to create documents in batch, which can then be indexed individually or as a group.

Batch import

The Batch Import utility creates batches from existing files, specified in a text file on your hard drive. Once imported, the files are temporarily stored for indexing.

The text file (.txt) used by this utility can be created in any common text editor (Microsoft Word, WordPad, DOS Edit, etc.) It may specify one or multiple batches to be created. Each batch requires two components in the text file:

The name of the batch can be up to 32 alphanumeric characters long. If an existing batch name is specified, the files listed underneath the batch name will be appended to the existing batch

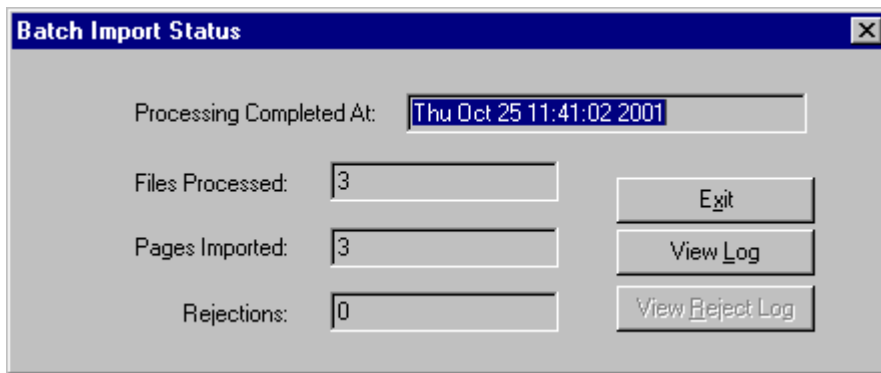
The filenames to be included in the batch should be listed as full pathnames, preceded by one or more '@' symbols. One @ may be used for supported file types (single-page image types, PDFs, Windows RTF, HTML) or for importing only the first page of multi-page image files. When importing foreign files (including text files) or every page of multi-page image files, two @s must precede the pathname.

Sample batch text file

A sample batch text file follows, specifying two batches:

```
Sample Image Batch 1
@c:\pictures\picture1.bmp
@c:\My Documents\johnson report-01.tif
@c:\My Documents\johnson report-02.tif
Johnson Report Specifications
@@c:\My Documents\johnson report.doc
@@c:\My Documents\readme.txt
```

Once this file has been created, select it via the Batch Import utility to import the specified files.



A status box will inform you as to the success or failure of the file imports.

Click **View Log** for a breakdown of successful import processes, or **View Reject Log** to see which files failed to be imported and why.

Batch creation

The Batch Creation utility allows you to quickly create a batch from a group of files. The files can either exist on your hard drive, be queued on your fax source, or be obtained via the optional ScanXtender module.

Select the appropriate application from the Application View, then select Batch Create. A dialog box will prompt you for the filenames you wish to include, and for the name of the batch in which they will be grouped. (You may enter the name of an existing batch to append these new files to it, or enter a new batch name.)

A status box will inform you of the success or failure of the importing of the selected files. Click **View Log** for a breakdown of successful import processes, or **View Reject Log** to see which files failed to be imported and why.

ScanXtender

The ScanXtender module allows you to scan multiple documents and import them as a batch in ApplicationXtender, indexing them at a later time.

Index New Documents

Introduction

Fields	Values
CONTRACT NUMBER	
DOCUMENT TYPE	
COMPANY NAME	
DATE	
DESCRIPTION	

New documents are indexed, so that they may be easily located within the database via queries. The fields available for a new document are dependent on their associated application.

These fields may be entered manually, or automated methods may be used.

OCR proofing

If FineReader is installed as the OCR engine for ApplicationXtender, you may index new image documents with OCR proofing. Only Plain Text image documents may be proofed; if Rich Text Format is selected on the OCR tab of the Configuration box, OCR proofing cannot be used.

Once your image document is in the Document Display view (in image view) and has undergone OCR, select *Index* and *OCR Index* from the Document menu. FineReader will analyze the document and output results. You may then edit the text boxes to make any necessary corrections.

Click the **AX** icon, then click **Save**.

Automated indexing features

There are several automated methods within ApplicationXtender that can reduce the amount of data entry required. Index information can be inserted into a table, which can then automatically populate some or all of a new document's index fields as appropriate.

Automated indexing features include:

- Auto Index
- Key Reference
- Append Page
- Copy Index Info
- Copy Previous Index Info
- Cut and Paste

Some preparation by the administrator is involved in setting up Auto Index and Key Reference features. For more information about these functions, consult your administrator.

Index validation

Your ApplicationXtender administrator may enable certain features that help prevent errors in index data entry, or configure your entries in desired ways.

Some examples of this include:

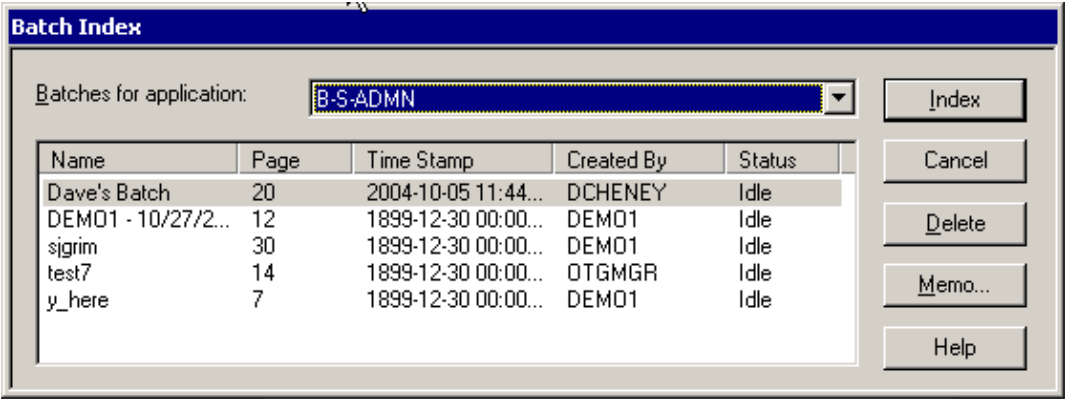
- Index fields may convert entries to a desired syntax.
Example: an entered phone number of *2125557843* could be automatically converted to *(212) 555-7843*
- Index fields may reject values in an incorrect format.
Example: a phone number field could reject letter input, such as *212-EL6-5744* or *610-BIZNESS*
- Index fields may be configured to auto-populate.
Example: fields such as **Date** or **Time** may be configured to assume the current system date or time. Such fields are read-only
- Unique Index Validation ensures that the same index value for selected fields cannot be used for more than one document in an application
- Dual Data Entry features require selected index fields to be entered twice before being accepted, and rejects entries where the second entry differs from the first (thus aiding accuracy).

Index Batches

Batch index a single batch

If you want to index a single batch and know its name, select Batch Index (Single) from the Utilities menu and enter the name of the batch when prompted.

Batch index from a list



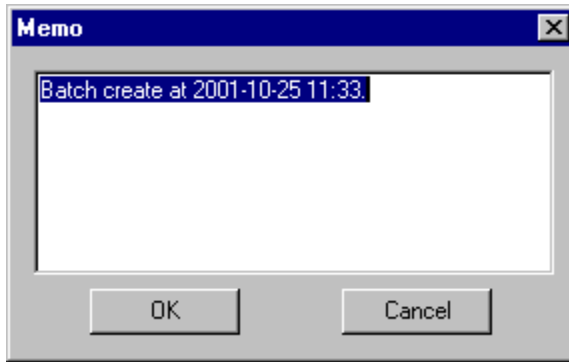
Select an application from the drop-down box to list its available batches. To index a batch, highlight it and click **Index**.

When the first page of the first document appears, you may perform Previous Page or Next Page functions to navigate between pages, or Delete Page to remove unwanted pages from the batch.

Perform a New Document function to create a new document that can be indexed and saved.

The Attach Page and Attach All buttons will add other batch pages to the most recently indexed document.

Memoing



From the Batch Index window, you may add a memo to a batch by clicking **Memo**. Enter your descriptive text and click **OK**.

If a batch has the status "Indexing", the only available option for that batch will be **Cancel**. This can also happen when a batch is stuck in an error state. If this happens, contact your administrator.

Scan Documents



Introduction

This section discusses how to scan documents into ApplicationXtender.

Objectives

At the conclusion of this section, participants will be able to:

- scan documents into ApplicationXtender.

Select a Scanner

Introduction

There are three places in ApplicationXtender where you may select a scanner:

- From the Scan pull-down menu, select *Configuration*, then select *Select Scanner*
- From the Main toolbar, click **Select Scanner**
- From the Scan toolbar, click the arrow on the right side of the **Scanner Setup** button. Choose *Select Scanner* from the drop-down list

If your scanner does not appear in the Select Scanner list, make sure that your scanner is turned on and ready, and that its drivers were properly installed prior to starting up ApplicationXtender. For further reference, consult your administrator.

If your scanner does appear in the list, select it and click OK. If further instructions on scanner configuration appear, consult the documentation for your scanner or your administrator.

Via the **Scanner Setup** button on the Scan toolbar, you should be able to customize your scanner's settings to produce a quality image. DPI settings, rotation, image enhancement, brightness, contrast, feeder settings and other settings can be configured here. The full list of available options will vary with individual scanners.

Scan a Single-Page Document

Steps

Once your scanner is operational and ready, close any open documents and feed the paper you want to scan to your scanner.

There are several ways to activate the scanner from within ApplicationXtender:

- Right-click an application in the Application view, then select *New Document* and *Scan* from its shortcut menu
- Click **New Document** on the Main toolbar, then select *Scan* from the New AX Document Object dialog box
- Click **Scan a New Document** on the Main toolbar
- Click **Scan** on the Scan toolbar

These functions are also found on the main pull-down menu bar, in its Document and Scan menus.

The document will be scanned, and the resulting image will be displayed in the Document Display view. If you wish to stop a scan in progress, click **Cancel**.

Scan Multiple Pages

Scan feeder options

There are three (mutually exclusive) options for scan sessions in ApplicationXtender: Single Feed, Automatic Feed and Manual Feed modes.

- If you select Single Feed mode by clicking **Single Feed** from the Scan toolbar, ApplicationXtender will scan one page at a time. If you wish to scan multiple pages, you will have to click **Scan** once for each page to be scanned.
- You may select Automatic Feed mode by clicking **Auto Feed** from the Scan toolbar. In this mode, ApplicationXtender will scan all pages in the scanner's feeder, and end its scanning session when the feeder is empty.
- You may also select Manual Feed mode by clicking **Manual Feed** from the Scan toolbar. In Manual Feed mode, ApplicationXtender will scan all pages in the feeder, then wait for a specified number of seconds for more pages to be added to the feeder. If more pages are added before the time period expires, the scan session continues.

The time period may be set on the ApplicationXtender Configuration screen on the Scan tab.

Insert a scanned page before the current page

To insert a page into a document before the current page, make sure that the document is open and selected, then place the new page into your scanner. From the Page pull-down menu, select *New* and *Scan*, then select *Insert Before* from the shortcut menu.

ApplicationXtender will scan the new page and insert it in the proper place in the Document Display view.

Insert a scanned page after the current page

To insert a page into a document after the current page, make sure that the document is open and selected, then place the new page into your scanner. From the Page pull-down menu, select *New* and *Scan*, then select *Insert After* from the shortcut menu.

ApplicationXtender will scan the new page and insert it in the proper place in the Document Display view.

Append a page to the current document

To append a page to the end of a document, make sure that the document is open and selected, then place the new page into your scanner. From the Page pull-down menu, select *New* and *Scan*, then select *Append* from the shortcut menu. (Alternatively, you can simply click **Scan** from the Scan toolbar, as in this case it will put the new page in the right place.)

ApplicationXtender will scan the new page and append it to the end of your document in Document Display view.

Batch scanning via ScanXtender

If you have the ScanXtender module installed, you may scan a batch of documents and index them in ApplicationXtender later.

ScanXtender's interface is very similar to that of ApplicationXtender, so most of the functions and toolbar buttons should be familiar.

You may create a batch in ScanXtender by scanning, by selecting files from disk or from a batch import file. The latter two methods work the same way as the "Create Documents in Batch" section described in the previous lesson.

When your scanner and documents to be scanned are ready, right-click the name of the application in Application view into which you want to scan a batch. From the shortcut menu, select *New Batch*.

As above, you may select single feed, manual feed or automatic feed mode. ScanXtender will scan the batch of documents and display them in its Batch Display view.

Retrieve Documents



Introduction

This section discusses how to query ApplicationXtender and retrieve scanned documents.

Objectives

At the conclusion of this section, participants will be able to:

- retrieve documents from ApplicationXtender.

Queries

Introduction

A query is a process that searches the documents in the database. You may query a single application or search across multiple applications, and search on either index fields, the text contained in the documents (where applicable), or both.

Query a Single Application

Steps

1. To query an application, right-click its name in the Applications view. From the shortcut menu, select *New Query*.
2. The Query view should appear.

Fields	Values
ID	
PIDM	
DOCUMENT TYPE	*
LAST NAME	Cheney
FIRST NAME	
SSN	

AND OR All Words Any Words Exact Phrase Expression

Include Previous Document Revision Search Save

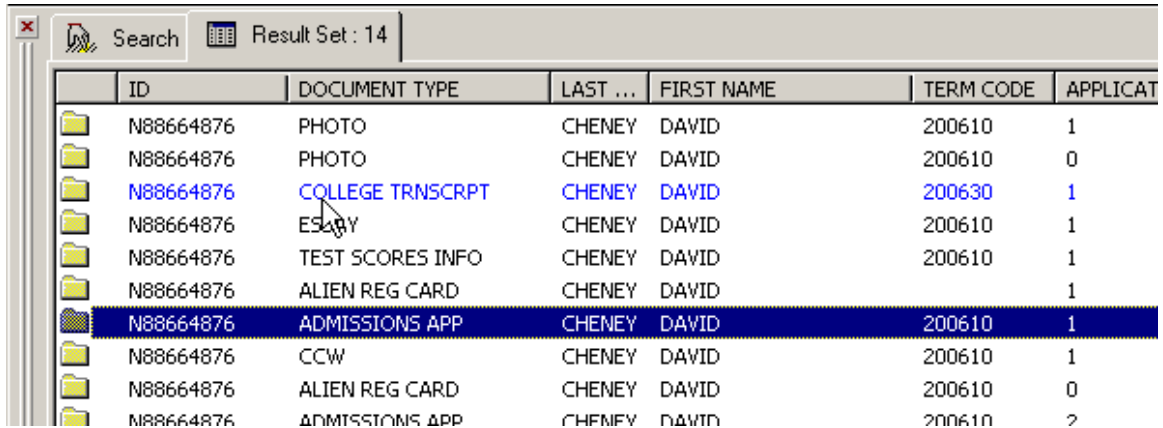
Enter index values as search criteria

The Search tab contains the index fields associated with the selected application. To search for specific values, enter those values in their respective fields on the Search tab and click **Search**. If more than one search term is entered, only results that match all terms will be returned.

You may enter an asterisk (*) as a wildcard as part of a search string. For example, searching for *Jo** will return all terms that begin with "Jo"; searching for *J*n* would return all terms that begin with "J" and end with "n", regardless of what was in the middle. Wildcards are valid for text, time-stamp, SSN, telephone, Zip code, boolean and user-defined list index field types.

Matches found

If one match is found, the matching document will be opened in Document Display view.



The screenshot shows a search results window titled "Search" with a "Result Set : 14" tab. The window displays a table with the following columns: ID, DOCUMENT TYPE, LAST ... (Last Name), FIRST NAME, TERM CODE, and APPLICAT (Application). The table contains 14 rows of data, all with the same ID (N88664876). The row for "COLLEGE TRNSCRPT" is highlighted in blue, and a mouse cursor is pointing at it.

ID	DOCUMENT TYPE	LAST ...	FIRST NAME	TERM CODE	APPLICAT
N88664876	PHOTO	CHENEY	DAVID	200610	1
N88664876	PHOTO	CHENEY	DAVID	200610	0
N88664876	COLLEGE TRNSCRPT	CHENEY	DAVID	200630	1
N88664876	ESSAY	CHENEY	DAVID	200610	1
N88664876	TEST SCORES INFO	CHENEY	DAVID	200610	1
N88664876	ALIEN REG CARD	CHENEY	DAVID		1
N88664876	ADMISSIONS APP	CHENEY	DAVID	200610	1
N88664876	CCW	CHENEY	DAVID	200610	1
N88664876	ALIEN REG CARD	CHENEY	DAVID	200610	0
N88664876	ADMISSIONS APP	CHENEY	DAVID	200610	?

If more than one match is found, the Result Set tab will list all matching documents. Selecting one of these documents will open it in Document Display view.

Enter full-text values as search criteria

If documents have been submitted to the Index Server (an ApplicationXtender add-on module), their text may be queried as well as their index fields. (Consult your administrator as to whether the Index Server is available on your system, if you're not sure.)

If the Index Server is available and the selected documents have been submitted to it, the Search tab will allow you to enter full-text strings.

You may search for:

- All Words (results matching all words entered are returned)
- Any Words (results matching one or more words entered are returned)
- Exact Phrase (results matching the search string exactly are returned)
- Expression (results containing the search string are returned)

Expression operators

To build a full-text search expression, enter the words you are searching for in the field, using expression operators between them:

Expression Operator	Sample	Result
And	Dick and Jane	Results containing both <i>Dick</i> and <i>Jane</i> are returned.
Or	Dick or Jane	Results containing <i>Dick</i> , <i>Jane</i> or both are returned.
Not	Dick not Jane	Results containing <i>Dick</i> but not containing <i>Jane</i> are returned.
Near (x)	Dick near (5) Jane	Results where <i>Dick</i> appears within five words of <i>Jane</i> are returned.
?	J?ne	Any character can take the place of the question mark. In this case, results containing either <i>Jane</i> or <i>June</i> are returned.
*	Jo*	Any string can take the place of the asterisk. In this case, all results containing words beginning with <i>Jo</i> are returned.
()	Dick and (Jane or June)	The section of the search expression within the parentheses is evaluated first. In this case, results containing <i>Dick</i> and also containing either <i>Jane</i> , <i>June</i> or both are returned.

Enter a combination of values as search criteria

If your document has been submitted to the Index Server, you may search for both index fields and full-text strings. To do so, enter all search terms (both index terms and text strings) in their respective sections of the Search tab.

Select **AND** to query for documents containing both the entered text string and the entered index terms. Select **OR** to search for documents matching either type of entry.

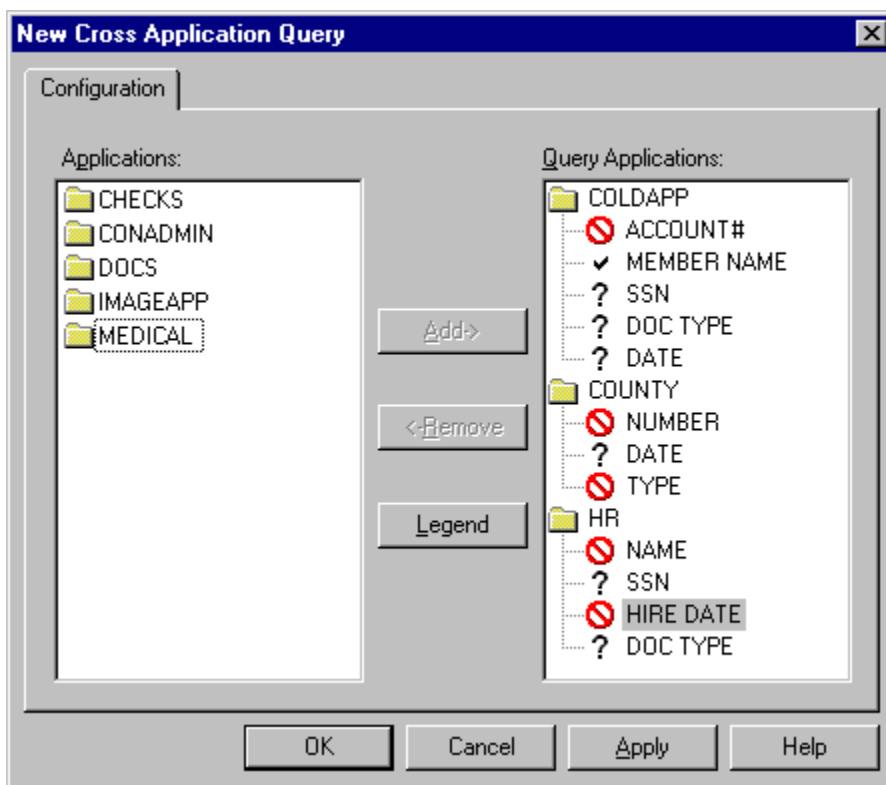
Query Multiple Applications

Introduction




Queries can be spread across multiple applications. These are known as *cross-application queries*.

Create a cross-application query

To begin a cross-application query, right-click the name of an application in the Query view, and select *New Cross App Query* from its shortcut menu.



Select the applications you wish to query from the Applications box, and double-click them or click **Add** to move them to the Query Applications box. Within the Query Applications box, you may designate application fields as follows:

	This field will not be used in the query.
	This field will be used as search criteria in the query.
	This field will appear in the query results, but will not be used as search criteria.

Search criteria

Each application selected for a cross-application query must have at least one search criteria field in common with another application in the query. For example, in the sample above, COUNTY shares DATE with COLDAPP, and HR shares SSN and DOC TYPE with COLDAPP.

Applications that do not share fields (that are set as search criteria with a question mark) with other query applications will return error messages and will be excluded from the query.

Click OK to save the query, **Apply** to apply changes to an existing query, or **Cancel** to exit without saving the query. Saved queries will appear in the Applications view under all applications that were selected within them.

Perform a cross-application query

Right-click a cross-application query, then select *Edit Query* from its shortcut menu. Enter the desired values in the Search tab of the Query view, then click **Search**. You may use wildcards, expressions, full-text or combinations of these, just as in a normal query.

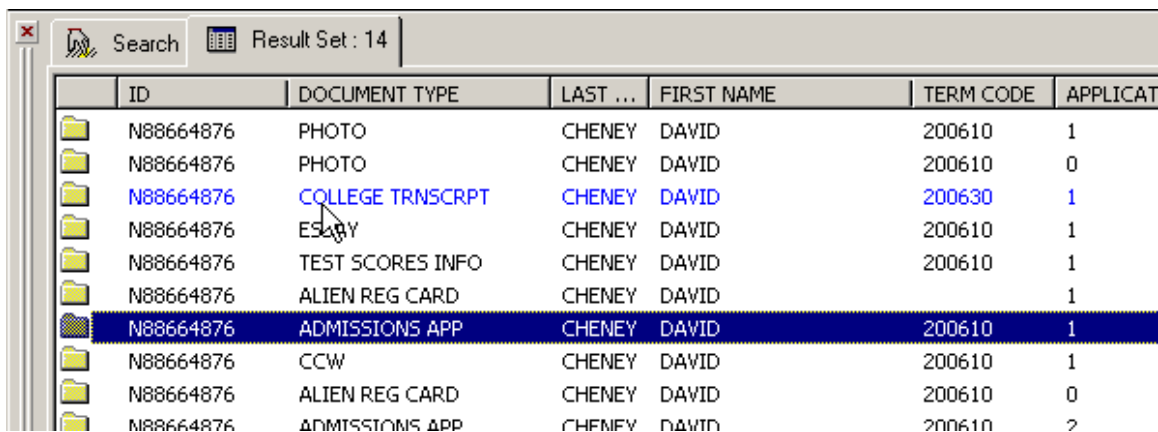
Modify a cross-application query

To modify an existing cross-application query, right-click it in the Application view and select *Configure*. You may then edit the contents of the query.

Display Documents From the Result Set

Introduction

When a query has executed and more than one matching result has been found, the Result Set tab will be added to the Query view. (If only one result matches the query, the matching document will automatically be displayed.)



	ID	DOCUMENT TYPE	LAST ...	FIRST NAME	TERM CODE	APPLICAT
Folder	N88664876	PHOTO	CHENEY	DAVID	200610	1
Folder	N88664876	PHOTO	CHENEY	DAVID	200610	0
Folder	N88664876	COLLEGE TRNSCRPT	CHENEY	DAVID	200630	1
Folder	N88664876	ESSAY	CHENEY	DAVID	200610	1
Folder	N88664876	TEST SCORES INFO	CHENEY	DAVID	200610	1
Folder	N88664876	ALIEN REG CARD	CHENEY	DAVID	200610	1
Folder	N88664876	ADMISSIONS APP	CHENEY	DAVID	200610	1
Folder	N88664876	CCW	CHENEY	DAVID	200610	1
Folder	N88664876	ALIEN REG CARD	CHENEY	DAVID	200610	0
Folder	N88664876	ADMISSIONS APP	CHENEY	DAVID	200610	2

Display ApplicationXtender documents

To open a document in Document Display mode, double-click it in the Result Set window.

A yellow folder icon indicates that the document is available for viewing and editing. If the folder icon also contains a red checkmark, someone else has "checked out" the document; in this case, you may open the document in read-only mode. A gray folder icon indicates that the matching document is a previous revision, and can only be opened in read-only mode.

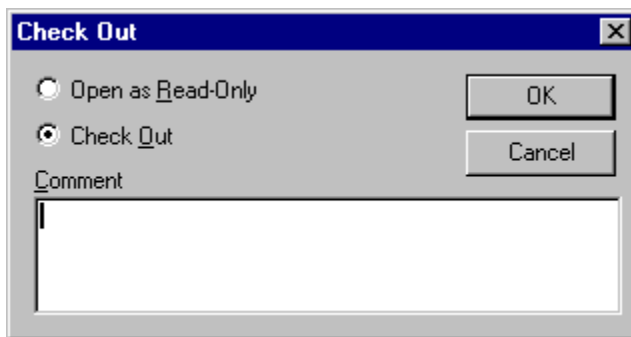
Select the display mode for an ApplicationXtender document

The Data tab of the Configuration dialog box contains the following check box:

Prompt for check out when open

If this check box is not selected, you are in Normal mode. You may open any document that is not checked out by another user, make changes to it, and save those changes as needed.

If this check box is selected, ApplicationXtender will be in *Check In/Check Out* mode. In this mode, whenever a document is opened that another user has not checked out, the following box appears:

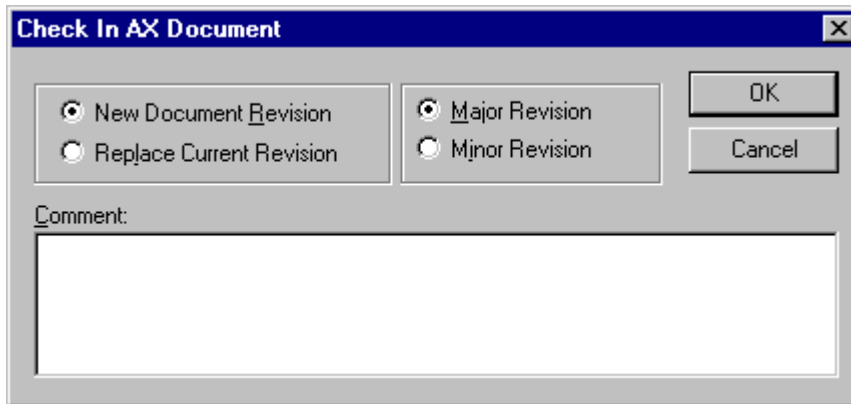


(This box also appears when you select Check Out from the Document pull-down menu, regardless of which access mode you are in. This allows a Normal mode user to check a document out to prevent others from modifying it.)

Select **Open as Read-Only** to work with a non-editable copy of the document, or select **Check Out** to obtain a writable document.

Until you check the document back in, other users will be restricted to a read-only version of the document, based on the last version available before you checked it out. (The system administrator can cancel checked-out status, if necessary.)

The Check In function is found on the Document pull-down menu.



You may check the document back in as a new revision or by replacing the previous version, and can label the revision as major or minor. Changes to your ApplicationXtender document are not available to other users until the document has been checked in.

View full-text search results

When you have retrieved a document using a full-text query, the Full Text Search Results box will appear when you display the document.

You may navigate between occurrences of your search string with the **Previous** and **Next** functions, or click **Show All Hits** to highlight all appearances of your search string within the text.

View documents from Unknown Data Sources

When opening ApplicationXtender documents from outside sources (such as documents received via email, or documents saved on your desktop), ApplicationXtender may not recognize the data source.

If the **Allow map of unknown data sources** check box is selected on the Configuration tab, the Pick A Data Source dialog box may appear when opening one of these documents. Select the correct data source from the list and click OK.

If this check box is not selected, you cannot open documents from unrecognized data sources.

Document Text Queries

Introduction

In ApplicationXtender, you may search for keywords or phrases in text documents.

Text query from the document display view

To find text within the current document, select *Text search* from the Edit pull-down menu, or click **Text Search** on the Main toolbar.

1. In the Search dialog box, enter the desired text in the **Find Text** field.
2. Select *Ignore Case* to ignore upper/lower case distinctions in searchable text.
3. Select the **Fuzzy** check box to employ “fuzzy logic” when searching. When fuzzy logic is activated, text that is not an exact match but does match the first two or last two letters will be returned. This can be very useful when searching for many common names that are similar (Klein and Kline, John and Jon, or Jeff and Geoff, for instance).
4. Select *Page* to search only the current page, or *Doc* for all pages in a document.
5. Select *Next* to search downward (toward the end of the document) from the current position, or *Previous* to search upwards (toward the beginning).
6. Select *Top* to start the search at the top of the page, or *Last Match* to start at the last match found.
7. Click OK to begin the search.

The first match found will be highlighted, or a “No Match Found” message will be returned if the search text is not located in the document.

Select *Text Search Again* from the Edit menu to repeat the search.

Text query from the result set

Searching from the Result Set allows multiple documents to be searched at once, without having to open or display the searched documents.

1. Select the document(s) to be searched from the Result Set.
2. Right-click the Result set, then select Text Search from its shortcut menu.
3. Enter your desired text string in the **Search String** field.
4. Select the **Fuzzy** check box to employ "fuzzy logic" when searching. When fuzzy logic is activated, text that is not an exact match but does match the first two or last two letters will be returned. This can be very useful when searching for many common names that are similar (Klein and Kline, John and Jon, or Jeff and Geoff, for instance).
5. Select *Ignore Case* to ignore upper/lower case distinctions in searchable text.
6. Click OK to begin the search.

If the search string is found in any of the searched documents, a report will be generated listing the lines where the string was found. The search string will appear as a hyperlink within each line; to view the document in which the line was found, click the search string.

Special search characters

There are several characters that may be used as search operators in text searches.

Character	Function
*	<p>The asterisk serves as a wild card, and can be used to find words that match strings of characters.</p> <p>Examples:</p> <p><i>tele*</i> would return <i>telephone</i>, <i>telegram</i> and <i>telemarketer</i>, but not <i>clientele</i>.</p> <p><i>*tele</i> would return <i>clientele</i>.</p> <p><i>tel*m</i> would return <i>telegram</i>, but not <i>telephone</i> or <i>teleprompter</i>.</p>
@	<p>The @ can replace any single letter in a text search.</p> <p>Examples:</p> <p><i>telephon@</i> would return <i>telephone</i> but not <i>telephonic</i>.</p> <p><i>cho@e</i> would return <i>choke</i>, <i>chose</i> and <i>chore</i>, but not <i>chosen</i>.</p>
#	<p>The # can replace any numeric character in a text search.</p> <p>Examples:</p> <p><i>91#</i> would return <i>911</i> or <i>915</i>, but not <i>9111</i> or <i>91X</i>.</p>
!	<p>The ! can replace any non-space character.</p> <p>Examples:</p> <p><i>81!8</i> would return <i>8158</i>, <i>81K8</i> or <i>81Q8</i>, but not <i>81558</i>.</p>
?	<p>The ? can replace any single character, including the other special search characters.</p> <p>Examples:</p> <p><i>bob?bignet.com</i> would return <i>bob@bignet.com</i>.</p>

Manage Queries

Save a query

To save a query, click **Save** in its Search tab. If the query has already been run, you may right-click its name in the Applications view, then select *Save As* from the shortcut menu.

Enter a name for your query when prompted. You may select the **Available to all users** check box to make your query public, or leave the check box empty to keep it private.

Run a query

To run a query, right-click its name in the Applications view. From the shortcut menu, select *Run Query*. Alternatively, click **Run Query** from the Main toolbar.

Edit a query

To edit an existing query, right-click its name in the Applications view. From the shortcut menu, select *Edit Query*. The Query Search tab will appear.

Change the query as needed, then click **Save** to save it under its existing name.

Query access rights

Queries may be either public or private. Public queries may be run by anyone who has access to the associated application; private queries may only be run by their creator. Public queries have an unlocked padlock icon next to them; private queries have a locked padlock icon.

You may also right-click a query's name in the Applications view to view its public/private status. If *Make Public* is grayed out, the query is public; if *Make Private* is grayed out, the query is private.

Select *Make Public* or *Make Private* (whichever is appropriate) to change the saved query's status.

Rename a saved query

From the Applications view, right-click a query to call up its shortcut menu, then select *Rename* to rename it.

Delete a query

From the Applications view, right-click a query to call up its shortcut menu, then select *Delete* to delete it.

View Documents



Introduction

This section discusses how to view retrieved documents in ApplicationXtender.

Objectives

At the conclusion of this section, participants will be able to:

- view retrieved documents in ApplicationXtender.

View Documents

Introduction

Once you have retrieved your desired documents, ApplicationXtender contains several methods of viewing them. You can easily navigate between pages in a document, rotate the document, scale the document, zoom in and out, view thumbnails, view differing versions of a page, or display multiple documents at once.

Select Pages to View Within a Document

Introduction

You may navigate between pages of a multiple-page document via several methods: the Document pull-down menu, the keyboard and the Image toolbar all contain these functions.

Next, Previous and GoTo Page functions

The Previous Page function navigates to the previous page in a document. If you perform this repeatedly and reach the first page in the document, it will wrap around to the end of the document.

The Next Page function navigates to the next page in a document. If you perform this repeatedly and reach the last page in the document, it will wrap around to the beginning of the document.

The GoTo Page function lets you specify a page to navigate to.

View thumbnails

Select the Thumbnail view from the Main toolbar to open up the Thumbnails window. With that window open, select Thumbnails from the Document pull-down menu to call up buttons that jump directly to specific pages of your multiple-page document. A miniature image of each page is depicted on its corresponding button.

Double-click a button to view its corresponding page.

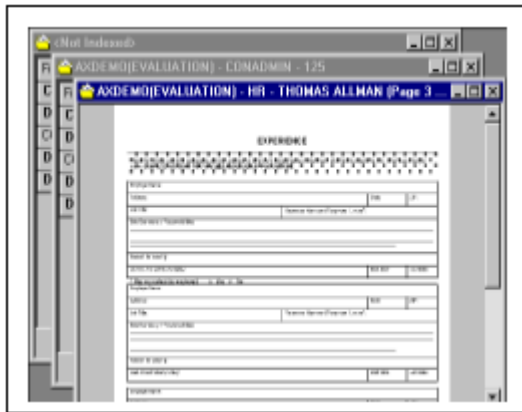
View versions of a page

If more than one version of a page exists, the newest version is displayed under normal circumstances. The Show Version functions of the Page pull-down menu let you view the previous, next, oldest or newest version of the current document.

View Multiple Documents and Pages

Cascade

The Cascade function takes all open document windows and arranges them in a diagonal line, with the active window at the lower right (on the top of the pile).

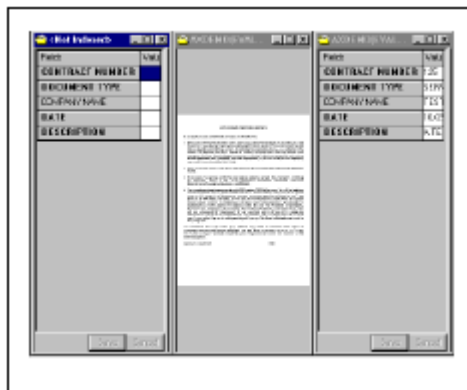


Tile

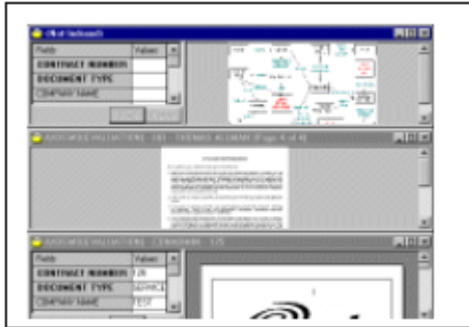
The Tile functions resize all active document windows so that all are visible and they all have the same dimensions on the screen.

You may select the Tile function from the Window pull-down menu, or click the **Tile Vertical** or **Tile Horizontal** buttons on the Main toolbar. (The Window pull-down menu function is equivalent to the **Tile Horizontal** button.)

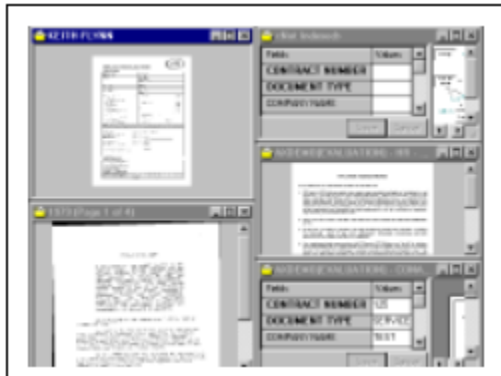
If you have three or fewer document windows open, the **Tile Vertical** button will arrange the windows across the page, as vertical rectangles.



If you have three or fewer document windows open, the **Tile Horizontal** button (or Tile function from the Windows pull-down menu) will arrange the windows across the page, as horizontal rectangles.



If there are four or more document windows open, all of the Tile functions and buttons will arrange the windows both horizontally and vertically, fitting the windows onto the screen as they best fit.



Split view

The View menu contains two functions that allow you to view two pages of a single document at once.

Split Vertically and Split Horizontally arrange two windows across the screen in a similar manner to Tile Vertical and Tile Horizontal, except that the maximum number of pages displayable is two. The No Split function returns the window to a single page.

When a page is split into two, the Previous and Next Page functions increment the page count by two instead of by one. (For instance, if you're viewing pages 3 and 4 of a ten-page document, clicking Next Page will call up pages 5 and 6.)

Display documents in a duplicate window

To open a second copy of a document in read-only mode, select Duplicate Document from the Document pull-down menu (or enter **[CTRL-F5]**). A new window will open with a read-only duplicate of your current document.

Page View Functions For Multiple Page Types

Sticky view

Sticky View modes allow you to save settings for viewing specific types of documents.

Zoom

The Zoom In and Zoom Out functions allow you to increase or decrease the viewing scale of your document. If you want to select a viewing scale with precision, the Zoom Percent function allows you to select a percentage of actual size to zoom to.

Zoom can be used with images, text or OLE objects.

Rotate

You may rotate images in 90-degree increments to the left or the right.

Magnifier

The Magnifier function changes the mouse pointer to a magnifying glass. You can move the pointer over a document and click to focus on a specific area, and resize the Magnifier window to change the size of the viewable area.

Use the slide bar to determine the degree of magnification (from 50% to 400%).

Scale-to-Gray

Black-and-white images can be converted to grayscale via the Scale-to-Gray function. This greatly enhances readability for many documents.

Regions

You can select specific regions of an image by deselecting the **Pan Mode** button on the Image toolbar. This puts you into Select mode. To select a region, click-and-drag the cursor across the current document image; the selected region will turn green.

Once a region has been selected, you can right-click to call up a menu with the following functions:

- You may cut or copy a region to the Clipboard. (Cutting a region does not remove it from the document image itself; it merely removes the green selection rectangle from the image.)
- You may delete a selected region
- You may print the region as-is
- You may magnify a region and save it, print it or copy it to the Clipboard in its magnified state
- You may perform OCR on a selected region

View Specific Page Types

Image pages

After performing OCR on an image, you may switch between image and text views of that page by clicking the **Show OCR Text** toggle button on the Image toolbar.

Text pages

Text documents may always be displayed in plain text mode without an overlay, with a text overlay or with an image form overlay. Documents appear as text documents in plain text or text overlay modes, and as images in image form overlay mode.

Users of ColdXtender or ErmXtender may display a document with a form overlay. (Consult your administrator for more information on these products.)

When in text mode, you may freeze horizontal and/or vertical regions for viewing purposes.

You must be in Pan mode (your cursor appears as a hand; the Pan mode button on the Image toolbar must be selected) to lock a title region. Place your cursor at the desired location in the text region and right-click. Select *Set Horizontal Title*, *Set Vertical Title* or *Set Horizontal and Vertical Title* to place blue bars across the text window.

When you use the scrollbars on the text window, the text above a horizontal blue bar or to the left of a vertical blue bar will not scroll. Right-click and select *Clear Title* to remove the bars from the text window.

PDF files

The View tab of the Configuration window (accessible by clicking **Configuration** from the Main toolbar) lets you specify whether or not to use the Outside In viewer to display Adobe PDF files.

If the **Use Outside In Viewer to display PDF files** check box is selected, Outside In will be used to view PDFs. If the check box is not selected, you will need to have Adobe Acrobat Viewer 4.0 (or higher) installed on your system to view PDFs.

Foreign files

The View tab of the Configuration window (accessible by clicking **Configuration** from the Main toolbar) lets you specify whether or not to use the Outside In viewer to display unsupported file types.

If the **Use Outside In Viewer to display foreign files** check box is selected, Outside In will be used to view file types not directly supported by ApplicationXtender. If the check box is not selected, you will need to have an appropriate third-party viewer for each unsupported file type installed on your system. File types that cannot be viewed by ApplicationXtender will be displayed as icons.

OLE objects

OLE objects can be viewed and edited in the Document Display view, as long as the appropriate application for your OLE object type is installed on your system.

Document View Properties

Introduction

Right-click a document and select Properties from the subsequent menu to edit the view properties for the document.

General tab

On this tab, you can select the appropriate action for the left mouse button when viewing documents (scrolling the image, select an image w/o scrolling, or select annotations), temporarily disable the right-click context menu (to reenable it, close the document and reopen it), turn scrollbars on or off, and specify the zoom percentage at which to view the document.

Image tab

On this tab, you can select black-and-white, 16-color grayscale or 256-color grayscale for the images in the current document.

If the **Display image in its actual scale** check box is selected, you can select a custom DPI at which to view the image.

Text tab

On this tab, you can enable colored bars across OCR'd text for readability purposes, and select the height and color of the bars. You may also select the font and font settings, tab size and form overlay.

OCR tab

This tab allows you to specify various options for OCR output.

Page Information

Introduction

Right-click a document and select Information from the subsequent menu to view various information about the document. Information types displayed include file type, file size, width, height, bits per pixel, resolution and/or compression type on the Information tab, or image and annotation pathnames on the Files tab.

Overview of BDMS



Introduction

Welcome to the Banner Document Management Suite (BDMS) document management enterprise solution for Banner. BDMS is a powerful addition to your family of Banner applications.

Objectives

This section introduces you to the BDMS enterprise solution and describes its key concepts and features. It includes the following:

- Overview of Banner Document Management Suite
- Description of BDMS functionality
- BDMS terminology
- Using BDMS query rules
- Executing queries

Overview of Banner Document Management Suite

Introduction

BDMS is an imaging and electronic document management system for clients who use Banner products. It is designed to meet the imaging and document management requirements of higher education.

BDMS provides integration with the Banner application suite. Specific integration is within each of the five functional areas – Human Resources, Finance, Student, Financial Aid, and Advancement. BDMS works as an integrated product with Banner and Documentum's document management system, ApplicationXtender (AX).

Scanning and indexing tie image and document data to Banner information. In addition, ApplicationXtender (as well as other Documentum products) can be used standalone outside the Banner environment so clients can scan important documents which do not need indexing to Banner applications.

BDMS allows you to:

- Generate a query from within a Banner form
- Limit the scope of the query based on document type, and where applicable, to block level, item level, or value level
- Access ApplicationXtender to view Banner documents online
- Index new documents on the fly from a Banner Form

BDMS Functionality

Introduction

A BDMS toolbar icon is available on all Banner forms as part of the Banner General 6.1 release. This icon allows you to access the AX application from within Banner. It also allows auto-querying of objects based on the cursor's location (touchpoint) within a Banner form.

ApplicationXtender can run stand-alone and can store index values that are not Banner-related.

Clients are able to utilize ApplicationXtender, DiskXtender, WebXtender, and OCR/ICR applications without Banner for information that doesn't logically fit with Banner. Documents such as letters to college personnel, can be captured and managed in this way.

ApplicationXtender can manage and view the images, and WebXtender can make these images available on the Web.

- Clients may scan and index documents singularly or in batch
- All documents can be retrieved through Banner and AX stand-alone, subject to security restrictions
- Images and documents are available across the entire enterprise, including both client server-connected Banner workstations and clients using the Web-enabled version of Banner

Banner 8 Enhancements to BDMS

Enhancements

The following technical enhancements are part of the Banner 8.0 release.

HR FLAC Self-Service Integration with BDMS

The BDMS 8.0 release includes streamlining of the optional integration components and guidelines for linking the HR Faculty Load and Compensation Self-Service Banner enhancement, delivered with Banner HR 8.0 and Employee Self-Service 8.0 to the AppXtender Web Access (WX) product.

For technical details on this enhancement, please refer to the *Banner Document Management Suite 8.0 Release Guide*.

Financial Aid Requirements Linking

The BDMS 8.0 Financial Aid requirements linking process was modified to accommodate the addition of a new Active indicator field in Financial Aid's Tracking Requirements Table (RTVTREQ) and their Fund Code table (RFRBASE). The new fields were added as part of the new Financial Aid Algorithmic Packaging enhancement for Financial Aid 8.0.

BDMS PL/SQL packages and forms for the tracking requirements linking functionality in BDMS have been modified accordingly.

For technical details on this enhancement, please refer to the *Banner Document Management Suite 8.0 Release Guide*.

Internationalization

- BDMS 8.0 has been certified to work with databases using the UTF8 standard.
- BDMS 8.0 PL/SQL packages and some forms have been modified to accommodate column name expansions for the First Name and Social Security Number columns.

For technical details on this enhancement, please refer to the *Banner Document Management Suite 8.0 Release Guide*.

The following enhancements are among the improvements shipped with Banner Document Management Suite 8.1:

- The BDMS Query and Add Documents icons have been adjusted to reflect the product's name change to Banner Document Management Suite.
- BDMS has been certified with ApplicationXtender version 5.40 SP1.
- Integration with the new Banner Travel and Expense Management module has been added. More information on this integration is available in the Banner Travel and Expense Management documentation.

BDMS Terminology

Annotation

Note or shape you can add to a document page, typically to focus attention on a particular part of the page.

Application Xtender™ (AX)

Component of Documentum Software's suite of Document Management Suite™ products that facilitates file/object storage, OCR, and many other features for document management.

BDMS Application

Index-driven data storage structure where documents can be stored and retrieved. An application stores related documents pertaining to a specific functional area.

BDMS-enabled

Form has been regenerated (recompiled) following installation of Banner General 6.1.

BDMS Query icon

Icon on the Banner toolbar which, when clicked, opens the ApplicationXtender product so a query can be performed.

BDMS Add Document icon

Icon on the Banner toolbar which, when clicked, opens the ApplicationXtender product so a new document may be indexed.

Context

Actual cursor location within a Banner form where you are when you click the BDMS icon to access the ApplicationXtender system and create a query.

Document

File or group of files stored in an application and identified by one unique set of index information. Each page of a document is a single object, such as a scanned image file or a word processing document. A document can be as small as one page, or it can contain thousands of pages.

Document Type

User-defined code that identifies each type of document that is stored and indexed in a BDMS application.

Index

Group of fields where information relating to documents is stored. When a document is stored in an application, the index values you enter identify the document.

Documentum

Formerly OTG Software, Inc., and Legato Systems, Inc. (Bethesda, MD). The SunGard Higher Education partner for this integrated enterprise solution.

Page

Single object within a document. Each page of a document shares the document's index values.

Banner Document Management Suite (BDMS)

Combination of the ApplicationXtender product with all the Banner-based software that integrates the two products into a functional model where Banner can drive AX.

BDMS Applications

Introduction

A BDMS application is an index-driven data storage structure where documents are stored and retrieved. Banner Document Management Suite includes 18 BDMS applications.

Not all of the applications are available to every user. You can access only those applications that are appropriate to your area of functionality.

Applications delivered

The applications delivered with BDMS are:

Banner Product	Banner Document Management Suite Applications
Advancement	Advancement – Gift/Pledge-Related (B-A-IDGP) Advancement – ID-Related (B-A-ID)
Human Resources	Human Resources – ID-Related (B-H-ID) Human Resources – Employee-Related (B-H-EMPL) Human Resources – Applicant-Related (B-H-APPL) Human Resources – Position Control Related (B-H-POSN)
Finance	Finance – ID-Related (B-F-ID) Finance – Document-Related (B-F-DOCS) Finance – Grant Related (B-F-GRNT) Finance – Proposal Related (B-F-PROP)
Student	Student – ID-Related (B-S-ID) Student – Admissions-Related (B-S-ADMN) Student – Course Reference-Related (B-S-CRSE) Student – Degree Number-Related (B-S-DGRE) Student – Section Related (B-S-SECT)
Financial Aid	Financial Aid – ID-Related (B-R-ID) Financial Aid – Tracking Requirement-Related (B-R-TREQ)
General	General – ID-Related (B-G-ID)

BDMS Context Rules

Introduction

Context rules define the actual cursor location (context) within the Banner form that you are in immediately before you click the BDMS icon on the Banner toolbar.

When the BDMS icon is clicked, ApplicationXtender (AX) or WebXtender (WX) is accessed and the query is run based on the location of the cursor within the Banner form.

The rule identifies the BDMS application that is used in the query, as well as the document type. If no document type is specified in the rule, the query will run for all document types within that BDMS application.

Types

There are four types of context rules in BDMS:

- Form-level rules run a query from any location on the Banner form.
- Block-level rules run a query from any location within a specific block of a Banner form.
- Item-level rules run a query from a specific field within a Banner form.
- Item-value-level rules run a query based on the value of the specific field within a Banner form.

Examples

In example 1, clicking the BDMS icon anywhere in SPAPERS uses the B-S-ID BDMS application to query all document types.

In example 2, clicking the BDMS icon anywhere in the SARADAP block in SAAADMS uses the B-S-ADMN BDMS application to query the Admissions Application document type.

In example 3, clicking the BDMS icon in the **SPBPERS_SSN** field of the SPBPERS block in SPAPERS uses the B-S-ID BDMS application to query the Social Security Card document type.

In example 4, clicking the BDMS icon in the **SPBPERS_DEAD_IND** field when it has a value of *Y* in the SPBPERS block in SPAPERS uses the B-S-ID BDMS application to query the Death Notice document type.

#	Form Name	Block Name	Item Name	Item Value	BDMS App	Doc Type
1	SPAPERS				B-S-ID	
2	SAAADMS	SARADAP			B-S-ADMN	ADMISSIONS APP
3	SPAPERS	SPBPERS	SPBPERS_SSN		B-S-ID	SSN CARD
4	SPAPERS	SPBPERS	SPBPERS_DEAD_IND	Y	B-S-ID	DEATH NOTICE

Context Rules Hierarchy

When a query is executed, the level of the context rule involved determines the results returned by the query. A form level rule can be superseded by a rule that has higher priority. The priority of rules from lowest to highest is form, block, item, and item-value.

If two or more rules apply to a cursor location, the rule with the highest priority takes precedence. For example, if an item-level rule and a block-level rule both apply to a specific field, the item-level rule has higher priority and is used to run the query.

Banner Linking

Introduction

Functionality is in place in BDMS to allow the indexing of certain Student and Financial Aid documents to automatically update Banner data.

There are two specific situations when indexed documents in AX automatically update Banner data:

- When a Banner Student Admissions checklist requirement document (for example, a high school transcript) is indexed in AX
- When a Banner Financial Aid Tracking Requirements checklist document (for example, a savings statement) is indexed in AX

The indexing of these documents in AX is essentially the same as marking them as “received” in Banner, which means there is no need to manually update Banner. Double processing is eliminated.

Attaching Documents

Introduction

The ability to toggle between Banner and the Documentum system allows scanning, indexing and querying to be accomplished with one login. The BDMS system comes with 18 delivered applications, complete with context points, Banner linking and document types already in a validation table.

Levels

Documents can be attached on any of four levels:

- Form - Documents may be attached and queried at this level. Any documents attached at a lower level (the Block, Item or Item value) may also be queried.
- Block - Documents may be attached and queried at this level.
- Item - Documents may be attached and queried at this level.
- Item Value - Documents may be attached and queried at this level.

Requirements

The appropriate context rules must be in place to allow the documents to be attached at any of these levels. In addition, the context rules also identify the Imaging application that the documents will be queried and attached through.

The scanning and indexing process is the primary method of obtaining documents and attaching them to the Banner system.

Correcting Indexes

Introduction

Occasionally, mistakes are made when indexing documents. When this happens, corrections need to be made.

Methods

With the BDMS system, the correction is accomplished by exporting the document to the desktop, importing it back in and re-indexing it.

Alternatively, the document may be cut to the clipboard, and then pasted as a new document and indexed to the correct individual.

Once the document has been re-indexed, the version of the document that was in error should be deleted. Remember to remove the erroneous document from the desktop, as well.

Executing Queries in BDMS



Introduction

This section discusses BDMS queries and how to execute them in Banner.

Objectives

At the conclusion of this section, participants will be able to

- execute BDMS queries in Banner.

BDMS Display Documents Icon

Introduction

A BDMS Display Documents icon has been added to the Banner toolbar. This icon allows you to open ApplicationXtender from within Banner and execute queries. It also allows autoquerying of objects based on the location of your cursor (touchpoint) within a Banner form.

Note: This icon was called the BDMS Query icon prior to release 8.1.

Defaults

By default, client/server Banner will attempt to open ApplicationXtender first, and WebXtender if AX is not available on the workstation. On the other hand, INB (Internet Native) Banner will default to the WebXtender application when the BDMS icon is invoked. These defaults may be overridden by selecting the <Tools> menu and choosing <User Preferences> to invoke the EXAUPRF form. Additional bridging components must be installed to use one of the non-default options.

Icon

Here is an enlarged image of the BDMS Display Documents icon:



BDMS Add Documents Icon

Introduction

A BDMS Add Documents icon has been added to the Banner toolbar. This icon allows you to invoke ApplicationXtender (or WebXtender) from within Banner and index a new document from an imported file. In addition, this feature will open the appropriate application to store the new document based on the context rules outlined above, and will auto-fill the index fields with the information from the currently selected student record in Banner.

Icon

Here is an enlarged image of the BDMS Add Documents icon:



The next lesson contains a screen capture of a Banner form with the BDMS icons on the toolbar.

Running a Query from Banner

Steps

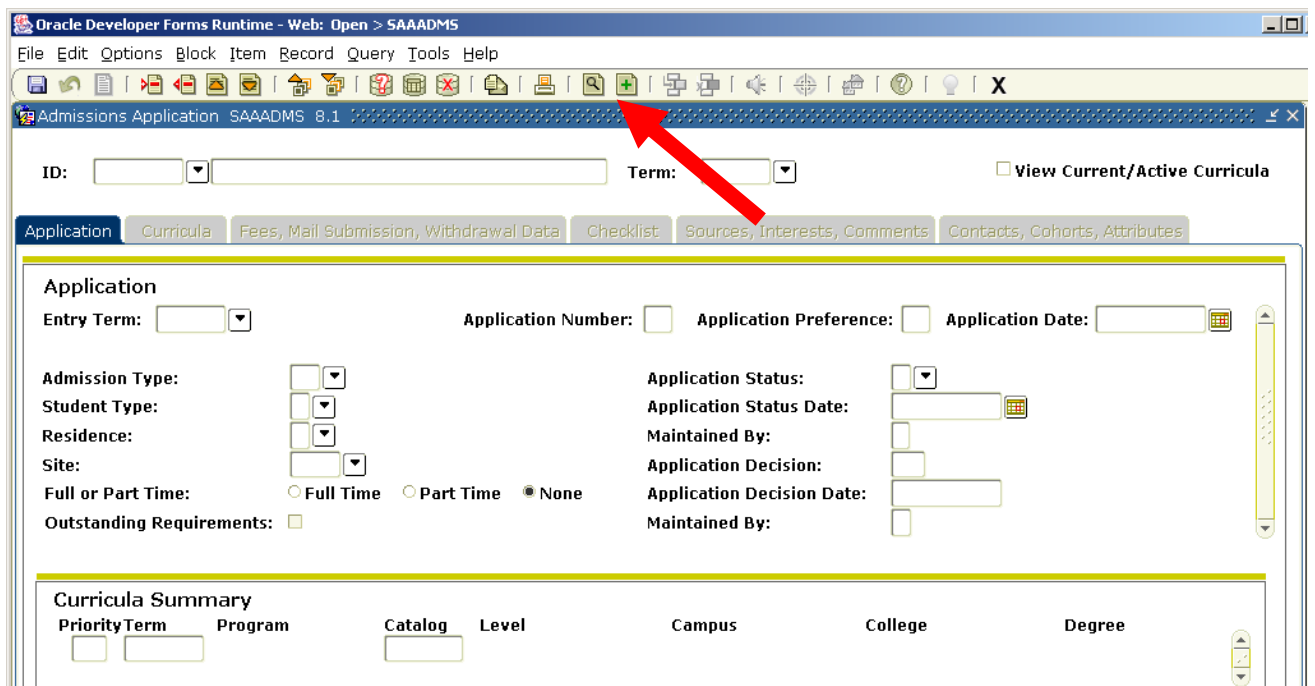
1. Access the appropriate form in Banner.

If the query can be executed at block-level, item-level, or item-value-level, place the cursor at the appropriate location in the form.

If the query is to be executed at form-level, the cursor can be placed anywhere in the form.

2. Click the BDMS Query icon on the Banner toolbar.

Your results are automatically displayed in ApplicationXtender (or WebXtender).



The screenshot displays the Oracle Developer Forms Runtime interface for the 'Admissions Application SAAADMS 8.1' form. The window title is 'Oracle Developer Forms Runtime - Web: Open > SAAADMS'. The menu bar includes 'File', 'Edit', 'Options', 'Block', 'Item', 'Record', 'Query', 'Tools', and 'Help'. The toolbar contains various icons, with a red arrow pointing to the 'BDMS Query' icon (a magnifying glass with a plus sign). Below the toolbar, the form fields are organized into sections: 'Application' (with fields for ID, Term, Application Number, Application Preference, Application Date, Admission Type, Student Type, Residence, Site, Full or Part Time, and Outstanding Requirements) and 'Curricula Summary' (with a table header for Priority, Term, Program, Catalog, Level, Campus, College, and Degree). A 'View Current/Active Curricula' checkbox is located in the top right corner of the form area.

BDMS Messages

Messages

When executing a query, messages display to give you the information pertaining to the query, or to the status of the system. There are two types of messages:

Tooltip messages – Customized messages which display by right-clicking the BDMS icon; messages are based on the results returned during the execution of a query.

Alert messages – Messages which display if you are not set up to use BDMS, or if the required software is not present.

Tooltip Messages

The following messages appear during a “right-click” of the BDMS icon on the Banner toolbar:

- *Banner Document Management Suite* – Displays whenever the mouse is moved over the BDMS icon at a non-BDMS site. This message also appears at a BDMS site until AX is opened.
- *(Customized text, based on a real query of AX Data)* – Displays when you right-click the BDMS icon and AX is running. This will only occur when BDMS is installed and the form has been BDMS-enabled.
- *No Banner Document Management Suite Context Rules Apply to This Location* – Displays when the mouse is right-clicked on the BDMS icon at BDMS sites where the form has been BDMS-enabled and no context rules apply to the cursor

Alert Messages

- *The link to Banner Document Management Suite cannot be established because the required software is not present. For information about Banner Document Management Suite, contact your Account Consultant.*
Displays when the BDMS icon is clicked and the form is not BDMS-enabled.
- *While Banner Document Management Suite is installed at your site, you are not set up as a user in that system. Please contact your Administrator for information.*
Displays when the BDMS icon is clicked and the Banner form is BDMS-enabled, but you have not been set up as a user

Exercises



Introduction

This chapter contains exercises that will demonstrate common procedures using ApplicationXtender.

The sample pages for these exercises are found in the next chapter.

Exercise 1

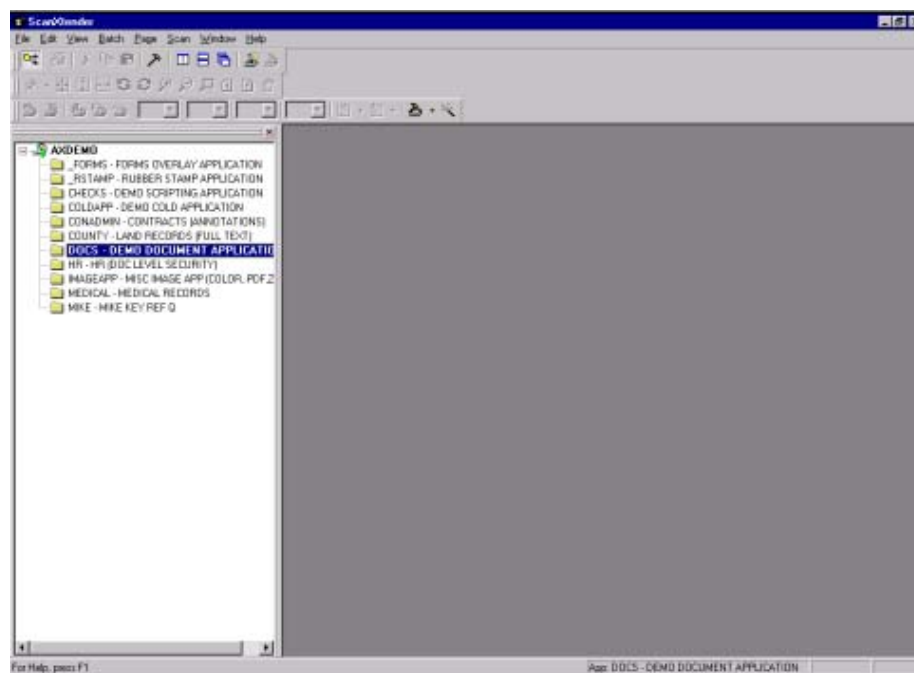
Purpose

Scan a batch of documents into ScanXtender. Scan Pages 2 to 5.

The sample pages for these exercises are found in Section K.

Actions

1. In the Start menu, go to Programs, select ApplicationXtender, and select ScanXtender.
2. Select the correct database; in this case, it is AXDEMO.
3. Select an application by double-clicking it. The application selected shows up in Bold and also shows up in the Status bar at the bottom of the screen, as shown below.



4. Select **Batch** from the menu bar.
5. Type in the Batch ID and name it (e.g. "**two-five**") in the dialog box.

(It is assumed that the trainees are familiar with their scanners and their settings. For our exercise, a HP PrecisionScan scanner was used.)
6. Make sure the settings on the scanner are set for Multiple feed, correct DPI and Color.
7. Make sure you are logged in the right database and application. (E.g. DOCS-DEMO DOCUMENTS APPLICATION)
8. Load the sheets numbered 2 to 5 to scan in the scanner.
9. From the Menu bar, select '**Scan**'.
10. A dialog box pops up and requests name of the batch. Type in a name, by which you can link this batch of scans (e.g. "**two-five**").
11. Make sure the page orientation matches the way the document should be viewed on the monitor. (E.g., If the document is fed upside down then you will view it upside down on your screen. You can rotate displayed documents, however.)
12. The HP Scanner dialog box pops up. It shows "Scan to AX".
13. Uncheck the box in front of "Select parts of page of view page first".
14. Click on **Scan**. This may differ with the scanner installed at the client's site.
15. To close the batch, go to **File** and select **Close**.
16. **Exit** out of ScanXtender.

Exercise 2

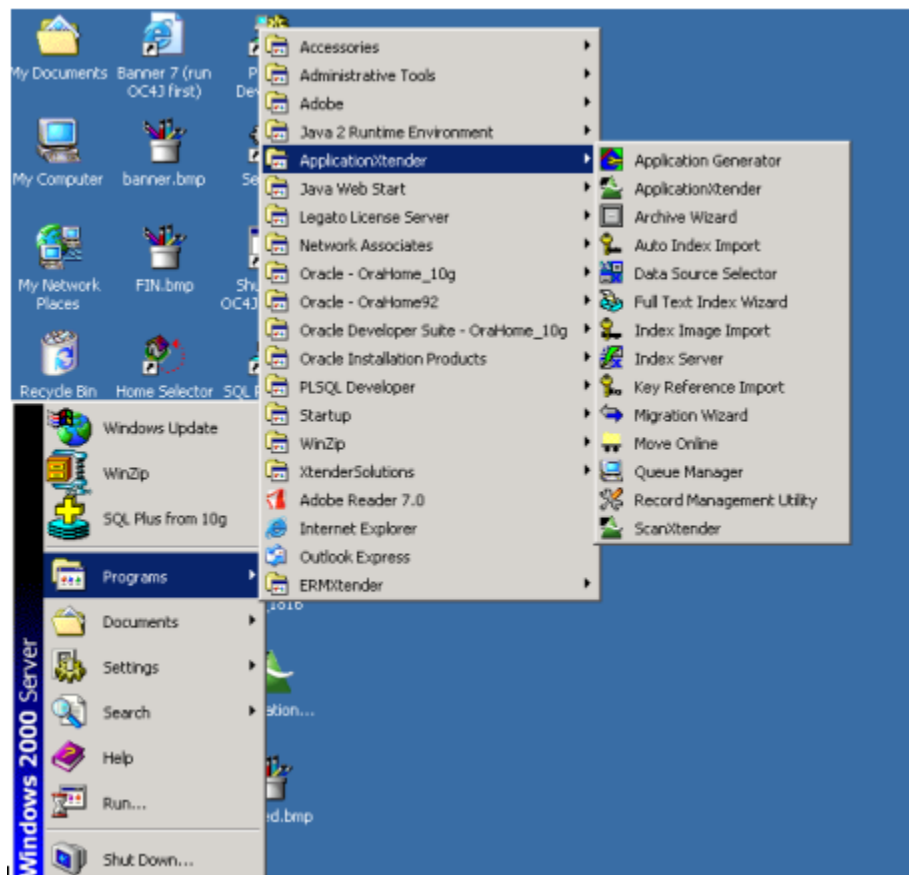
Purpose

Launch AX (ApplicationXtender).

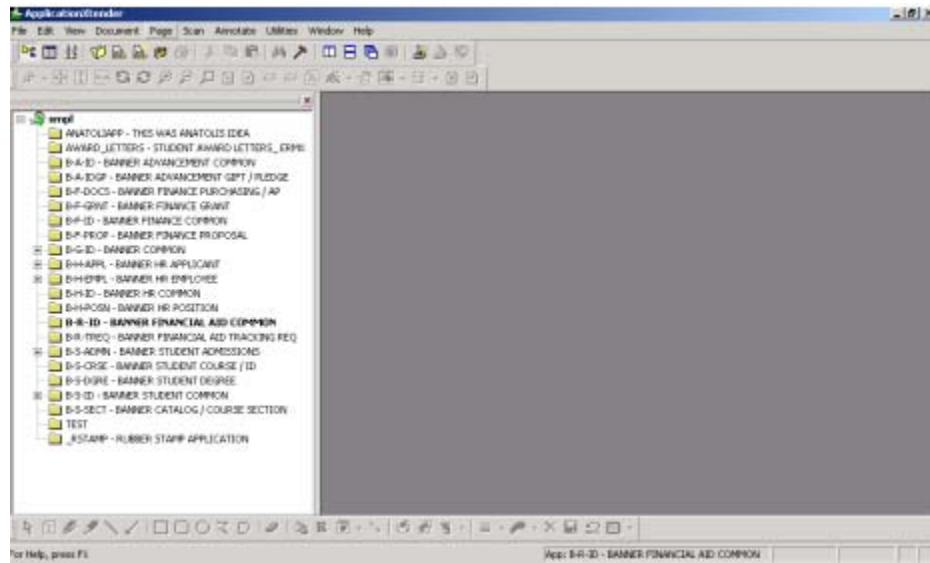
It is assumed that the software has been loaded on the Windows workstation and the trainee is ready to roll.

Steps

1. From the Start menu, go to **Programs**, select **ApplicationXtender**, and select **ApplicationXtender** as shown below.



2. Select the correct database; in this case, it is AXDEMO.
3. Select an application by double-clicking it. The application selected shows up in Bold and also shows up in the Status bar at the bottom of the screen, as shown below.



4. Index the batch in AX.
5. Launch AX, and select **Utilities** from the menu bar.
6. Select **Batch Index (List)**. You will see the batch “two-five” displayed in the dialog box.
7. Select it by double-clicking on it. The “**two-five**” document will be displayed.
A new menu bar shows up with icons depicting ‘Previous page’ and ‘Next page’.
8. Select the icon **New Document**.
9. Enter the Index values (e.g. “**two-five**”). Remember the values or note them down, as you will need them later.
10. Click on the **Attach All** icon.
11. **Save** it. (You will also see the Save button at the bottom of the window)

Exercise 3

Purpose

Scan a New document into the sample application and different index values. "Pages 6-8".

Steps

1. To show the scanning toolbar, go to **View-> Toolbars**.
2. Select **Scan**. A check mark will appear next to Scan.
3. From the Menu bar, select **Document, New, Scan**.
4. Click on the **Scan** icon to scan the document "**six-eight**".
5. Uncheck the '**Parts of scan selection**' in the HP scanner dialog box.
6. Index the document, under Doc Type (e.g. "**six-eight**").
7. Click on **Save** in the lower right corner of the window.

This exercise shows that your scanner is correct for multiple pages and image quality.

Exercise 4

Purpose

Query the application to locate your first document, "Pages 2-5".

Steps

1. Right-click on the active application (e.g. DOCS-DEMO DOCUMENTS APPLICATION).
2. Select **New query**.
3. Open the query window and define your query (i.e. under DOCTYPE, "**two-five**") to open the document for you.

Exercise 5

Purpose

Insert Page 1 into the first document "Pages 2-5" in the correct position.

This involves scanning a single page (page 1) and inserting it at the right location within the document "**two-five**".

Steps

1. From the Menu bar, select **Page, New, Scan, Insert Before**, and the displayed page two of the Document called "**two-five**".

You should now have page 1 inserted in front of page 2.

Please note that the document named "**two-five**" now contains pages 1 to 5.

Exercise 6

Purpose

Create a new version of your second Document "Pages 6-8", scanned in exercise 3.

Steps

1. Right-click on the active application to locate your second document.
2. Select **New Query**, and enter the Index value "**six-eight**" in the **DOCTYPE** field.

This is the same task as Exercise 4.

Exercise 7

Purpose

Create a new version of the existing Page 6.

Steps

1. Alter Page 6 of your document to be scanned in some way.
2. Scan it as a new version, not as a new document.
3. From the Menu bar, select **Page, New Version, Scan**.

You should see the new version displayed on the screen.

Exercise 8

Purpose

Delete the old version of Page 6.

Steps

1. Make sure you have the current version on display.
2. From the Menu bar, select **Page, Show Version, Previous**. If this is an old version, select **Delete Version**.

A message will be displayed to confirm if the version displayed has to be deleted.

Exercise 9

Purpose

Export the document "Pages 6-8".

Steps

1. Go to the Menu bar and select **Document, Export, and Images**.

You will see a dialog box showing you the destination you would like to send your document.

2. Choose the appropriate directory and send your document (e.g. **C:\Temp\Folder Name\File Name**).

Exercise 10

Purpose

Import the document "Pages 6-8" and add it to the end of the new document "Pages 2-5".

Steps

1. In the active application, right-click to get a **New Query**.
2. **Search** for the document "**two-five**", which now contains Pages 1 to 6. Remember, we added Page 1 to the original document "**two-five**" (which had Pages 2 to 5) before we did Exercise 5.

Make sure you display the last Page 5 on your screen.

3. From the Menu bar, select **Page, New, Import File, Insert After, C:\Temp\Folder Name\File Name**.
4. Select the pages and click **Open** to import and place the pages from the "**six-eight**" document in sequence, after the displayed file "**two-five**".
5. Confirm by clicking on **Page Before** and **Page After** icons on the menu bar.

The result of this exercise is that the document "**two-five**" now contains pages 1 to 8.

Exercise 11

Purpose

Attach a document to a Banner Record.

Steps

1. Start a Banner session.
2. Navigate to SAAADMS, and enter the ID you have been working with.
3. While still in the ID field, click on the **BDMS** icon on the toolbar.
4. Once in BDMS, select **Document, New, and Import from file.**
5. Find a document on your hard drive to import.
6. Enter the same ID that you entered into SAAADMS.
7. Save and close the document, and return to Banner.
8. Click on the BDMS icon on the toolbar.

A query should call up all documents associated with the current ID.

9. Double-click on a document to view the document.

Exercise 12

Purpose

Correct the indexes.

Steps

1. Start a Banner session.
2. Click on the BDMS icon on the toolbar.
3. Right-click on the Application, and select **New Query**.
4. Enter an incorrect ID.
5. Click on Search.
6. Display the incorrect image.
7. Select **Document, Export, Image** from the menu bar.
8. Select the place where you want to put the image on your desktop.
9. Name the image, click OK, and close it.
10. Select **Document , New, Import from file** from the menu bar.
11. Select the file that was just saved to disk.
12. Enter the correct index and save.
13. Execute a query on the new ID.
14. Right-click on the Application, and select **New Query**.
15. Enter the new ID and click on Search.
16. Select the new ID and display the associated document.

If the new document is correct, delete the incorrectly imaged document as follows:

1. Right-click on the Application, and select **New Query**.
2. Enter the incorrect ID, and click on Search.
3. Display the incorrect image
4. Select **Document, Delete** from the menu bar. Click OK to delete the document.
5. Delete the incorrect document from your desktop.

Sample Pages



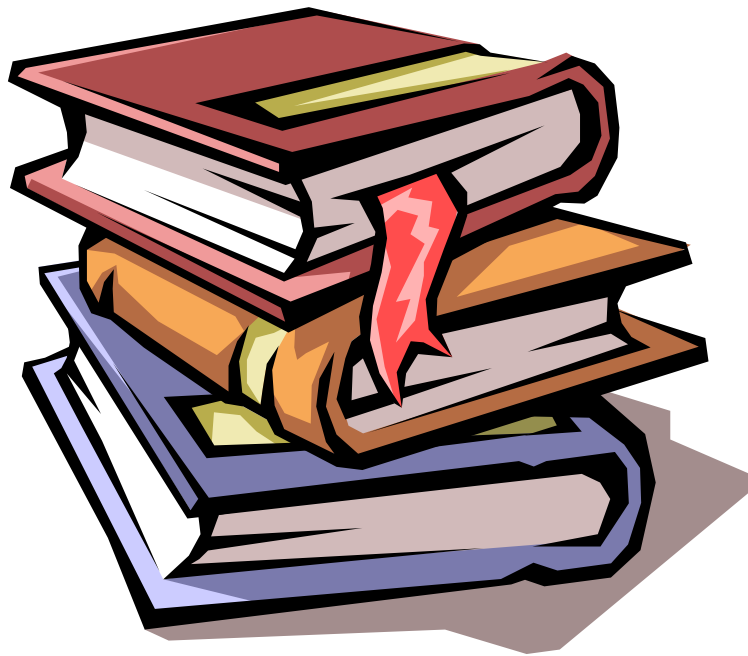
Introduction

This section contains the sample pages to be used in the exercises in the previous section.

Sample Pages

The following eight pages are to be used with the exercises in Appendix A.

PAGE 1



PAGE 2

PAGE 3





PAGE 4

Exercise Page 5

The other day I was walking down a country lane and saw a young girl walking towards me with a cow on a lead. I stopped and asked her what she was doing. She said, "I'm taking the cow to see the bull." I said, "couldn't your father do it?" "Oh no" she said, "it has to be the bull."

So I went to the Chinese restaurant and this duck came up to me with a red rose and says "Your eyes sparkle like diamonds". I said "Waiter, I asked for a-ROMATIC duck".

Two Aerials meet on a roof - fall in love - get married. The ceremony was rubbish but the Reception was Brilliant

Dyslexic man walks into a bra

There are 2 rules to success in life: 1. Don't tell people everything you know

So this bloke says to me, "Can I come in your house and talk about your carpets?". I thought "That's all I need, a Je-hoover's witness".

A fellow goes into a 'Chippie' and says to the fryer:"Jumbo Sausage please." The fryer says:"It won't be long." The fellow says "Well it'd better be fat then!"

So I was having dinner with Garry Kasparov and there was a check tablecloth. It took him two hours to pass me the salt. He said "You remind me of a pepper-pot", I said "I'll take that as a condiment".

But I'm in great mood tonight because the other day I entered a competition and I won a years supply of Marmite... one jar.

A guy goes into the butchers and says I bet you fifty quid you can't touch that meat hanging up in the corner. The butcher says I'm not betting on that, the steaks are too high!!

Now you know those trick candles that you blow out and a couple of seconds later they come alight again, well the other day there was a fire at the factory that makes them.

PAGE 5

But I'm in great mood tonight because the other day I entered a competition and I won a years supply of Marmite... one jar.

Exercise Page 6

The other day I sent my girlfriend a huge pile of snow. I rang her up, I said "Do you get my drift?"

There was a man who entered a local paper's pun contest. He sent in ten different puns, in the hope that at least one of the puns would win. Unfortunately, no pun in ten did.

Four fonts walk into a bar. The barman says "Oi - get out! We don't want your type in here"

Police arrested two kids yesterday, one was drinking battery acid, and the other was eating fireworks. They charged one and let the other one off.

Guy goes into the doctor's. "Doc, I've got a cricket ball stuck up my backside "How's that?" "Don't you start"

Man goes to the dog, with a strawberry growing out of his head. Doc says, "I'll give you some cream to put on it"

Now did you know all male tennis players are witches, for example Goran, even he's a witch.

I went to the dentist. He said "Say Aaah." I said "Why?" He said "My dog's died."

So a lorry-load of tortoises crashed into a trainload of terrapins, I thought, "That's a turtle disaster".

So I said "Do you want a game of Darts?" he said "OK then", I said "Nearest to bull starts". He said "Baa", I said "Moo", he said, "You're closest".

"Doc, I can't stop singing the green green grass of home." "That sounds like Tom Jones syndrome." "Is it common?" "It's not unusual."

So I was in Tesco's and I saw this man and woman wrapped in a barcode, I said "Are you two an item?"

Exercise Page 7

Two peanuts walk into a bar. One was a salted.

Two men in an open top airplane. The one in the front says to the one in the back, "if I fly the plane upside down do you think we'll fall out?" He replies "no, we'll always be friends".

A man walks into a bar with a roll of tarmac under his arm and says: "Pint please, and one for the road."

Two elephants walk off a cliff..... boom boom!

So I rang up British Telecom, I said, "I want to report a nuisance caller", he said "Not you again".

Now, most dentist's chairs go up and down, don't they? The one I was in went back and forwards. I thought 'This is unusual'. And the dentist said to me 'Mr Vine, get out of the filing cabinet.

Did you hear about the flasher who was thinking of retiring? He decided to stick it out for another year.

So I went down the local supermarket, I said I want to make a complaint, this vinegar's got lumps in it", he said, "those are pickled onions".

"Doctor, I can't pronounce my F's, T's and H's." "Well you can't say fairer than that then"

A woman walks into a bar and asks the barman for a double entendre. So he gave her one.

Two Eskimos sitting in a kayak were chilly; but when they lit a fire in the craft, it sank, proving once and for all that you can't have your kayak and heat it too.

Two boll weevils grew up in Cornwall. One went to Hollywood and became a famous actor. The other stayed behind, drove a tractor and never amounted to much. The second one, naturally, became known as the lesser of two weevils.

A group of chess enthusiasts checked into a hotel and were standing in the lobby discussing their recent tournament victories. After about an hour, the manager came out of the office and asked them to disperse. "But why?" they asked, as they moved off. "Because," he said, "I can't stand chess nuts boasting in an open foyer."

PAGE 8



Document Types



Introduction

This section contains a list of available document type codes.

Objectives

Document Types

Introduction

The integration of Banner documents with ApplicationXtender is accomplished using pre-established document types codes that are in each BDMS application. These codes are set up on the Banner Document Management Suite Document Type Validation Form (ETVDTYP).

The following list contains the document type codes and a description of each.

Document Type	Description
401K FORMS	401k Forms, Checks and Amortization Schedules
ACCEPTANCE LETTER	Acceptance Letter
ADMISSIONS APP	Admissions Application
ADMISSIONS REQS	Admissions Requirements
ALIEN REG CARD	Alien Registration Card (Green Card)
APPLICANT INFO	Applicant Information
APPLICATION FORM	Application Form
APPLICATION INFO	Application Information
ATTENDANCE ROSTER	Attendance Roster
AWARD ACCEPTANCE	Award Acceptance
AWARD OFFER LETTER	Award Offer Letter
BENEFIT BACK-UP DOCS	Birth/Marriage Certificates, Family Change Forms, Insurance Claims
BENEFIT FORMS	Enrollment Forms, Medical and Dental Forms, Benefits Confirmations and Statements
BROKERAGE STMT	Brokerage Statement
CERTIFICATIONS	Certifications
CHARITABLE CONT	United Way Donations
CHECK	Check
CLASS ROSTER	Class Roster
COBRA FORMS	Termination Letters, Continue Medical Benefits for 18 Months
COLLEGE TRNSCRPT	College Transcript

Document Type	Description
CONFIDENTIAL PAPERS	Payers for Employee Disciplinary Action
CONTACT FORM	Contact Form
CONTRACT INFO	Contract Information
COURSE SUMMARY	Course Summary
CURRENT VISA INFO	Current Visa Information
DEATH CERTIFICATE	Death Certificate
DEATH NOTICE	Death Notice Documentation
DEGREE INFO	Degree Information
DIPLOMA INFO	Diploma Information
DIRECT CASH RECEIPT	Direct Cash Receipt Form
DRIVERS LICENSE	Copy of Drivers License
EDUCATIONAL TRNSCRPT	Educational Transcript
ELECTRONIC LOAN APPL	Electronic Loan Application
EMAIL	E-mail Document
EMPLOYEE INFO FORM	Employee Information Forms, Employee Recs
EMPLOYEE REVIEW FORMS	Employee Review Forms
EMPLOYMENT AUTH FORMS	Employment Authorization Forms
ENCUMBRANCES	Encumbrances
ENROLL VERIFICATION	Enrollment Verification Form
ENTRY VISA INFO	Entry Visa Information
EXAM SCORES	Examination Scores
EXECUTIVE BENEFITS	Executive Benefits
FACULTY COURSE LOAD	Faculty Course Load
FEDERAL TAX RETURN	Federal Tax Return

Document Type	Description
FLEXIBLE ACCOUNT FORMS	Flexible Spending Accounts/Forms
FMLA	Family Medical Leave Act
FY COMMISSION PLANS	Commission Plans and Analysis
GIFT	Gift
GIFT CHECK	Copy of Gift Check
GIFT STOCK CERT	Gift Stock Certificate
HIGH SCHOOL TRNSCRPT	High School Transcript
HOLD INFO	Hold Information
I-9 FORM	I-9 Form
I-94 FORM	I-94 Form
IMMIGRATION DOCS	Immigration Forms, Visa Agreement Forms, Extension of Visa Forms
INTERNATIONAL DOCS	International Documentation
INVOICE	Invoice
INVOICE PAYMENT	Invoice Payment
JOURNAL VOUCHER	Journal Voucher
LEAVE OF ABSENCE	Maternity Leave, Short Term Disability, Doctors Letters/Evaluations
LIFE INSURANCE	Voluntary Life Insurance Forms
LOAN DISBURSEMENT	Loan Disbursement Form
LONG TERM CARE FORMS	Long Term Care Forms
LONG TERM DISABILITY	Long Term Disability Forms
MAILINGS	Mailings – Annual Report, Event Flyers, Letters, etc.
MANUAL LOAN APPL	Manual Loan Application
MEDICAL DOCS	Medical Documents
MEDICAL INS	Medical Insurance

Document Type	Description
MISC BENEFIT FORMS	Miscellaneous Benefit Forms
MISC EMPLOYEE DOCS	Direct Deposit Forms, Time Reports, Employee Referrals, Employment Authorization and Other Docs
NAME/ADDRESS CHANGE	Name and Address Change Forms
NEW HIRE DOCS	Offer Letters, Confidential Agreements, Resume
OFFER LETTER	Offer Letter
PASSPORT	Passport Information
PC LOANS	Promissory Notes, Receipts from PC Purchase, Loan Amortization Schedules
PERFORMANCE LETTERS	Awards, Peer Counselor Letters, Employees Performance Skills Letters
PHOTO-CHILD	Photograph of Child
PHOTO-CONSTITUENT	Photograph of Constituent
PHOTO-SPOUSE	Photograph of Spouse
PLEDGE	Pledge
PLEDGE PAYMENT	Pledge Payment
PROMISSORY NOTE	Promissory Note
PROOF OF CITIZENSHIP	Proof of Citizenship
PROPOSAL FORM	Proposal Form
PRSPCT RESEARCH DOC	Prospect Research Document
PUBLICATIONS	Publications
PURCHASE ORDER	Purchase Order
RECRUITMENT INFO CARD	Recruitment Information Card
REGISTRATION INFO	Registration Information
RELOCATION FORMS	Relocation Agreements, E-mails, Relocation Analysis
REQUISITION	Requisitions
RESUME/CV	Resume or Curriculum Vitae

Document Type	Description
SALARY AND JOB INFO	Salary Adjustment Forms, Job Detail Info., Misc. Job Info., Payroll Action Forms, Bonuses
SSN CARD	Social Security Card
STOCK FORMS	Stock Purchase Forms
SUPPLEMENTAL INFO	Supplemental Information
TAX FORMS	Federal Tax Forms, W4
TERMINATION FORMS	Termination Forms, Letter of Resignation
TEST SCORES INFO	Test Score Information
TIME OFF DOCS	Time Off Documents – Vacation, Sick, Holiday
TRACKING REQUIREMENT	Tracking Requirement
TRANSCRIPT INFO	Transcript Information
VACATION FORM	Vacation Requests, Vacation Rollover Forms
VETERAN CARD	Veteran Information Card
WITHDRAWAL FORM	Withdrawal Form
WITHDRAWAL QUERY	Withdrawal Query Form
WORKERS COMP	Workers Compensation