

Axaem Overview

August 24, 2010

The Utah State Archives' local system is written with software called APPX, a proprietary Rapid Application Development tool, and the resulting application has been named APPX-based Archives Enterprise Manager (Axaem). This software allows us to develop applications that reflect our business needs, and change and expand as we see fit. The features used in Axaem are directly related to APPX Software's capabilities, and they change and grow as we implement upgrades. We can add new processes, menus, and data fields easily when needed, often taking only minutes, so feedback about new business requirements is always welcome. Axaem code has been made open-source by the State of Utah.

That said, our local system was designed many years ago by a group of archivists, who sat in many meetings discussing archival theory and how it applied to archives practices, records management, and automated systems. They came up with foundational principles and table structures that have served us well for over 20 years.

One foundational principle is that records have a lifecycle. They are created and used actively by an entity, stored for a while off-site, and then destroyed or transferred to an archives for permanent access. Once in an archives, other things happen to those records. The process is a continuum, but with many procedural branches. Since the Utah State Archives and Records Service functions as both a records management and archival institution, our local system is smart to do so as well. To that end, Axaem begins with a simple core idea that gets added upon. Records first obtain retention schedules, and are given basic descriptive data. They also have classifications, or access restrictions reflecting state law. And they have an approval process that they must go through, and those meetings where approval is granted have to be managed. Then other important things start to emerge, all of which get saved to the system. For instance, records are sometimes microfilmed. The film contains certain data ranges, belongs to specific record series, and is filmed by individual cameras all of which need to be managed. The records, if permanent, are arranged and described at the box, file, and reel level. They have finding aids created, and may also be indexed. They have relationships to other records, which must be recorded. They may have a history of being produced by another agency before being managed by their current one, which also needs to be recorded. Those agencies have their own history, functions, and prior names, and may be current or defunct. There are people at the agencies that we need to keep in contact with and train, and those training sessions need to be managed. And on, and on.

Each piece adds context and meaning to the information we are trying to preserve, understanding of the government process that existed at any moment in time, and greater efficiency to the administrative tasks of the Archives. Context, content, provenance, and original order are the cornerstones of archival management. Instead of starting the descriptive process over each time the records pass through another point in their lifecycle, the information is added continually to that single entry point. Then the data is

presented to the public as a retention schedule, a catalog record, a finding aid, a searchable index, and the metadata for the scanned image of individual items.

This tutorial is intended to clarify what the features are, how they were intended to be used, and why they support best practices. It will also delineate the procedural steps for navigating through the software, adding data, and saving changes.

System Architecture

APPX has three components: the client, server, and database. The client is what's known as "thin client." It is written in Java. All that the client does is create a communication link with the server and provide a runtime environment so that you can interact with the data using a graphical interface. You may download the client from APPX's website, www.appx.com. After the client is installed, you can access Axaem from anywhere, as long as you have an Internet connection and login rights. If you are trying to access it outside the state firewall, there may be some restrictions.

The APPX engine and the applications we've written for our business processes are stored on the server, not the client. In Utah, our main (production) applications run on a Linux server. The name of this server is used when you are at the APPX login screen. We also have another instance of the software installed on a Windows server. The Windows server provides access to a database of record locations in our permanent records room, which has an Automated Storage Retrieval System from HK Systems. And we have a separate Linux VM for testing.

The database we use is Oracle (in the case of the Linux applications), and SQL Server in the case of Windows. The Linux server also stores data in APPX's native database, known as APPX/IO, to provide faster response to some tables. Oracle is located on a separate Linux server. The reason we use Oracle is so that data can be shared with another third-party system, which is used to manage records at our Records Center.

Also on the Linux server, we have a web server running, which provides public access to Axaem data, such as series indexes and retention schedules. This is where we store our CGI scripts. The forms on our website reference these scripts, which temporarily log the web user directly into Axaem, allowing people to interact with the system just as any other user (e.g. to run searches, submit new series, or generate PDF reports), then quickly log the user out again when the browser request has been fulfilled.

Login

To login to APPX, use the login ID and password assigned to you by the APPX administrator. APPX will remember everything except the password the next time you try to get in:



If you choose, prior to logging in, you can set options by going to the Options tab, and then click Advanced.



This is where you set the screen rows and columns to be 28 x 110 instead of the default 21 x 80, or change the font size. You will need to scroll about three-quarters of the way down to see these options. Double click in the left-hand value fields to edit. After you make your change, when you click outside of the field, the background changes to yellow. When you are done making changes, exit by clicking the X on the upper right-hand of the window. Then click the Remote tab and log in as normal to save your changes.

Option	Value	Default Value	Description
colorStartg			Standard Foreground Color
colorScrollSelectActive	#0000FF	#0000FF	Color of scrolling selector border on active record
colorScrollSelectOther	#FF0000	#FF0000	Color of scrolling selector border on other records
colorWindowBg			Window Background Color
guiLook	appx	appx	LookAndFeel Java theme to use
showOptionsTab	true	true	Show the Login Options tab?
commandShell			OS Command Shell for launching files
connectMode	both	both	Preset the connection type
embedApplet	false	false	Should the applet run embedded
enginePath			Engine pathname for Local execution
mapOptionKey			Key to use for the Option key
profileName			Name of profile to use from INI file
remoteHost			Remote login hostname
remotePassword			Remote login password
remotePort	0	0	Remote connection Appx server port
remoteUser			Remote login user id
runApplication			Application to run on startup
runDatabase			Database to run on startup
runProcess			Process to run on startup
runProcessType			Process Type to run on startup
screenRows	28	21	Screen grid cell rows
screenColumns	110	80	Screen grid cell columns
screenAspect	2.625	2.625	Screen cell width multiplier to get height
showDateScans	false	false	Show scan buttons on date fields
showMenubar	true	true	Show Menubar on client window
showToolBar	true	true	Show Toolbar on client window
showScanButtons	true	true	Show Scan Buttons on client window
startupWallMode			Wallpaper tiling mode for startup wallpaper
startupWallpaper			Wallpaper to load into the window in start
themeName	default	default	Name of theme directory to use
windowTitle	APPX - \$(host)...	APPX - \$(host)...	Text to show in the window title
[Debug]			
loggingEnabled	false	false	Turn on debug logging
debugNotifyLevel	NONE	NONE	Set debug level for popup dialogs
debugLogLevel	ALL	ALL	Set debug level for logging to the logfile
memoryCheckTimer	15	15	Seconds between About Dialog memory checks
[LogOptions]			

Main Menu

After you login, you will be presented with the Main Menu:

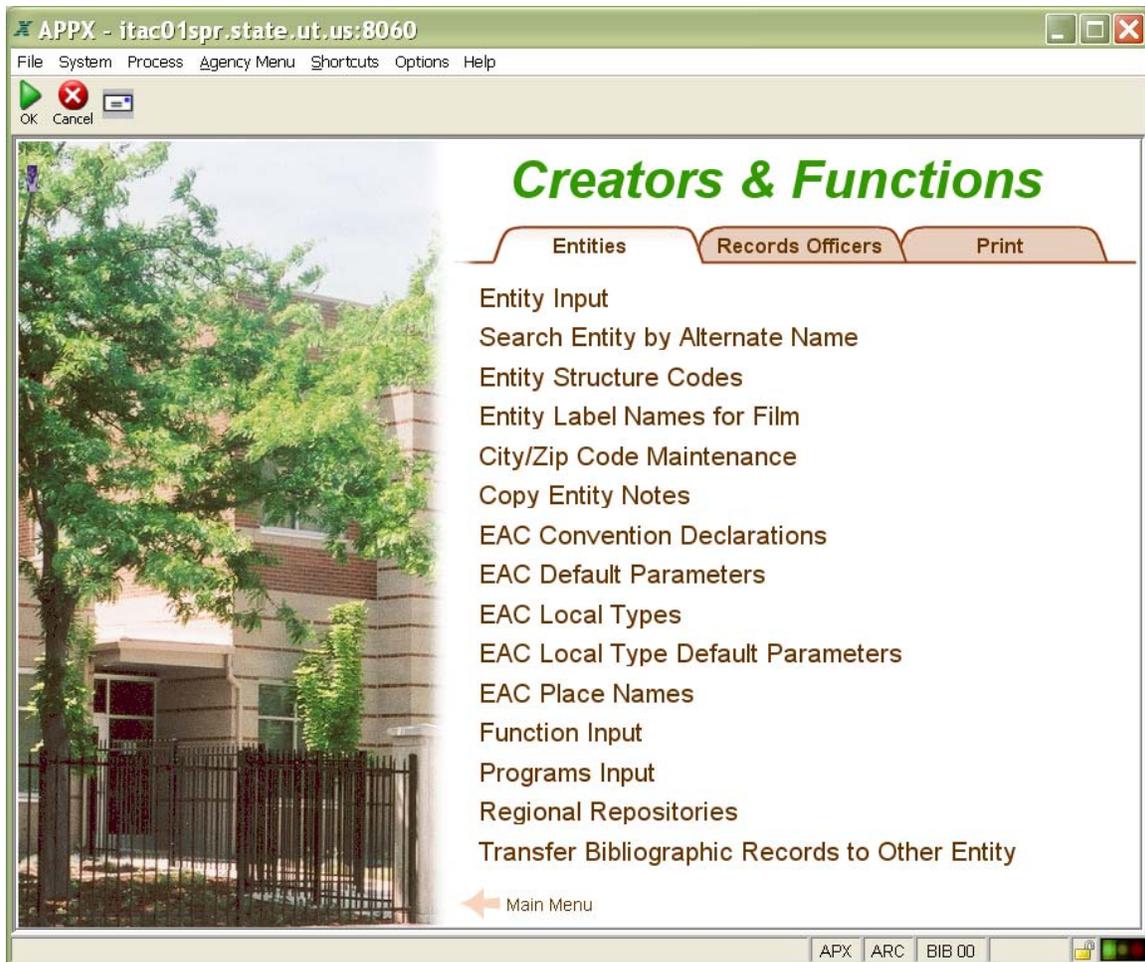


Some menu items are going to be used far more than others. Typically, you will spend most of your time in Series & Searching; Agents, Context, and Functions; and Microfilm—not necessarily in that order.

Agents, Context, and Functions

The Agents, Context, and Functions Menu is used to record information about state and local government agencies in Utah, and the people we interact with in those agencies. It also records all of the context of record creation, as defined by the Encoded Archival Context (EAC) standard, and the functions of record creators. Axaem calls these units “entities.” In Utah, we only work with governmental entities, also known as agencies, so the descriptions below will refer to entities as agencies. An “agency” is a unit of government that operates relatively independently. It may be part of a larger department or have smaller divisions under it. Program units are not considered separate agencies, but they can be recorded in the database when they exist. Programs are usually small workgroups, but are unique in that they may span several agencies, such as federal grant programs. The way the line is drawn between something being an agency versus a program is its size and purpose, the level of independence, an official name, the existence of a director, and a separate budget from other agency units. If it has all those things, it’s an agency.

Recording agency information provides provenance and context to the records that are created by those agencies. It also acts as an authority file, so that agency names only need to be established once but can be used multiple times by different processes.



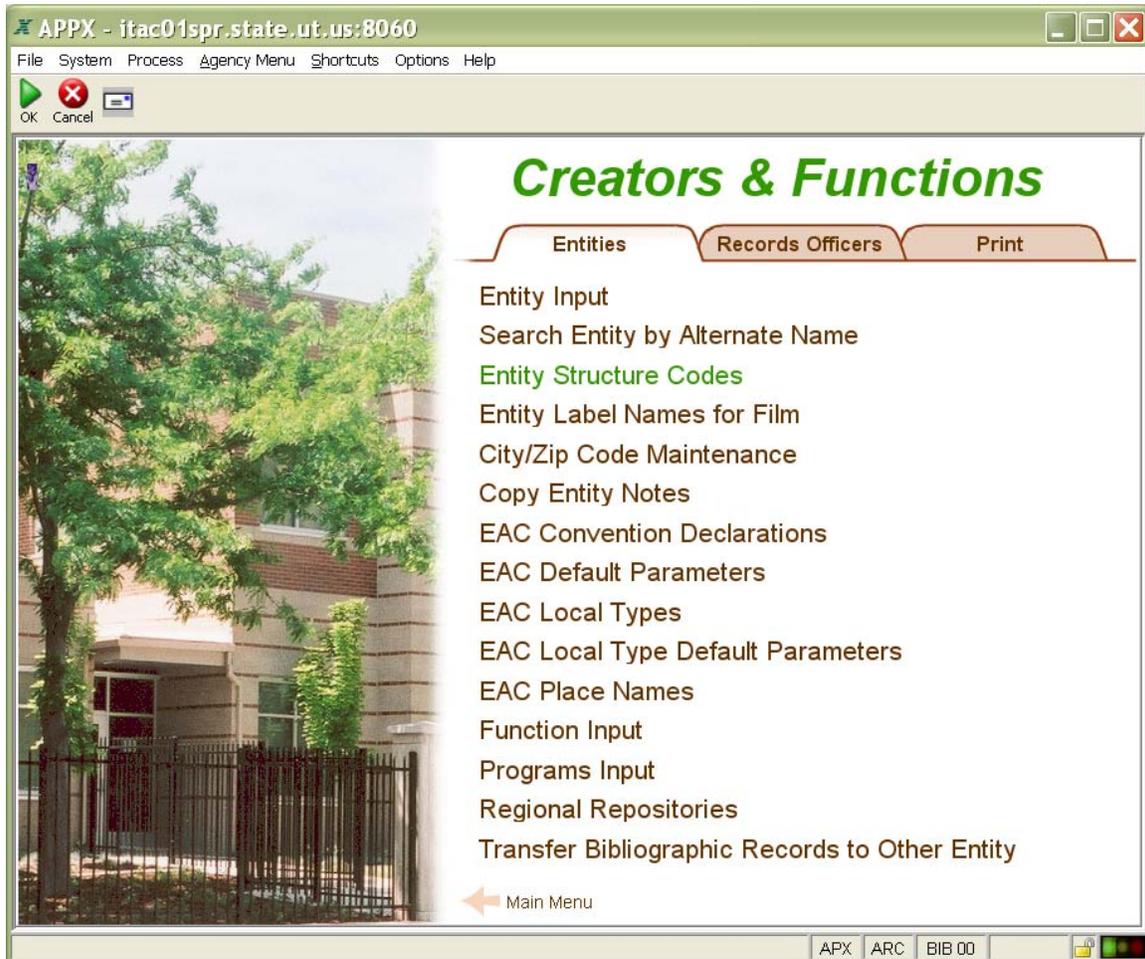
Every agency is given a number, called the agency key. This is a sequence number that grows as each agency is added to the system. The agency key is independent of all other numbers. Agencies also have another unique key called hierarchy codes. These 4-character codes, when used as a set, are equivalent to the agency key.

Higher Agency: 388 Finance

1	AS	AS	Administrative Services
2	FI	FI	Finance
3		ACO	Accounting Operations
4			
5			

In this example, the hierarchy code set is AS FI ACO, for the Accounting Operations section of the Division of Finance. Its agency key is 22. The agency key of the division above it (Finance) is 388. What the codes do is provide a linking relationship between agencies, so that all agencies belonging to the same department use the department's code as part of its set. Each hierarchy level has its own code, and together they describe the

specific agency. Before an agency can be created, these hierarchy codes must first be added through the Entity Structure Codes function:

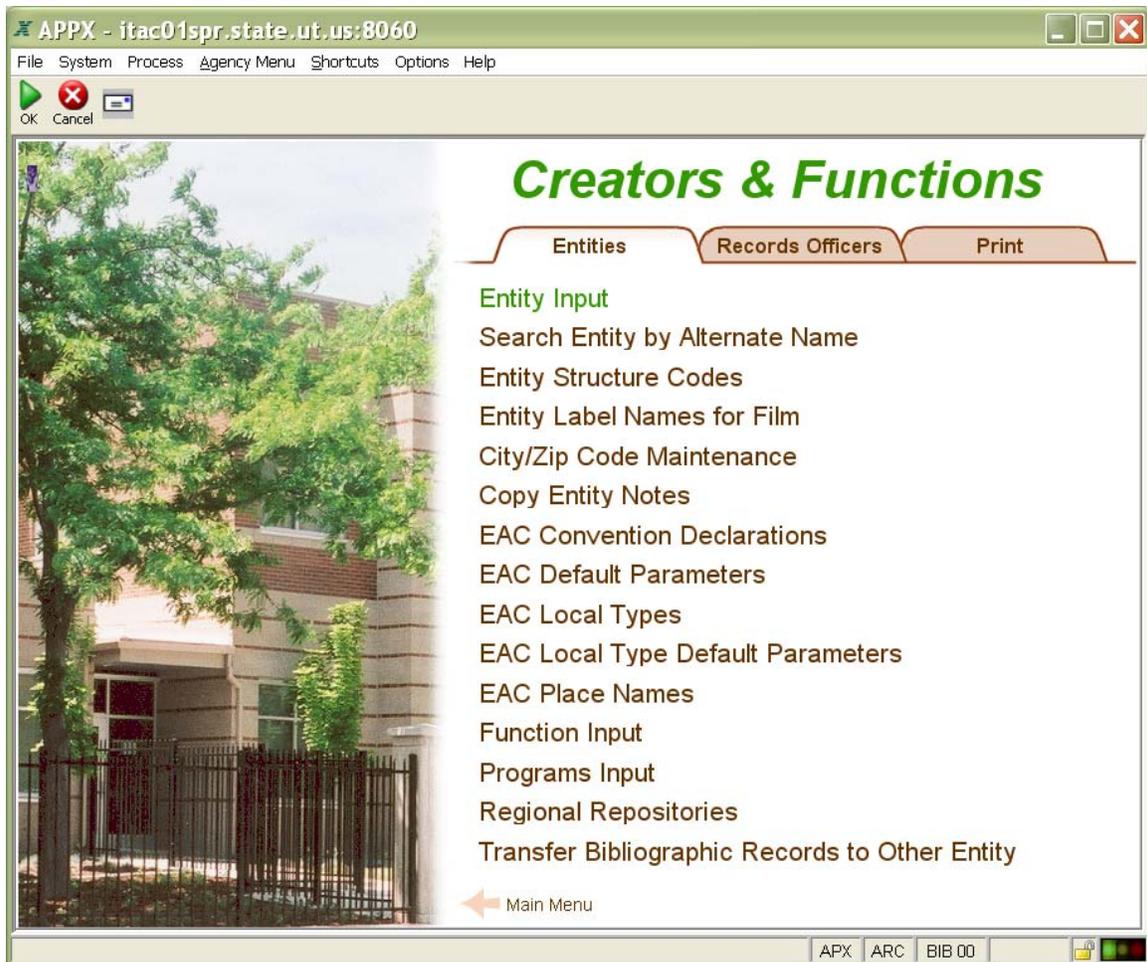


The individual codes are intended to be generic. They may appear at any level of the hierarchy, and are re-used for agencies that have similar units (e.g. “AS” for Administrative Services could be part of the code set for the Dept. of Administrative Services, as well as the Dept. of Human Services’ Division of Administrative Services, which is why it has been added several times—once for each level).

Code	Description	Hierarchical Level (1-5)
AC	Archives	2
AC	Archives	3
ANC	Animal Control	2
AS	Administrative Services	1
AS	Administrative Services	2
AS	Administrative Services	3
AS	Administrative Services	4
AS	Administrative Services	5
BC	Brigham City	1
COM	Commission	2
CRD	Corrections Department	1
CRD	Operations Administration	2
DAC	Davis County Commission	1
DC3	District Court (3rd)	1
DLS	Driver Licence Division	2
DTS	Dept. of Technology Services	1
GV	Governor	1
HD	Health Department	1

So if you pull a report that lists hierarchy codes, don't be surprised if the name tied to the code doesn't perfectly reflect the official name of the agency. It's not supposed to. The most useful part about hierarchy codes is the ability to pull reports for a whole department and its subunits with a single query. For instance, if you want every retention schedule that the Dept. of Transportation has, use the department code TR in the space provided in the query, and the system will happily print all 1,000 pages from every division for you. If you just want the report for a single division of UDOT, use the agency key instead to specify which one.

Click Exit to go back to the Creators & Functions Menu, then Click Entity Input:



To look at an agency record, click Entity Input, and then click OK or press Enter to bring up the first record:

APPX - itac01spr.state.ut.us:8060

File System Process Options Help

Entity Input

Identity Context Relationships Controls Resources

Entity: 2 Department of Human Services, Division of Aging and Adult Services

Label Name: Aging and Adult Services Created/Born: 1967

Entity Type: State Government Ended/Died: CCYY

OK for Inventory:

Corporate/Family Structure

Higher Entity: 1116 Human Services Department Hierarchy Began: 07/10/1967

Level	Higher	Current	
1:	HS	HS	Human Services
2:		AA	Aging and Adult Services
3:			
4:			
5:			

Go to Higher Entity
Go to Lower Entity
Edit Structure Codes

Identity Elements

Alternate Names Alternate names of entity, including nicknames.

Multiple Identities List entities participating as part of a multiple or collaborative identity for this entity.

Official Name Official authorized (current) name of entity, and its MARC coding.

Parallel Names Parallel official current names of the entity, such as in multiple languages.

Prior Names Names the entity used to be known by.

Prior Structure Structure/hierarchy the entity used to belong to.

< Exit Go To OK Cancel Next >

APX ARC BIB 00 Chg

Agencies have official names. The way that these names are recorded in the database reflects standard library cataloging rules. If you would like to know why an agency is named the way it is, see *Anglo-American Cataloging Rules II (AACR2)*, and *Describing ARCHIVES: a Content Standard (DACs)*. Generally, the names are closely tied to what the agency calls itself, as recorded in its own literature, but the form is standardized to an extent. Official names have been known to change over the years, and we keep track of each change, called the prior name. Records created and then closed during the years of a prior name will display the prior name in the system as the creating entity instead of its current one. That's how we keep track of all the different governor's records, even though the governor as an agency has kept the same agency key (446) throughout the years.

The alternate agency name is a list of names the agency may go by, including its official one as well as nicknames and shorthand names. This field is used when searching, both when logged into the system and on our website.

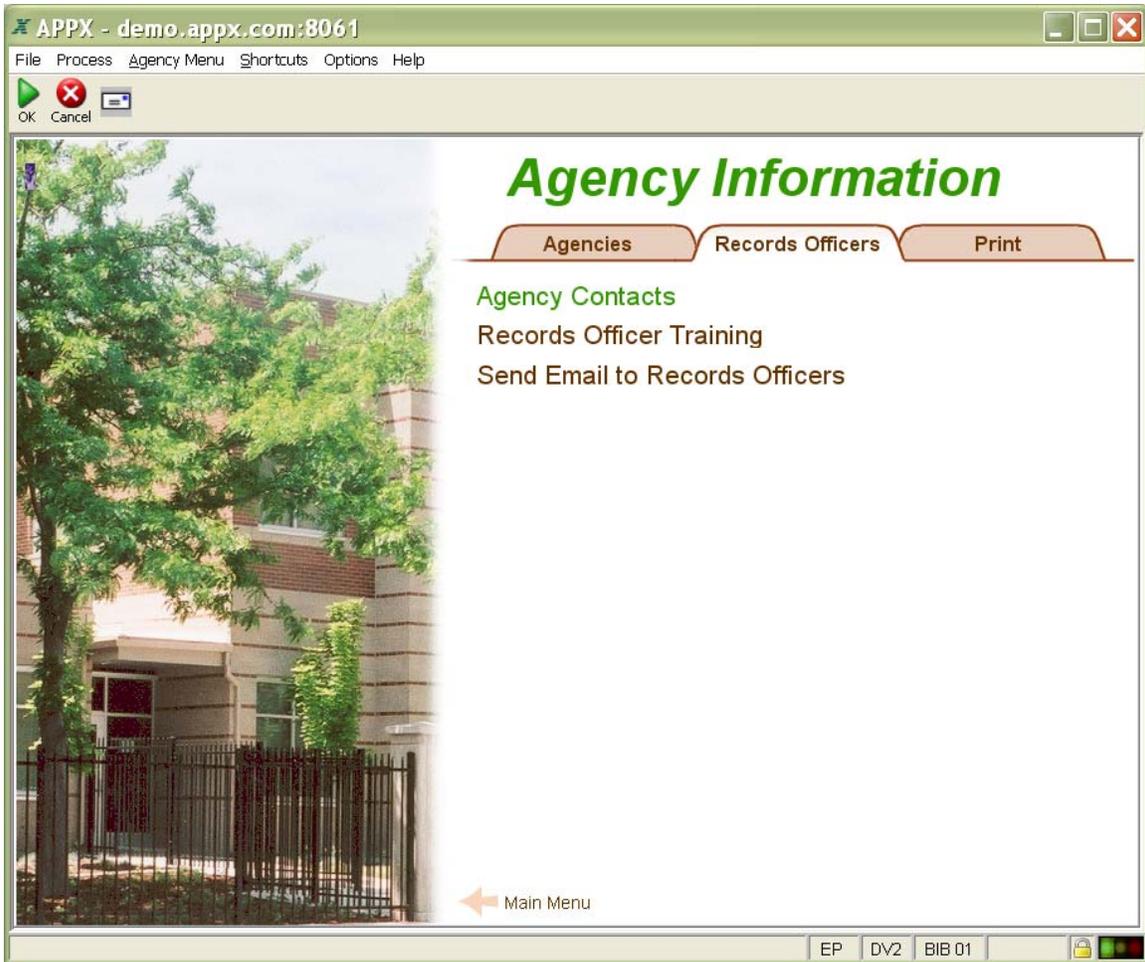
Agencies also have date spans, histories, functions, and other notes. All of these details are part of the history record. Each agency record is automatically mapped to MARC codes when data entry is done, and becomes part of the catalog.

The buttons below the name and hierarchy information on this screen represent other files (children of the agency record), each of which has its own descriptive information. The shading on the button indicates that data exists in that category.

Click Exit or press F8 to go back to the Creators & Functions Menu.

To view the people we interact with at the agencies, click the Records Officers tab.

Records officers and their contact information (address, phone, email, etc.) are recorded in the database and tied to the agencies they represent as well as the roles they fill. Some people wear more than one hat, so contact types are given codes, such as ARO for Agency Records Officer, CRC for County Recorder, and MIC for Micrographics Contact. You may add as many codes as the person has hats. Each name in the database is given a number. This number is automatically added when a new name is added, and is also used when registering people for records officer training so that we know all the training sessions any one person has attended. The email address of records officers is recorded so that group emails may be sent easily based on geographic regions, all county employees, or other criteria.



Click Agency Contacts, then press Enter to bring up the first record:

APPX - demo.appx.com:8061

File Process Options Help

OK Cancel Add Change Inquire Delete Ack/Del

Mailing List

Key	Prefix	Last Name	First Name	Familiar Name	Suffix
1		Smith	John	John	

Title: County Recorder

Address:

Street: 123 Maple Ave

City: Salt Lake City UT 84101

Phone: 801 555 - 9876 Ext:

Fax: -

Email: john.smith@somecounty.utah.gov **Send Email**

Building Mail:

Agency to Appear on Label if Building Mail is Used: 0

Comments:

Track the training sessions this individual has attended.

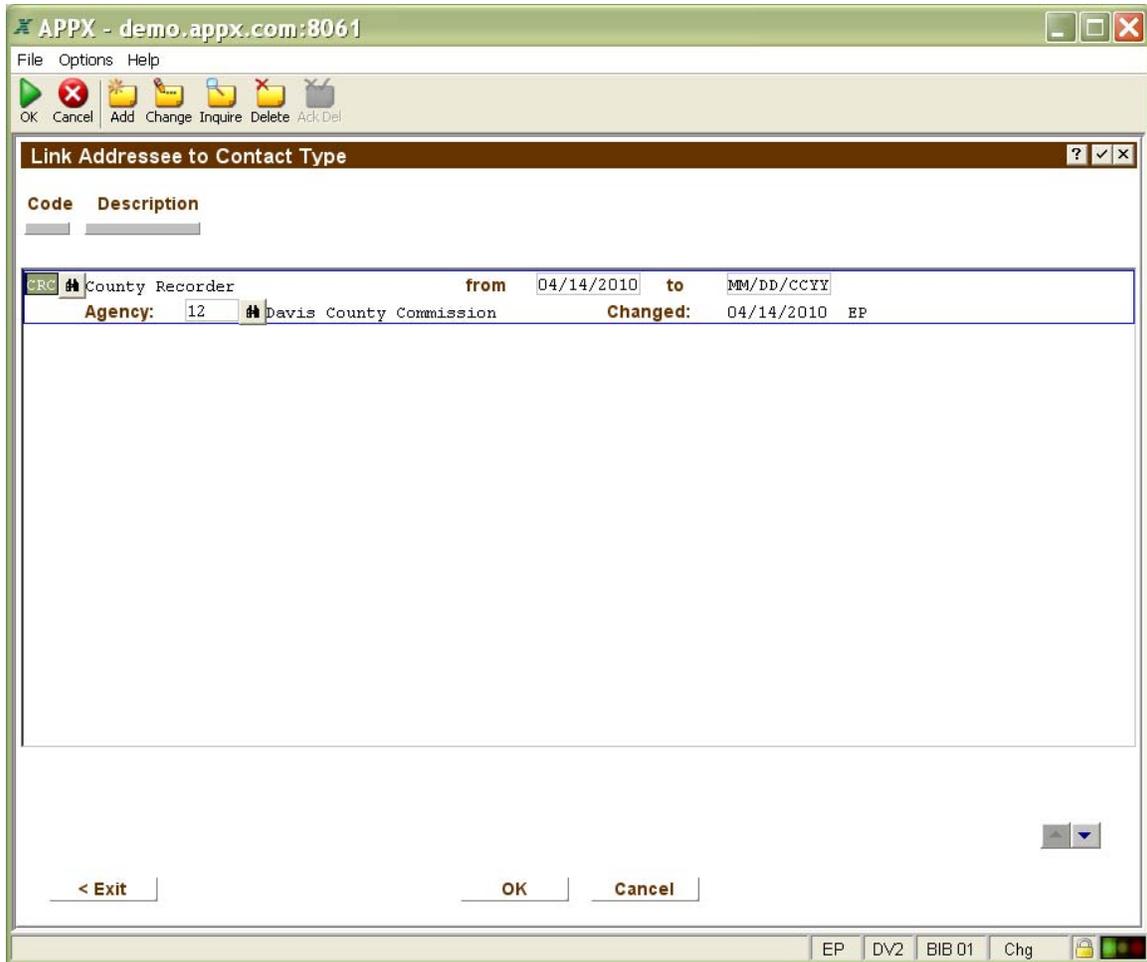
Training

Contact Type

< Exit Go To OK Cancel Next >

EP DV2 BIB 01 Chg

Click Contact Type to see this person's role(s):



Exit to Main Menu.

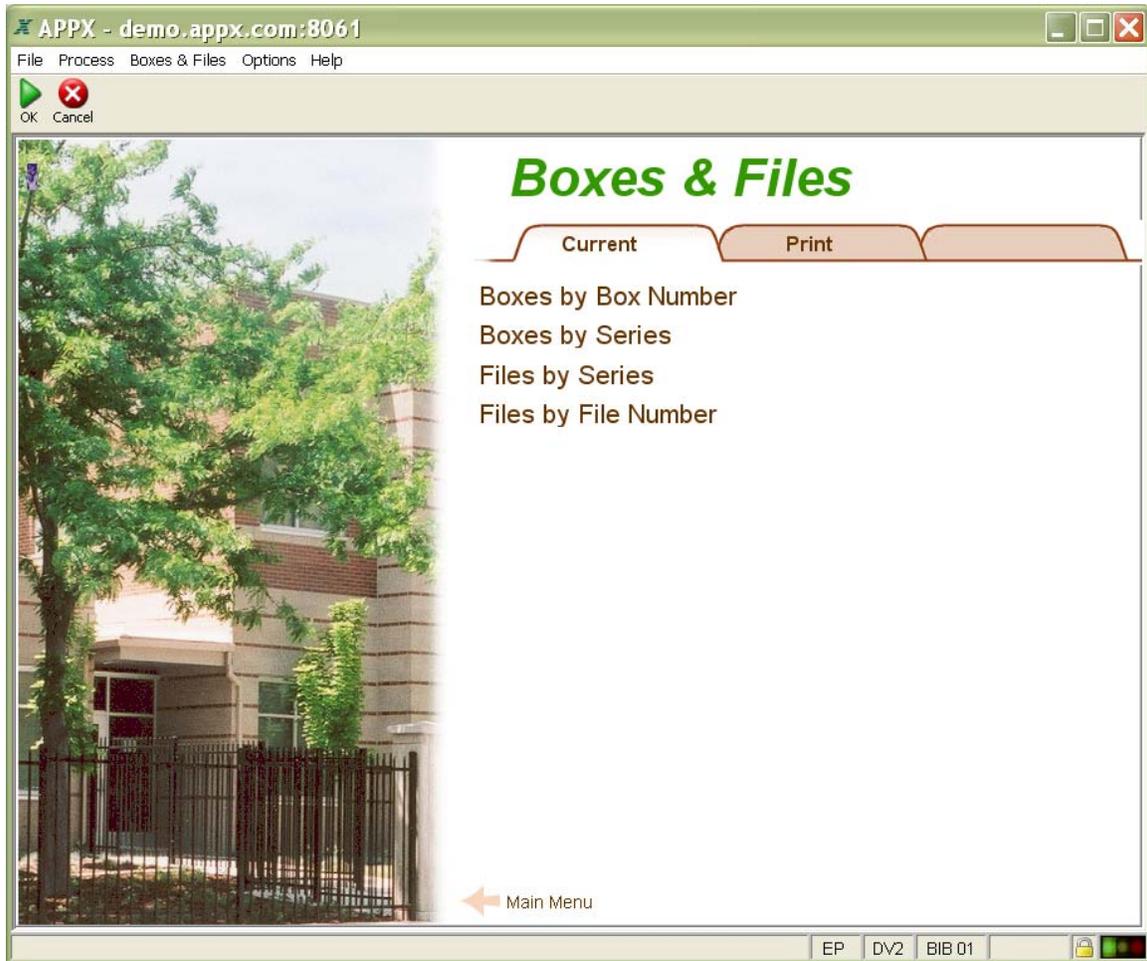
Boxes & Files

The Boxes & Files Menu is used to view the physical holdings of the Archives. This data is created in the box inventory system used by the Records Center. Records here are not edited through Axaem. If you think a change needs to be made to a box or file, log into the box inventory system. Viewing boxes by series is much easier to do in Axaem, however.

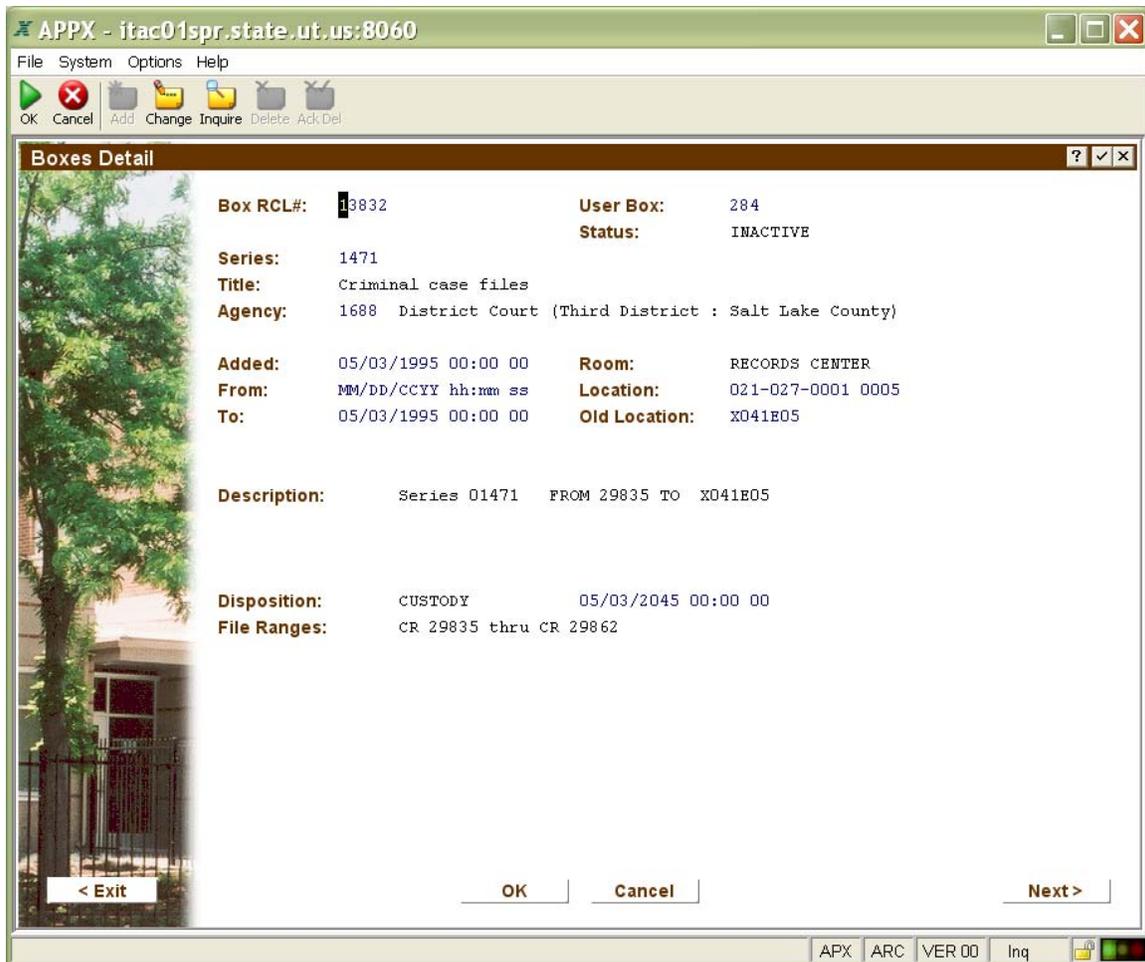
The box and file numbers are generated by the Records Center system. In turn, this system uses Axaem series numbers to identify sets of records, so the two systems work together. You may search for items by either number. Boxes and files display even if the item in question has been destroyed.

Box records include user box numbers, physical shelf location, date spans of contents, and file spans of contents. The description usually just duplicates this information, but may provide more context on occasion. File records contain similar data. Note that file

descriptions (when the file is a piece of microfilm) contain the film accession number (discussed further below).



Here's an example of a box detail record:



Exit to Main Menu

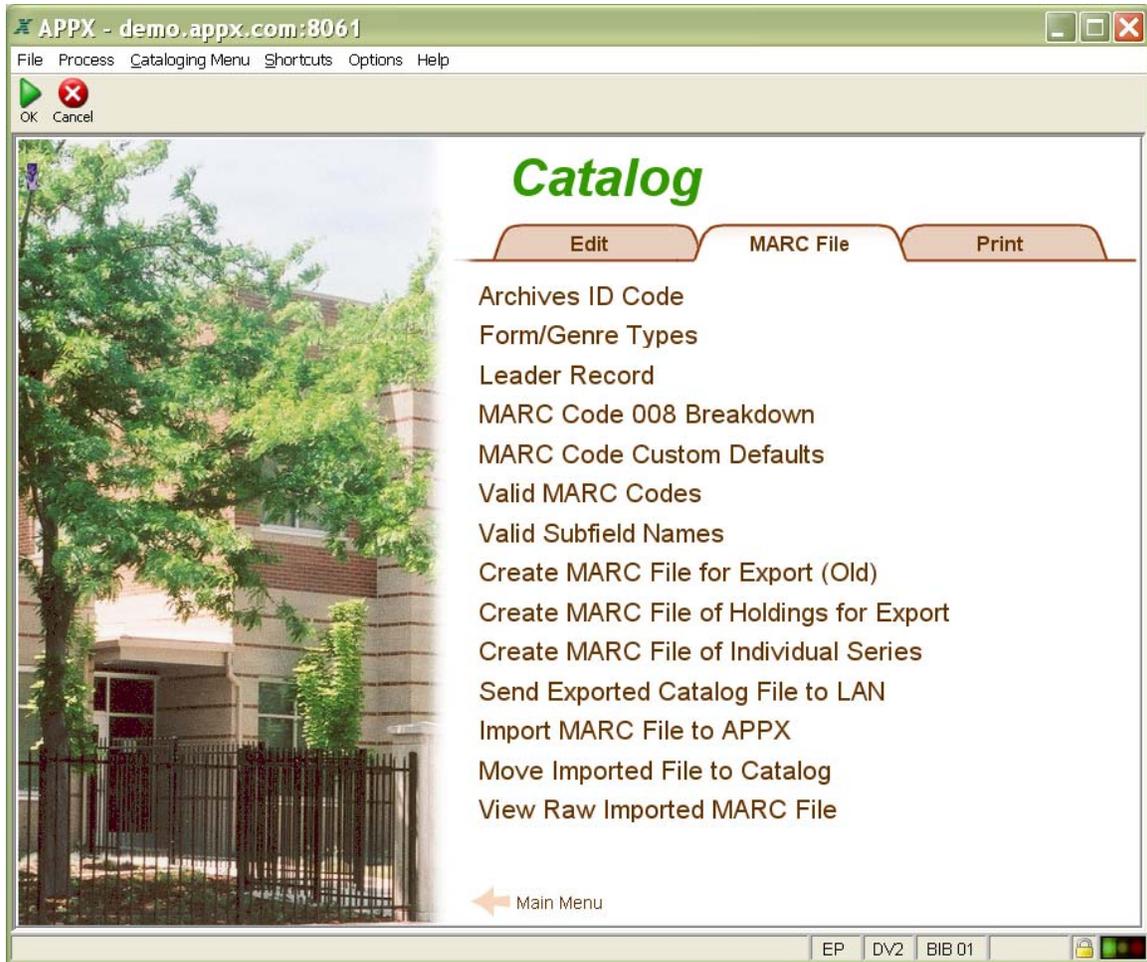
Cataloging

The Cataloging Menu manages all cataloging functions, including how the exportable catalog file and online catalog are generated, and the paths used for specific URLs within the catalog record (such as a link to an index).



The primary role of the Cataloging Menu is to produce the MARC 21 record and manage features related to cataloging efforts. All record series recorded in Axaem are automatically assigned MARC cataloging codes. All the user has to do is run a process called Convert to Catalog, which can be done as a batch (converting many series at once), or individually while within a series. Record series that go through the SRC approval process have this task done automatically. Records changed after SRC approval need to use the Convert to Catalog function. After records have been converted, the MARC record can be exported from Axaem, imported into any MARC-compatible library cataloging software, and changes that were made in the series will be visible to the public.

To export catalog records, click the MARC File tab:



The menu options called Create MARC File use various queries to export the data. In Utah, records are either exported as a whole batch file based on whether or not we have holdings in our custody, or individually one series at a time as needed. The resulting CATALOG.txt file will automatically land either as a file on your desktop or on the Archives' LAN server, depending on system settings. This menu also provides input processes to keep Axaem's knowledge of valid MARC values current.

Click back to the Edit tab in the Catalog Menu.

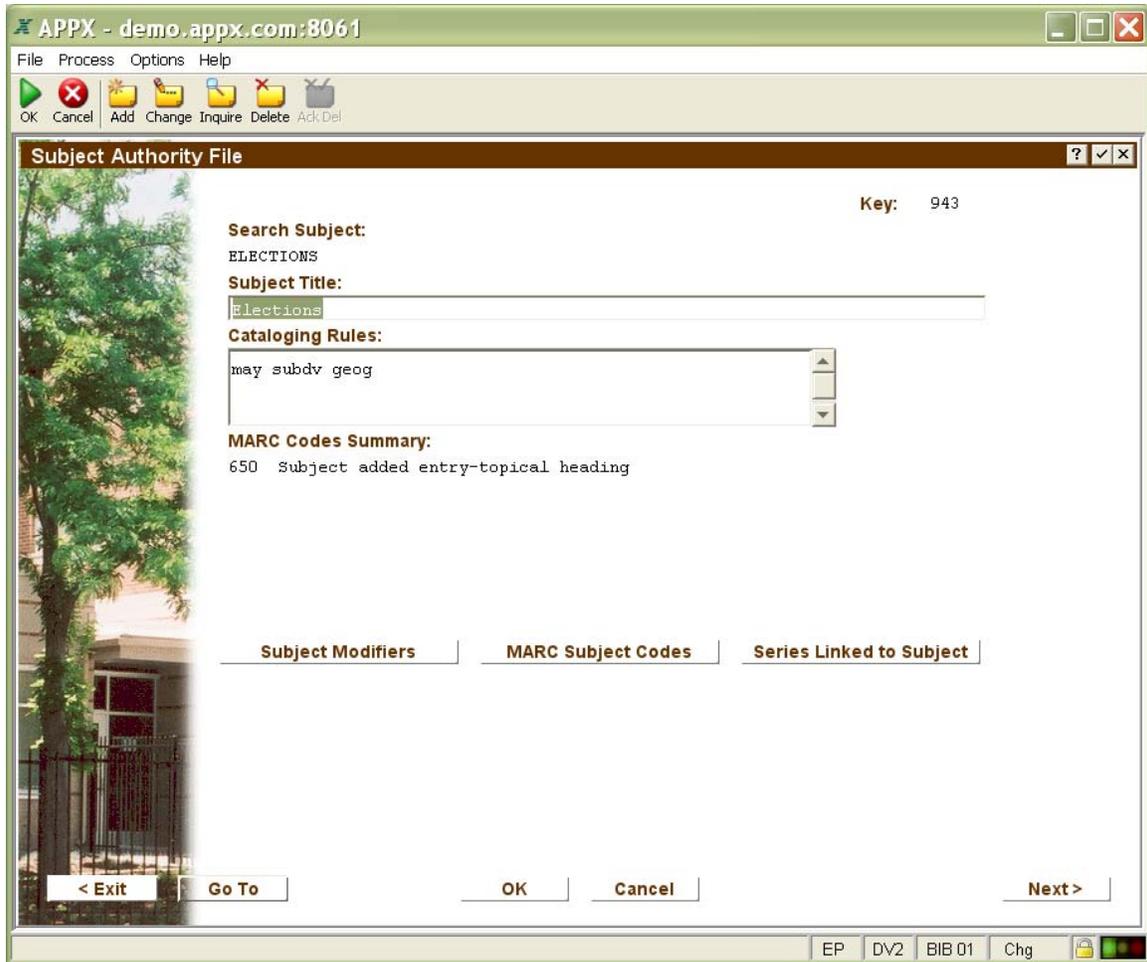
An important function of this menu is the subject authority file, which keeps track of all subject headings and their MARC codes. These subjects are then used to create access points in series. Subjects are not valid unless they follow the pattern of the Library of Congress subject headings, so our subject authority file is a subset of the Library of Congress's authority file. If we need to use a subject heading that isn't in our authority file, we add it, following the Library of Congress's entry. To access the Library of Congress headings, we have to subscribe to their service, since the data changes frequently. The philosophy behind a subject authority file (as opposed to keyword searching) is to standardize search terms so that a single search can pull up as many

related records as possible. Keyword searching does not handle synonyms very well, and Google doesn't always have access to a catalog database.

Click Subject Authority File:

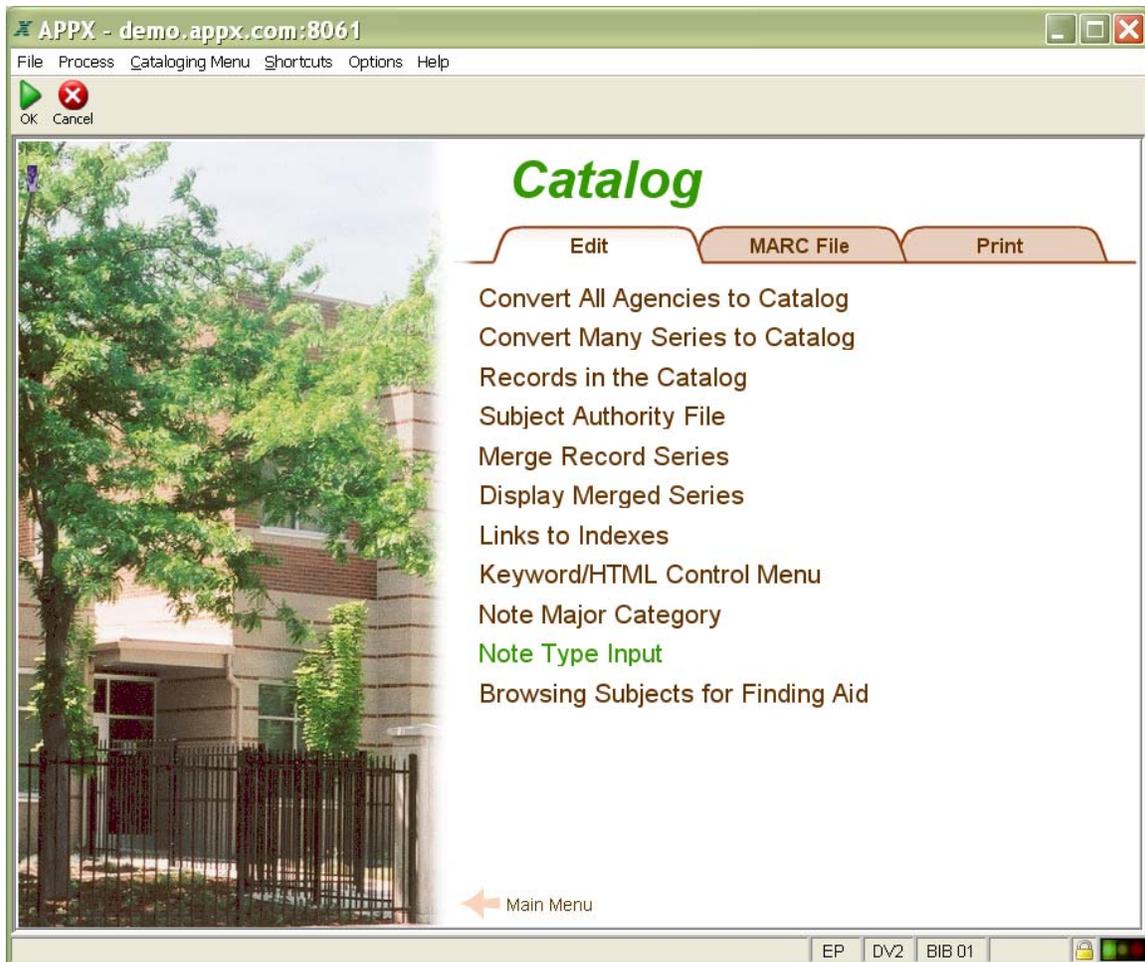


Press the Go To button, type ELECTIONS and press Enter:

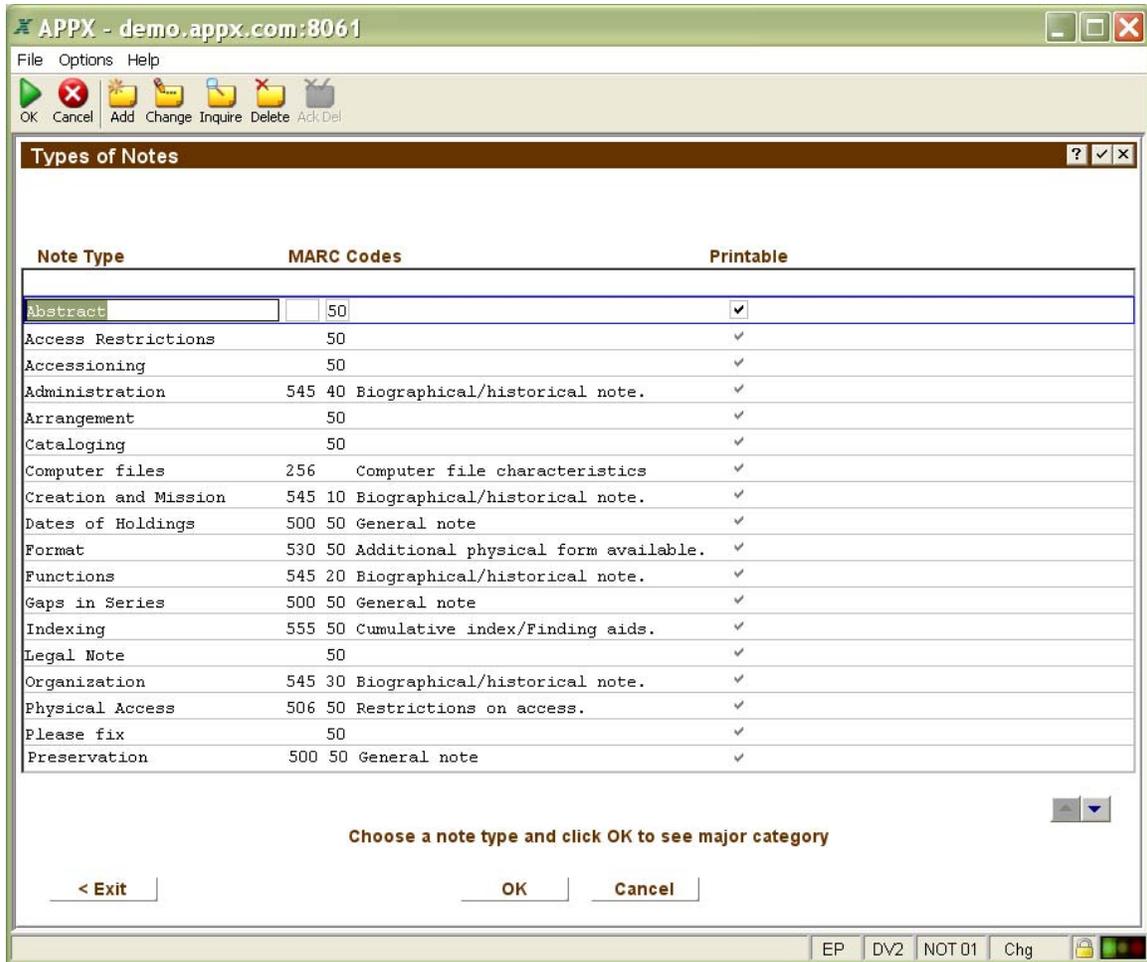


Exit back to Catalog Menu.

Another important option in the Catalog Menu is the management of note types. There are three different major note categories: those tied to agencies, series, and general schedules. The note types under each of these categories are user controlled. Click Note Type Input:



You may add any type of note type to any major category you wish, which will then show up as a place to add that type of note in Series Input:



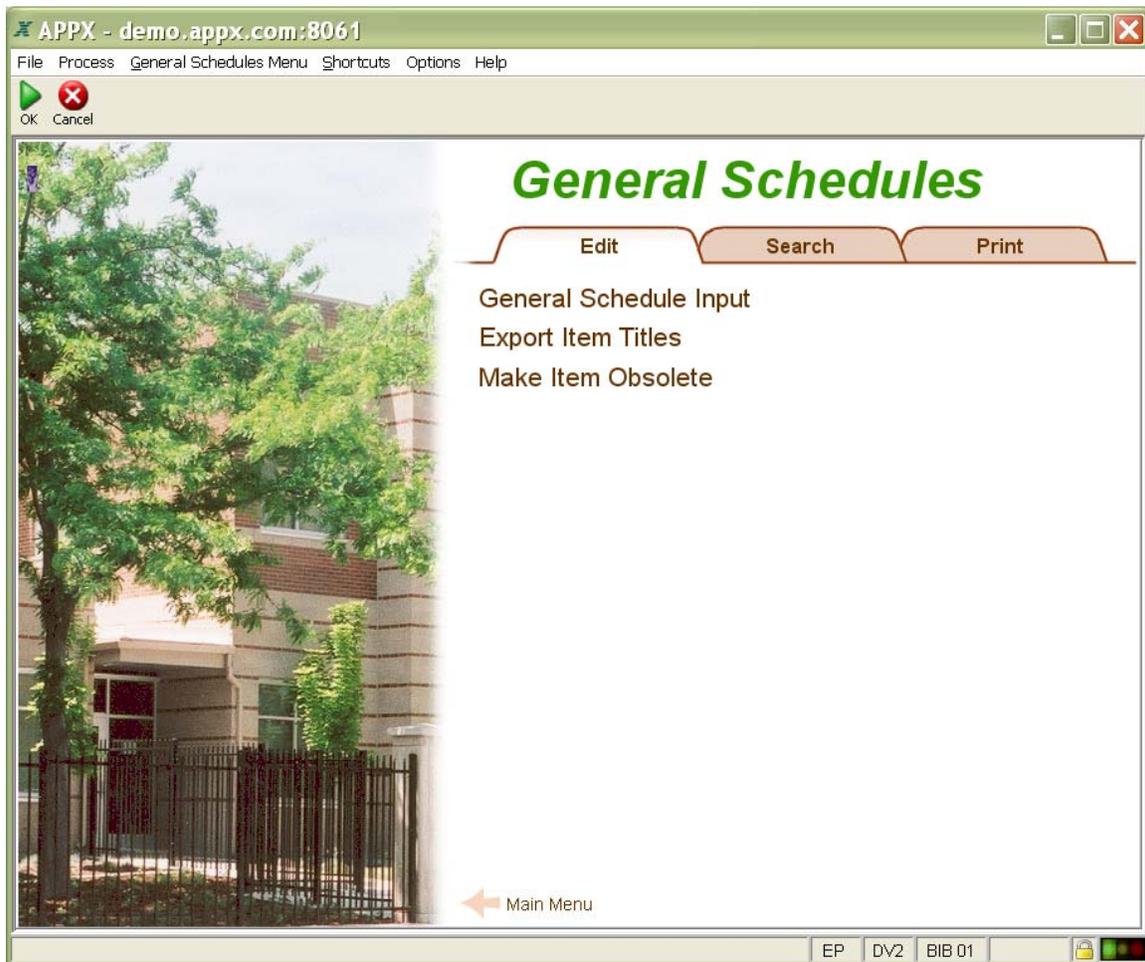
The name of the note is listed, followed by the MARC code, followed by a priority ranking, in case the notes need to be output in a particular order in the MARC record while sharing the same MARC code (see all the 545 entries).

Exit to Main Menu

General Schedules

The General Schedules Menu is used to manage retention schedules that are applicable to groups of agencies, such as state or municipal government. Sometimes these schedules are used for only one department if it has many identical regional offices. General schedules include record series that are usually common to many agencies: administrative records, financial records, and human resource records. Creating general schedules saves us time because once a schedule is approved, agencies can use it without needing to go through us further. They do need to interact with us if they want to house their records at the Records Center or do microfilming, however. In that case, a series is created in Axaem but it uses the descriptive information from the general schedule item, again saving us time.

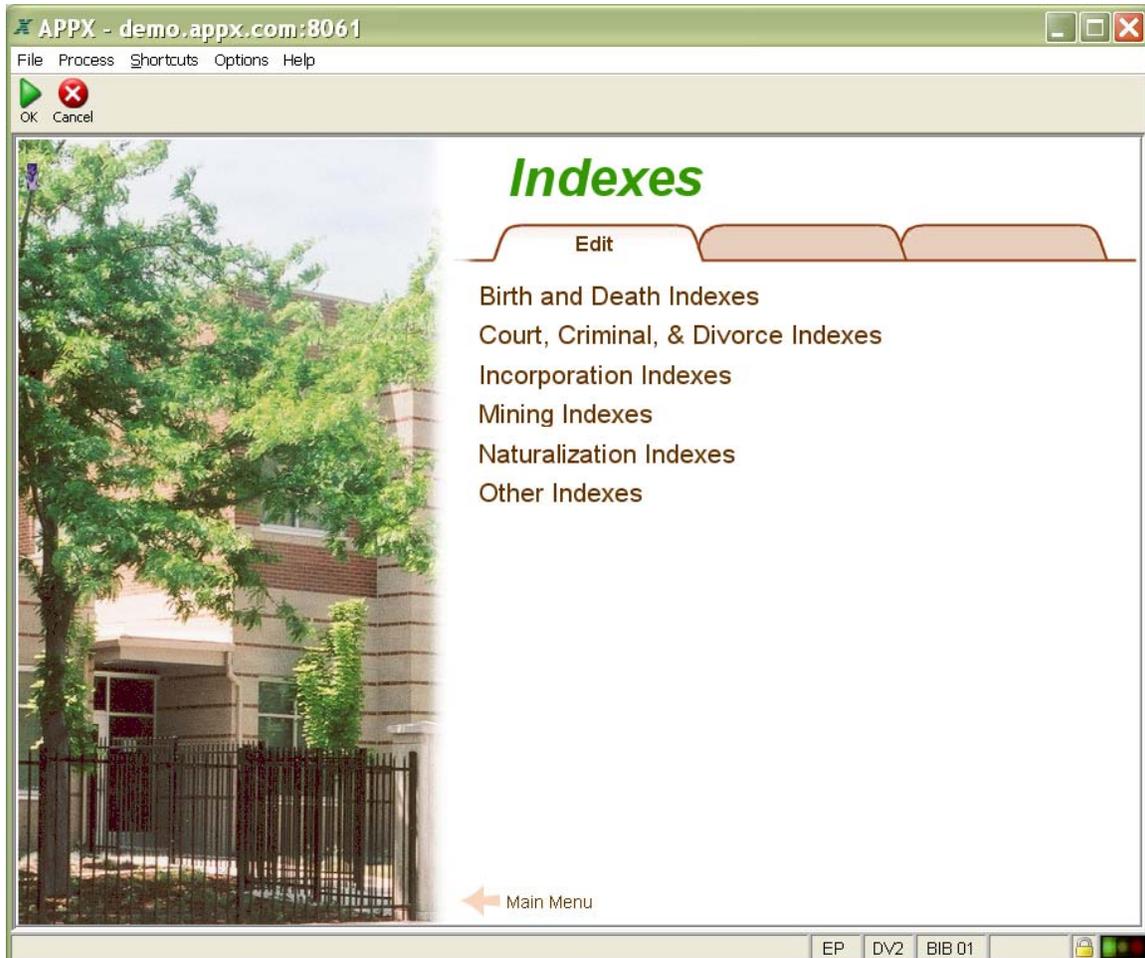
General schedules have a three-part key, which consists of an agency number (if applicable), schedule type (e.g. SG for State Government) and a schedule number. The schedule is first described as a unit, and is given a title. Then individual items are added and linked (as a child) to this schedule, with the key consisting of the schedule type, schedule number, and item number. Item numbers do not exist independently. They are repeated between schedules. The items do have another key (called the general schedule key) which is actually like a series number (it is generated from the same table as a series) and is unique from item to item but isn't used as a series in the traditional sense. The items are organized this way in order to use the same State Records Committee approval process that a regular series does.



Exit to Main Menu.

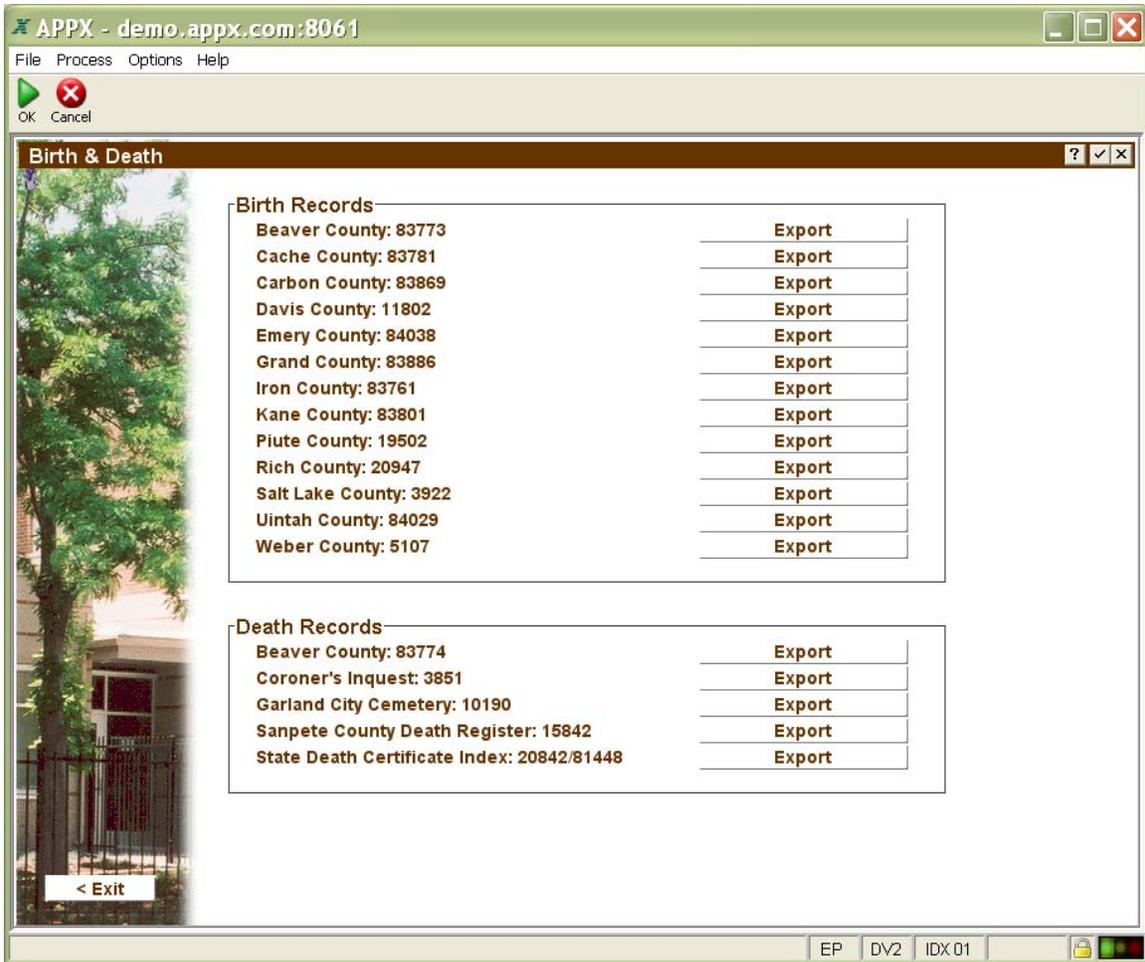
Indexes

The Indexes Menu provides direct access to series indexes, which index everything from birth records to mining claims. Indexes have been created by staff, volunteers, or the originating agency to make individual records more visible to the general public. Usually the items of interest are names of people or corporations. Series that are indexed are searchable through our website by these fields.

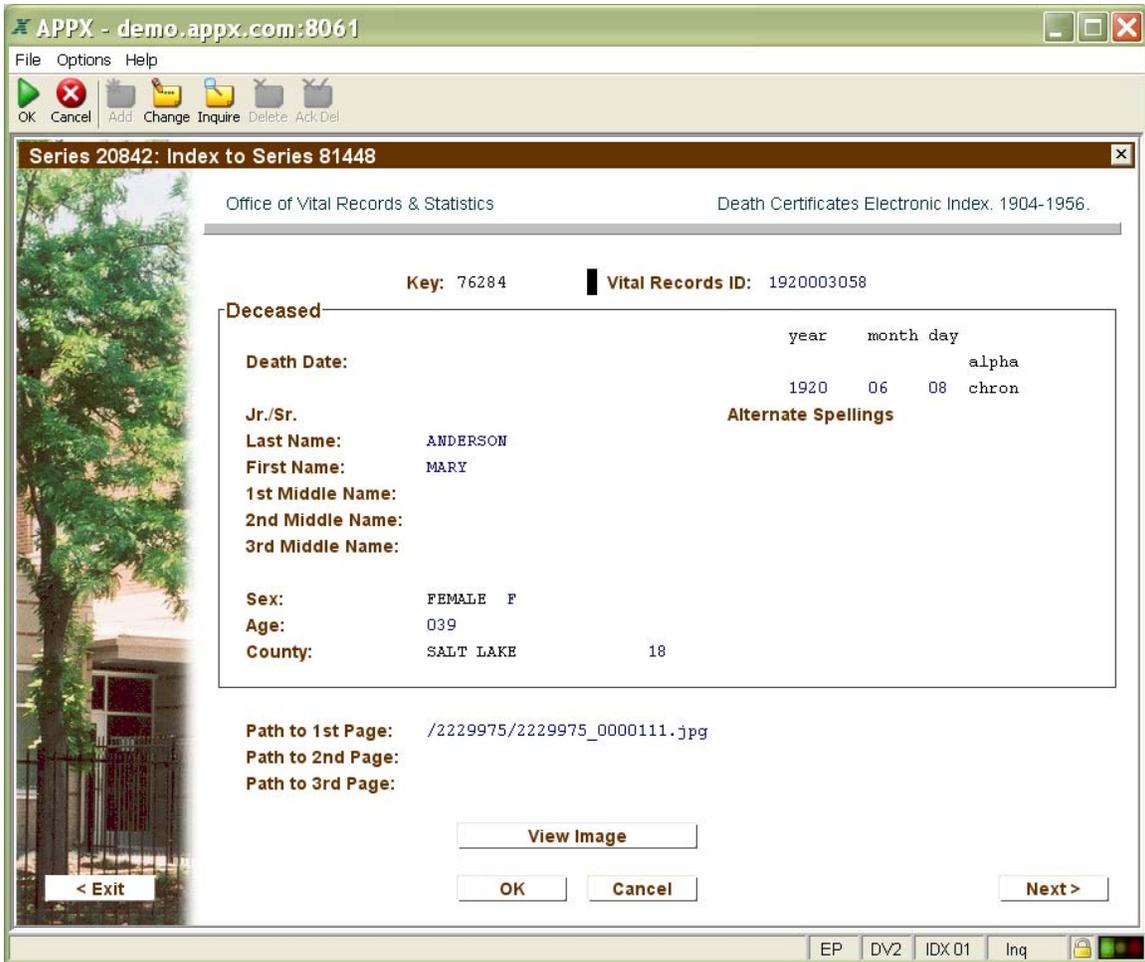


The menu lists indexes first by general category, and then by agency and title. The website will search all indexes simultaneously. Going to individual indexes here will search just that particular index. Or you may edit index entries through these screens.

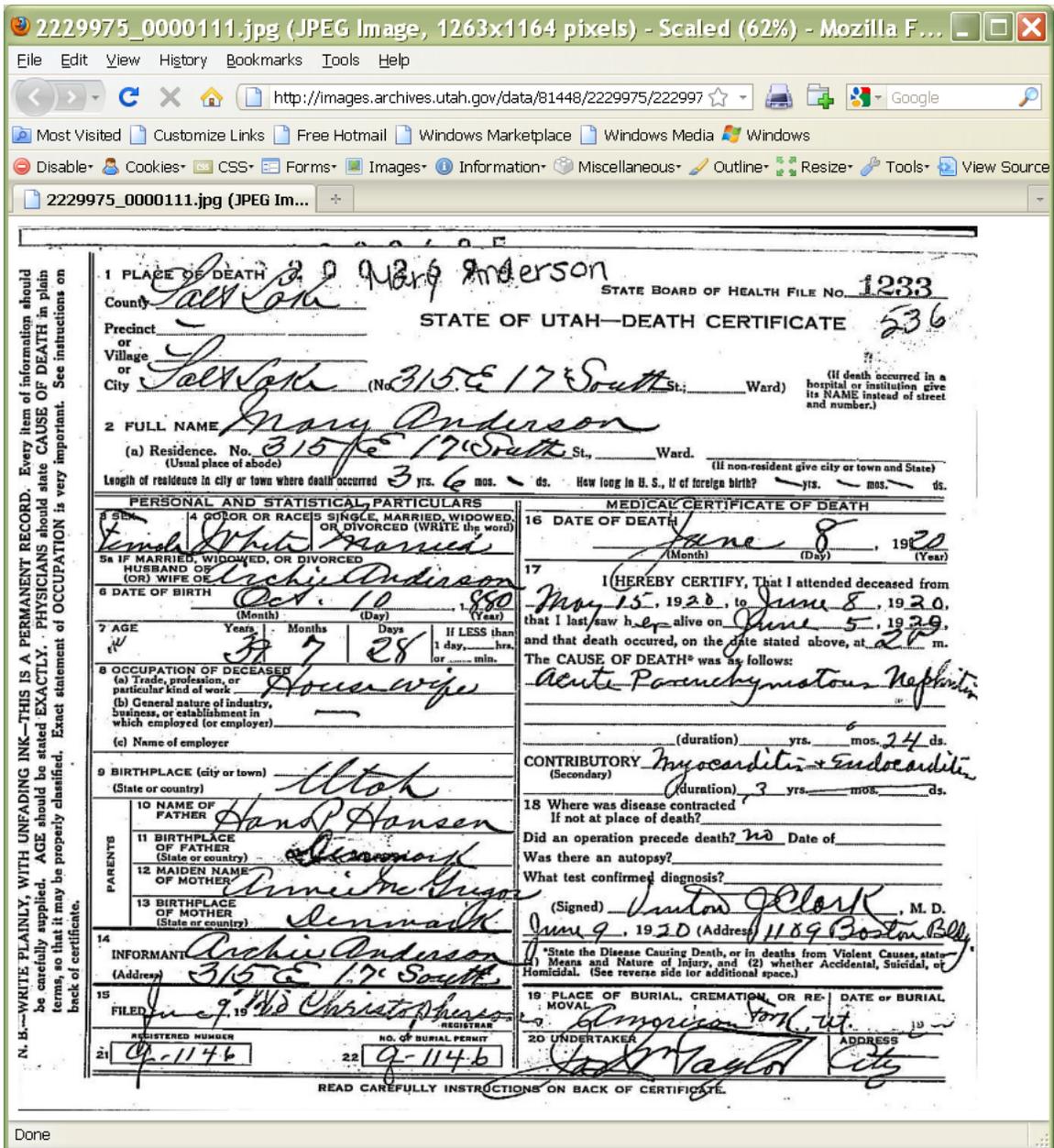
Data from individual indexes can be exported to an Excel spreadsheet to be used as metadata for digital collections, or to share with requesting entities:



Click the State Death Certificate Index (at the bottom of the list above) to view a record and its image:



Click View Image to see the linked death certificate:



Close browser, then exit to Main Menu

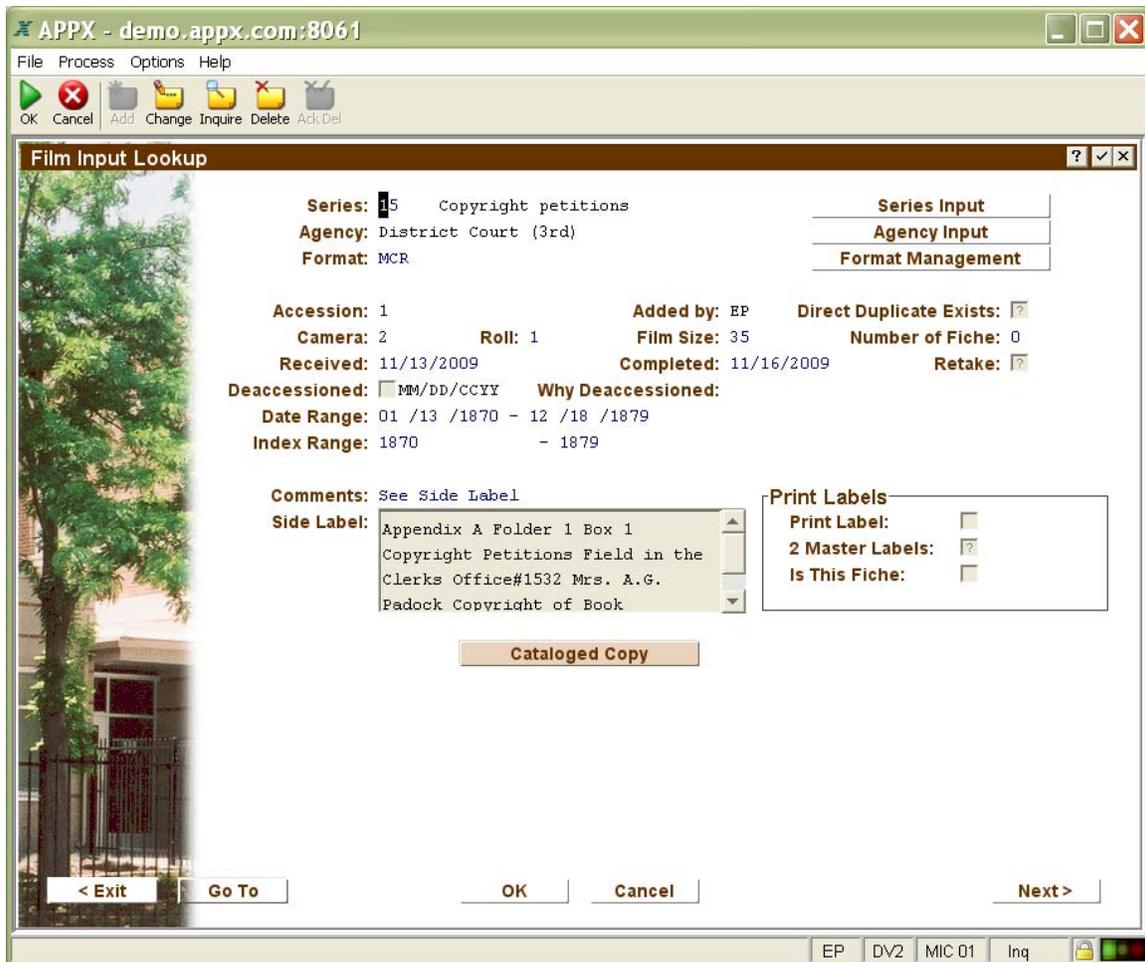
Microfilm

The Microfilm Menu is used to accession and track microfilm. Records may be filmed at the Archives, in the agency, or elsewhere, but the film is always processed (developed) by us. Usually the master copy is also retained by us. Agencies may request duplicate copies of film, also known as the diazo copy. Another diazo copy may be made for research use, as needed, or agencies may request that film be digitized and provided on an electronic medium. As each film comes in for processing, it gets added to the system.

At that time it is tied to a series, and the date spans and content ranges are recorded. Each piece of film receives an accession number, which is automatically-generated and reflects the sequence count number of all the film processed by the Archives (so the number keeps going up, regardless of series or other demarcations). The unique key for film, however, consists of three parts: the series number, the format type (usually MCR or FCH for microfilm and microfiche, respectively), and the accession number. This is necessary to differentiate logical control from physical control. The intellectual separation of records is subject to change, but film can't always be snipped.



Click on Film Input Lookup and press Enter to view a microfilm record:

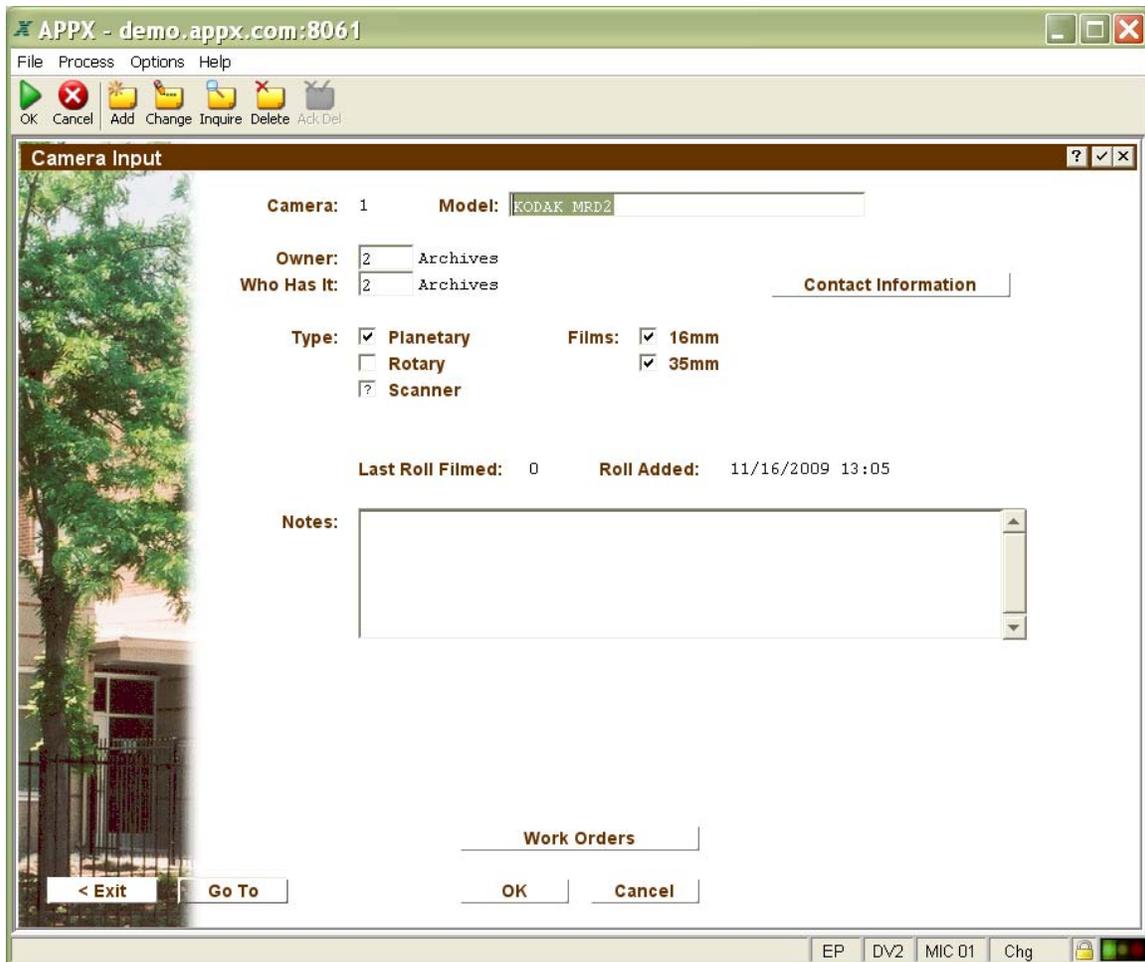


Exit back to the Microfilm menu.

We also record the camera that the records were filmed on, who has it, its make and model. Each camera keeps track of the number of rolls it has filmed, and the numbers are continuous regardless of what's being filmed.



Click on Camera Input, then press Enter to bring up the first camera record:



Exit back to Microfilm menu.

Different from the camera's roll number, the reel number is assigned to each piece of film in the permanent collection by staff while they are creating the finding aid. Reels are assigned in a particular order, depending on how the finding aid is arranged, starting at reel 1 and continuing until all the reels are described for that series. Reel numbers are unique within a series, but are re-used between series. Renumbering reels through the microfilm menu is available, but newer processes take care of this task in another way through our Processed Container functions.

Exit to Main Menu

Patron Registration

The Patron Registration menu is used to identify patrons, their research questions, and the actions that staff members have taken (or need to take) regarding those questions. Specific records used (by box barcode number) may also be recorded. Click on Patron Registration:



This option brings up another menu, which has a different design motif since it is used by two different divisions with a shared Research Center (State Archives and State History):



This system is still under development, but should have enough data entry capabilities to be usable. Click on the Patron Registration option and then click Enter to bring up the first record:

APPX - demo.appx.com:8061

File Process Options Help

OK Cancel Add Change Inquire Delete Ack-Del

Patron Input

Patron: 3 Added: 03/11/2010

Archives & History

Name

Last: Doe First: Jane Middle:

Title:

Organization: Signed Registration: Signed Film Loan:

Note:

Address

Address Line 1: 200 Oak Dr

Address Line 2:

City: Anywhere State: UT

Country: Zip: 84000

Email: jdoe@anywhere.com

Phone 1: 801-555-2000 Phone 2: - - -

Fax: - - - Phone Intl: - - -

Print (reports not yet available)

- Cover Sheet for Filing
- Film Loan Agreement
- Mailing Label
- Patron Registration Form
- Pending List for Patron
- Request History
- User ID Card

Write a Letter Use form letter: Questions

< Exit Go To OK Cancel Search By Next >

EP DV2 PTR 01 Chg

This identifies the contact information of the patron. Click on the Questions button (bottom right):

APPX - demo.appx.com:8061

File Process Options Help

OK Cancel Add Change Inquire Delete Ack-Del

Patron Questions

Archives & History

Patron: Doe, Jane Phone: 801-555-2000 Email: jdoe@anywhere.com

Research Question

Question: 2 **Added:** 03/11/2010 **Closed:** MM/DD/CCYY **Active:**

Request: Need grandmother's birth certificate.

Statistical Data

Mode: Email **Urgency:** 3 Low **Why:** _____

Category: Genealogy **Topic:** _____

Object/Person Being Researched: _____

Dates: CCYY - CCYY **County/Judicial District:** _____

or Specific Date: 03/25/1898 **Municipality:** Salt Lake City

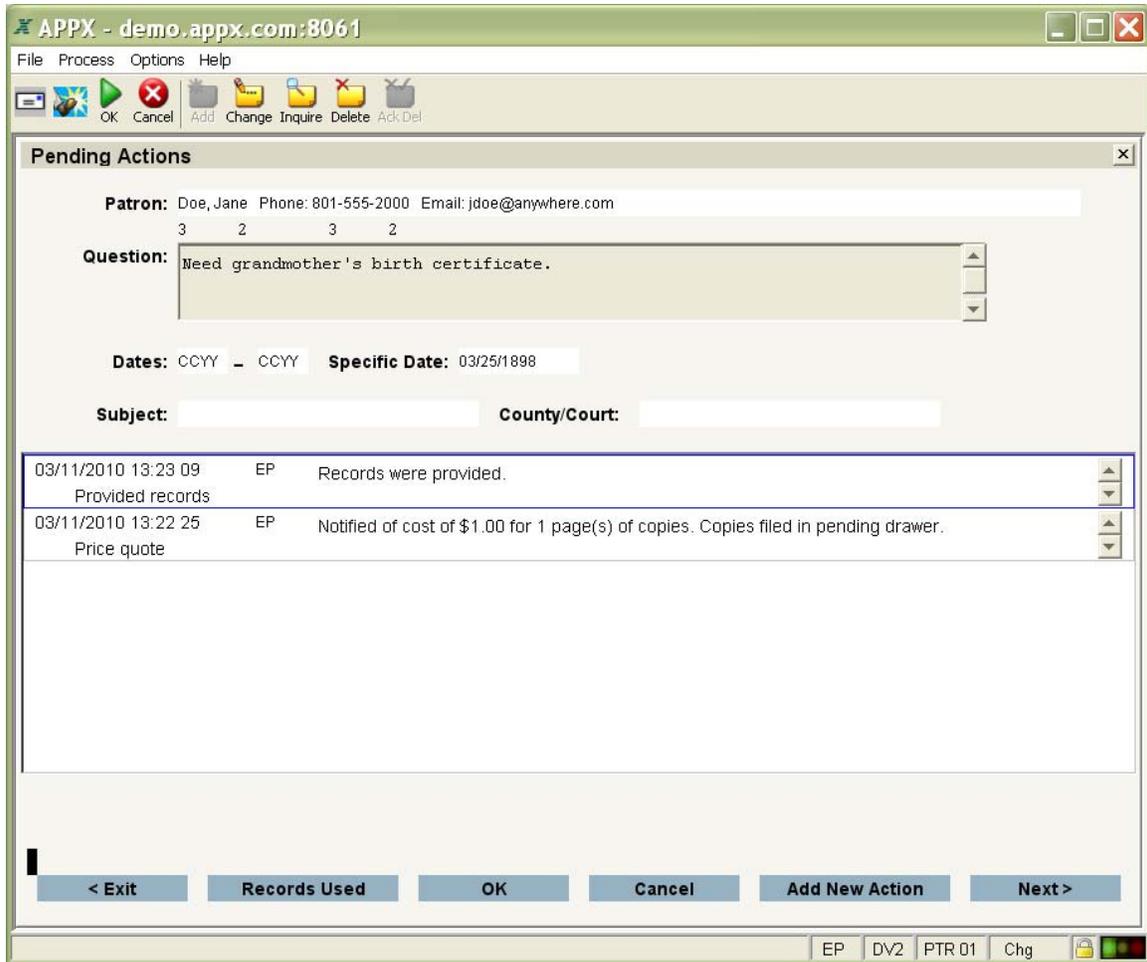
Write a Letter **Use Form Letter:** _____

Staff Actions **Records Used**

< Exit Close Question OK Cancel Search Series Next >

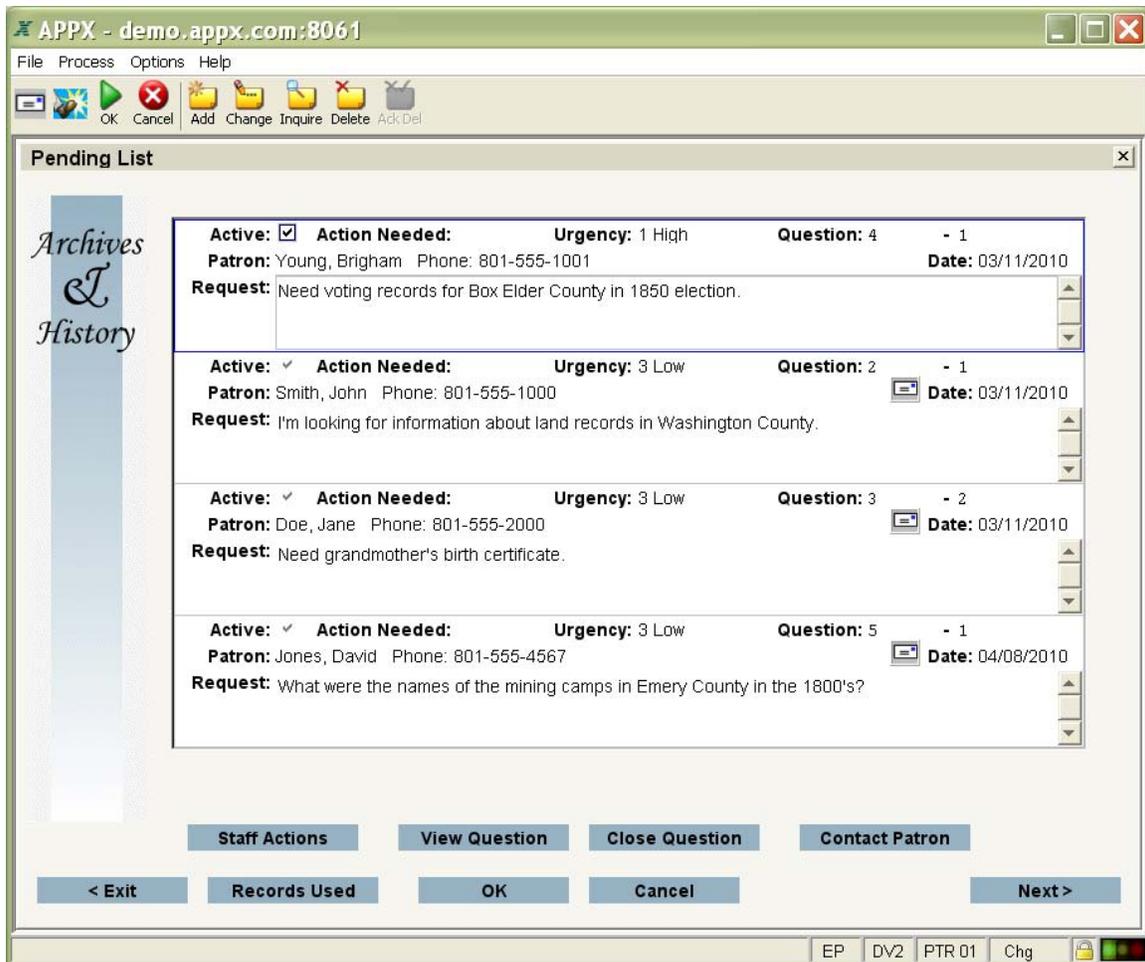
EP DV2 PTR 01 Chg

Each question the patron asks should be recorded. Data being recorded is designed to assist in gathering specific types of statistics. Values in the drop-down menus may be changed to reflect institution needs. Click the Staff Actions button:



Each action that a staff member takes in regard to the research question should be listed here. Common actions have some pre-determined values in fields.

Exit back to the Patron Registration main menu (called Utah History Research Center).
Click the Pending List option:



This screen identifies active questions and whether or not staff action is needed. When a question is closed, it drops off this list.

Other options in the Patron Registration system duplicate processes in the other areas of Axaem, but are designed specifically to display data needed by Research Center staff, rather than provide a function for data entry.

Reports

The Reports Menu lists all reports that have been created. Many of these reports have been around for a long time. New reports can always be created or old ones updated. They may be printed as simple text files, or you can transform them into PDF reports. Some reports have been specifically designed for PDF use, especially the Retention and Classification Report. Reports designed with PDF in mind can have more graphical qualities than simple text reports. A PDF report is a little more flexible with its printing as well. You can choose which or how many pages to print.



These reports are generally also available under the Print tab of the other menus.

Exit to Main Menu

Series & Searching

The Series & Searching Menu is the heart of Axaem. All other functions revolve around data contained here. Record series by definition are groups of records housed together that are created for a single purpose, and share a common retention and arrangement. This definition comes into play when trying to determine series boundaries. Axaem uses the term “series” since that is the bibliographic level used at the Utah State Archives. The database table name used, however, is BIBLGRPC, for Bibliographic file. Any record at any bibliographic level can be entered here, and relationships between collections, series, sub-series, and items will be identified through a separate mechanism, called Collection Management.

When determining series boundaries, some archivists like to lump records together into one series and others prefer to split them into several. The former is more convenient, but

the latter is more precise. Axaem was designed to be flexible in this regard (series can be merged), but it supports descriptive precision especially well. Instead of combining the records together it allows the creation of relationship links to other series through the Related Materials file (MARC code 544) so that the full context of these records can be recorded. This allows for records whose purpose, title, or arrangement have morphed over the years to be described separately and yet still be linked together. Records created by separate offices should always be a separate series, and linked to their correct agency through the agency key (the agency authority file), not the series title.

Sometimes the decision to split a series or not is a little bit fuzzy. We do have a field for “prior arrangement,” MARC code 351, which can either be used to expand the understanding of one series (and the filing habits of a rotating door of secretaries) or be used as a clue that maybe the series is different enough in purpose now that it should be divided in two. Sometimes the rules are quite clear. For instance, cataloging rules state that a change in title (MARC code 245) must be followed by a new catalog entry (meaning you have to create a new series). So series boundary decisions are affected by professional standards as well as a certain amount of intuition. In the end, these rules help keep and maintain a clean system with good consistent data entry.

Click on The Series & Searching menu, then click Bibliographic Input:



Click Enter to bring up a record:

APPX - itac01spr.state.ut.us:8060

File System Process Security Options Help

CHVT CTLG MARC R&C OK Cancel Add Change Inquire Delete Ack Del

Series Input: Identity Elements

Identity	Content	Access & Use	Acquisition & Appraisal	Related Materials	Notes
Series ID:	84118				
Creator ID:	1496	Department of Workforce Services. Salt Lake Metro Employment Center			
		Creator name comes from agency authority file, do not repeat it in the title. End ongoing series dates with a dash (-), and closed series with a period (.). Extent comes from Processed Container and Microfilm Copy data. Box sizes are used to calculate cubic footage.			
Title:	Claims adjudication case files				
Searching Title:	Claims adjudication case files	Press Go To and then F3 to search.			
Dates:	1989-				
Normalized Dates:	i 1989 9999				
Extent:					
Security Level:	1	<input type="button" value="Administrative History"/>			

< Exit Go To

All of the buttons and options on the Bibliographic Input screen are designed to reflect DACS rules, so that standard can be used as a primer for knowing what kind of data to enter into the various fields in Axaem. Record series have a creator (an agency), a title, date span, arrangement, description, retention, appraisal, and physical extent at a minimum. Other data may also be recorded. Record series are cataloged as a unit, similar to a book in a library. Each field is automatically mapped to its corresponding MARC code. The way you word the data in these fields matters. Cataloging rules are very precise when it comes to things like capitalization.

Record series have a number. This series number is what makes our local system work. Every other process in the system uses the series number to one degree or another. It is unique, and a simple sequence number, not dependant upon any other data. It is not a child of the agency key, although agency information is recorded at the series level (and linked to the agency tables). This keeps the series independent of any change to agency hierarchy or original creator, which comes in very handy when series are moved about from agency to agency. A locally-defined key may also be added to the series record.

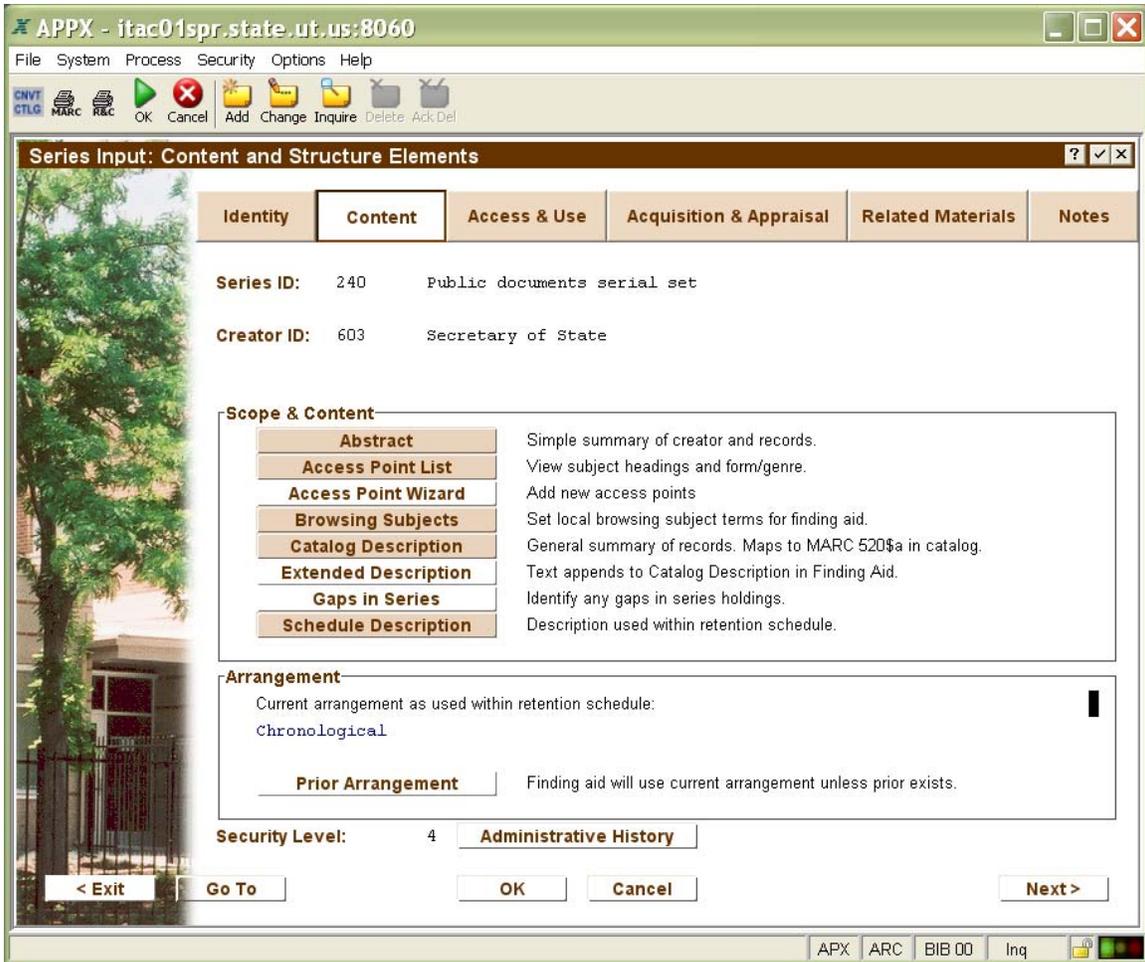
Here's another example of a series:

Identity	Content	Access & Use	Acquisition & Appraisal	Related Materials	Notes
Series ID:	240				
Creator ID:	603	Secretary of State			
		Creator name comes from agency authority file, do not repeat it in the title. End ongoing series dates with a dash (-), and closed series with a period (.). Extent comes from Processed Container and Microfilm Copy data. Box sizes are used to calculate cubic footage.			
Title:	Public documents serial set				
Searching Title:	Public documents serial set			Press Go To and then F3 to search.	
Dates:	i 1896-1956.				
Normalized Dates:	i 1896 1956				
Extent:	15.00 cubic feet and 92 microfilm reels				
Security Level:	4	<input type="button" value="Administrative History"/>			

< Exit Go To OK Cancel Next >

In this example, note that these records were created years ago and are no longer being created. The agency that created them no longer exists. We have the records on microfilm and hard copy.

Clicking on the different tabs at the top of this screen shows what kind of data is available for this series:



APPX - itac01spr.state.ut.us:8060

File System Process Security Options Help

CNVT CTLG MRC R&C OK Cancel Add Change Inquire Delete Ack/Del

Series Input: Conditions of Access & Use Elements

Identity	Content	Access & Use	Acquisition & Appraisal	Related Materials	Notes
Series ID:	240	Public documents serial set			
Creator ID:	603	Secretary of State			
Access					
Access Restrictions		Access Restriction notes.			
Classification		GRAMA designation. Used by finding aid unless there is a restriction note.			
Physical Access		Physical access notes, including fragility of records.			
Technical Access		Technical access notes, such as equipment needed to view or use records.			
Use					
Catalog		See catalog data.			
Finding Aids		Identify each finding aid and the dates it covers.			
Language		Identify language of records.			
Processed Containers		Link intellectual data in finding aid to physical holdings.			
Reproduction & Use		Identify copyright instructions.			
Security Level:		4	Administrative History		

< Exit Go To OK Cancel Next >

APX ARC BIB 00 Inq

APPX - itac01spr.state.ut.us:8060

File System Process Security Options Help

CNVT CTLG MRC R&C OK Cancel Add Change Inquire Delete Ack/Del

Series Input: Acquisition & Appraisal ? ✓ ✕

Identity	Content	Access & Use	Acquisition & Appraisal	Related Materials	Notes
Series ID:	240	Public documents serial set			
Creator ID:	603	Secretary of State			

Acquisition

ASRS Request	Order boxes & files from the Archives' permanent collection.
Custody History	Indicate custody history information.
Electronic Data Sets	Itemize electronic data sets in custody for series by type.
Prior Creators	Indicate prior creators of these records.
Records Center Boxes	View boxes in the Records Center and Archives.
Records Center Files	View files in the Records Center and Archives.

Appraisal, Destruction, & Scheduling

Appraisal	Indicate rationale for destruction and other disposition decisions.
General Schedule	Tie series to a general retention schedule.
Retention & Format	Identify unique retention schedules and accruals by format.
Retention Approval	View SRC and other approval status.

Total Retention: Retain permanently.
 Security Level: 4 **Administrative History**
 OK for Inventory: **OK** **Cancel** **Next >**

< Exit Go To

APX ARC BIB 00 Inq

APPX - itac01spr.state.ut.us:8060

File System Process Security Options Help

Series Input: Related Materials Elements ? ✓ ✕

Identity	Content	Access & Use	Acquisition & Appraisal	Related Materials	Notes
Series ID:	240	Public documents serial set			
Creator ID:	603	Secretary of State			

Related Records

Related Records Identify records related to this series.

Existence and Location of Copies

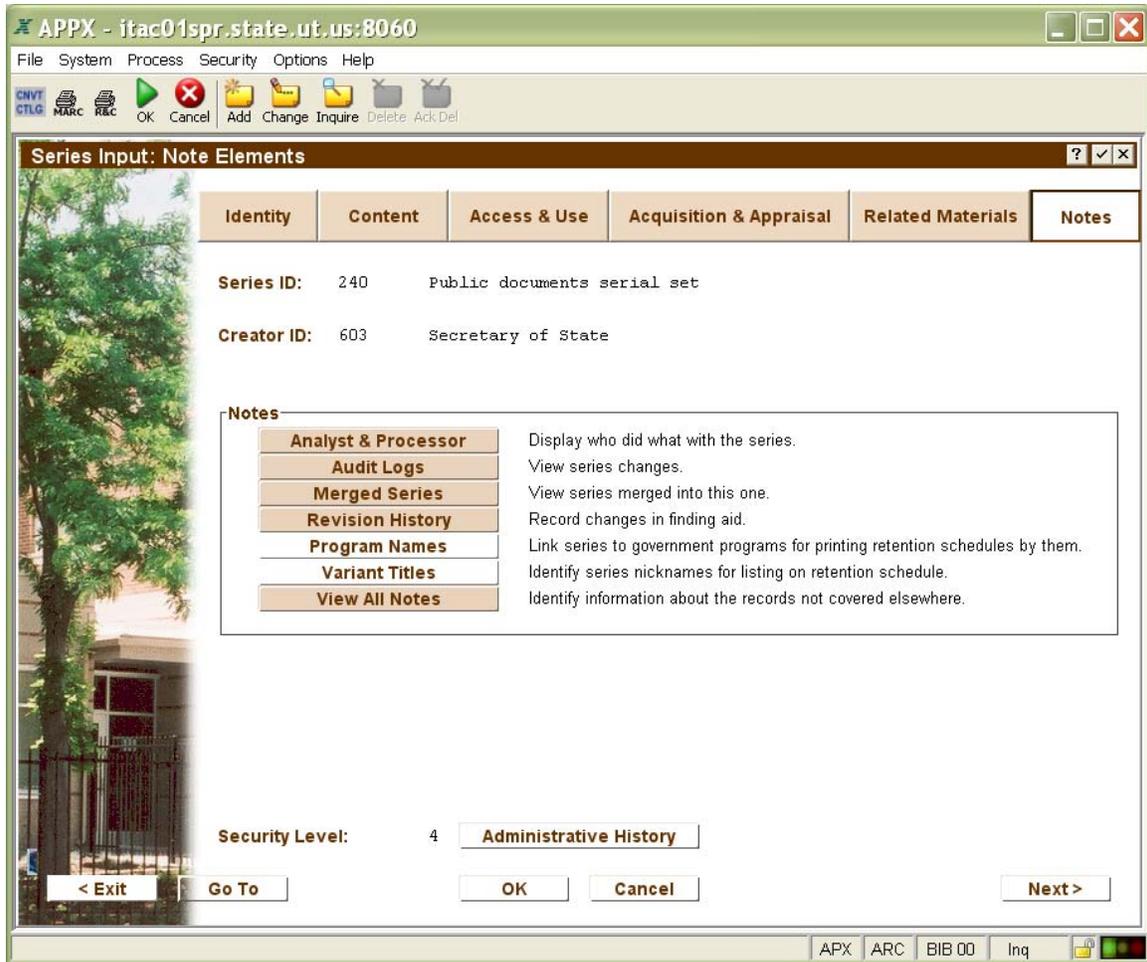
- Digitization Details** Digitization specifications and location for this series.
- Digitization Orders** Orders for these records to be digitized.
- Microfilm Copies** View reference copy film.
- Microfilm Master** View master copy film.
- Regional Film** Film held by Regional Repositories.
- Work Order** Create work order for microfilm.

Existence and Location of Originals

- Originals** If someone besides Archives has the originals, indicate which repository.
- Regional Repositories** Edit Regional Repositories.

Security Level: 4 **Administrative History**

APX ARC BIB 00 Inq



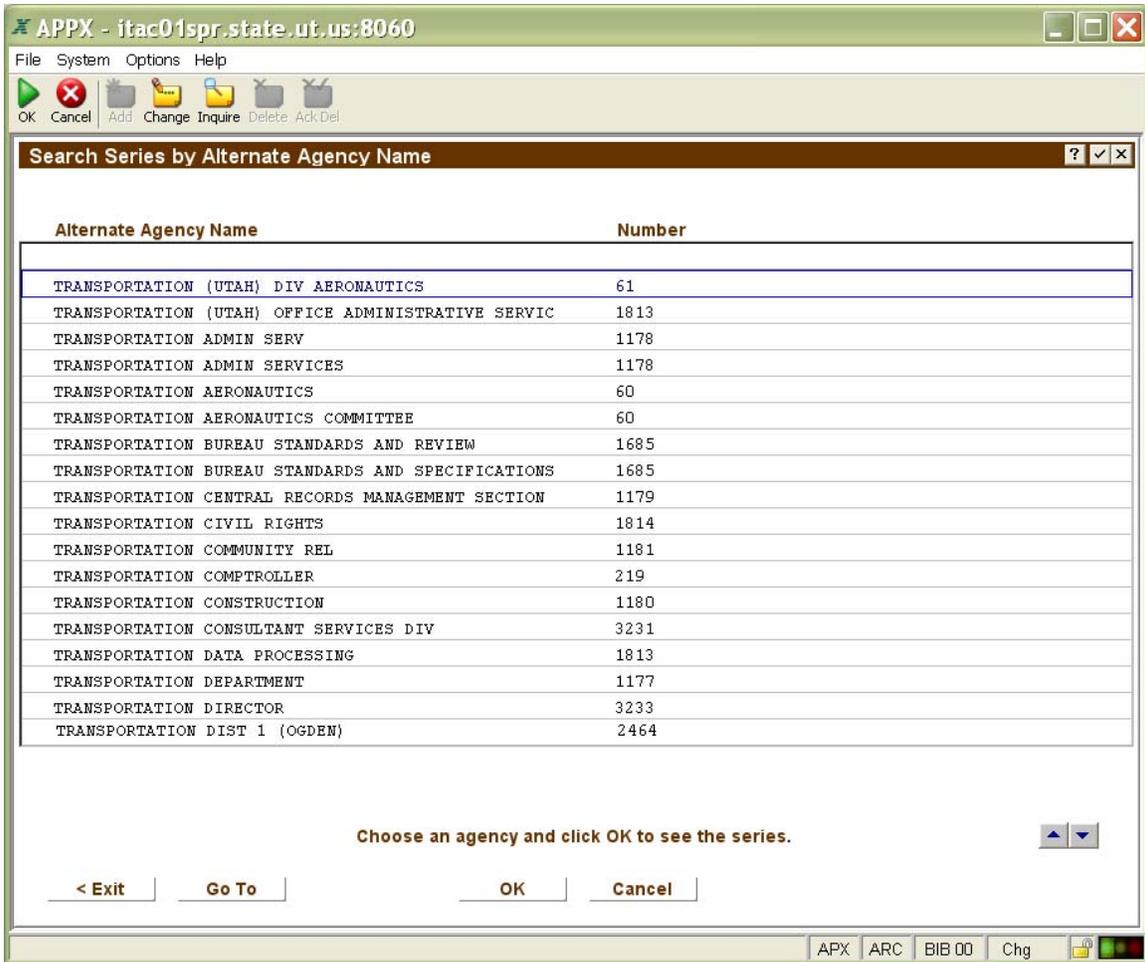
Click Exit or press F8 to go back to the Series & Searching Menu.

You may also search for series by the other fields, such as agency name or title. To do that, go to the Search tab. Here you may search by the field of your choice. Note that some of these fields, such as title, are case sensitive. Your search results will be a scrolling list of hits. Choose one and it will take you into Bibliographic Input. Exiting back out will take you to the scrolling list again where you may choose another series to view.

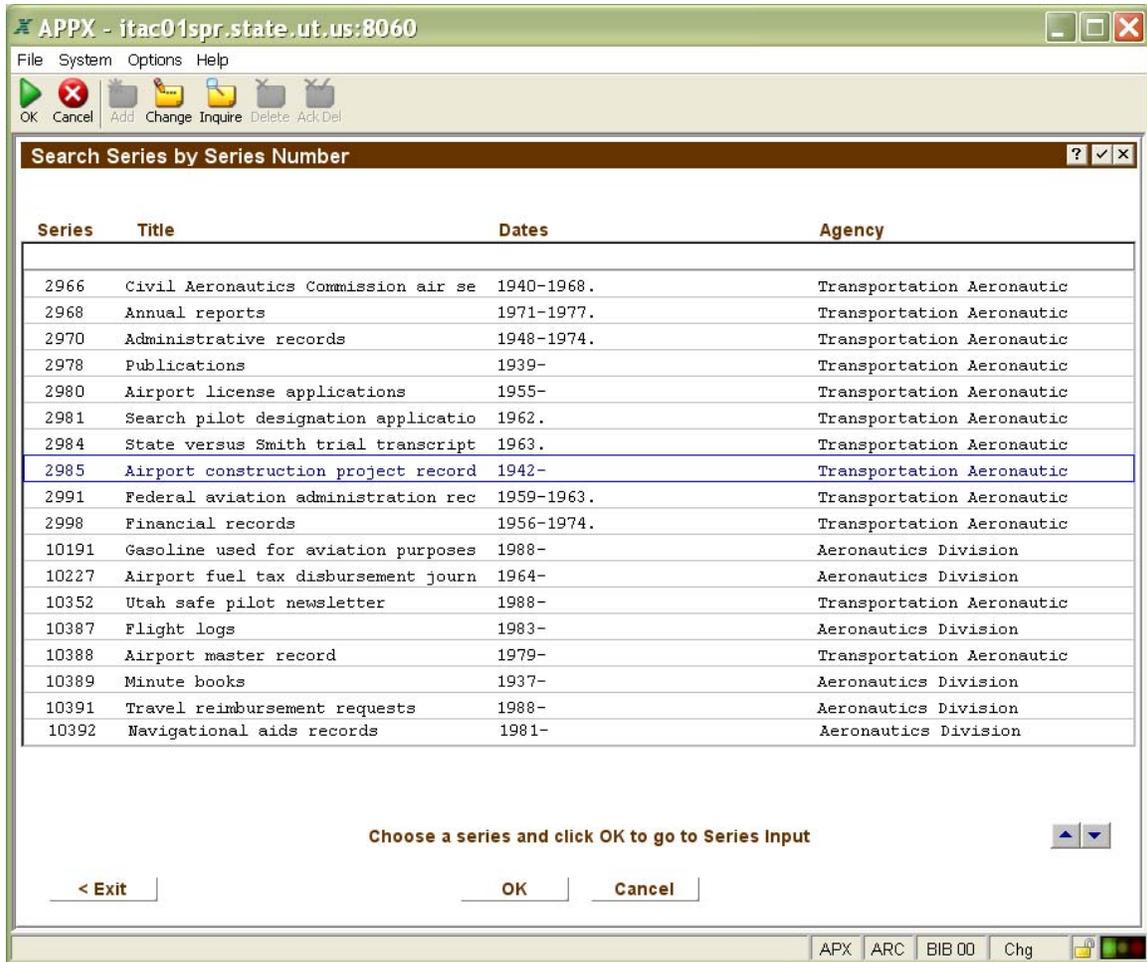
Click Alternate Agency Name:



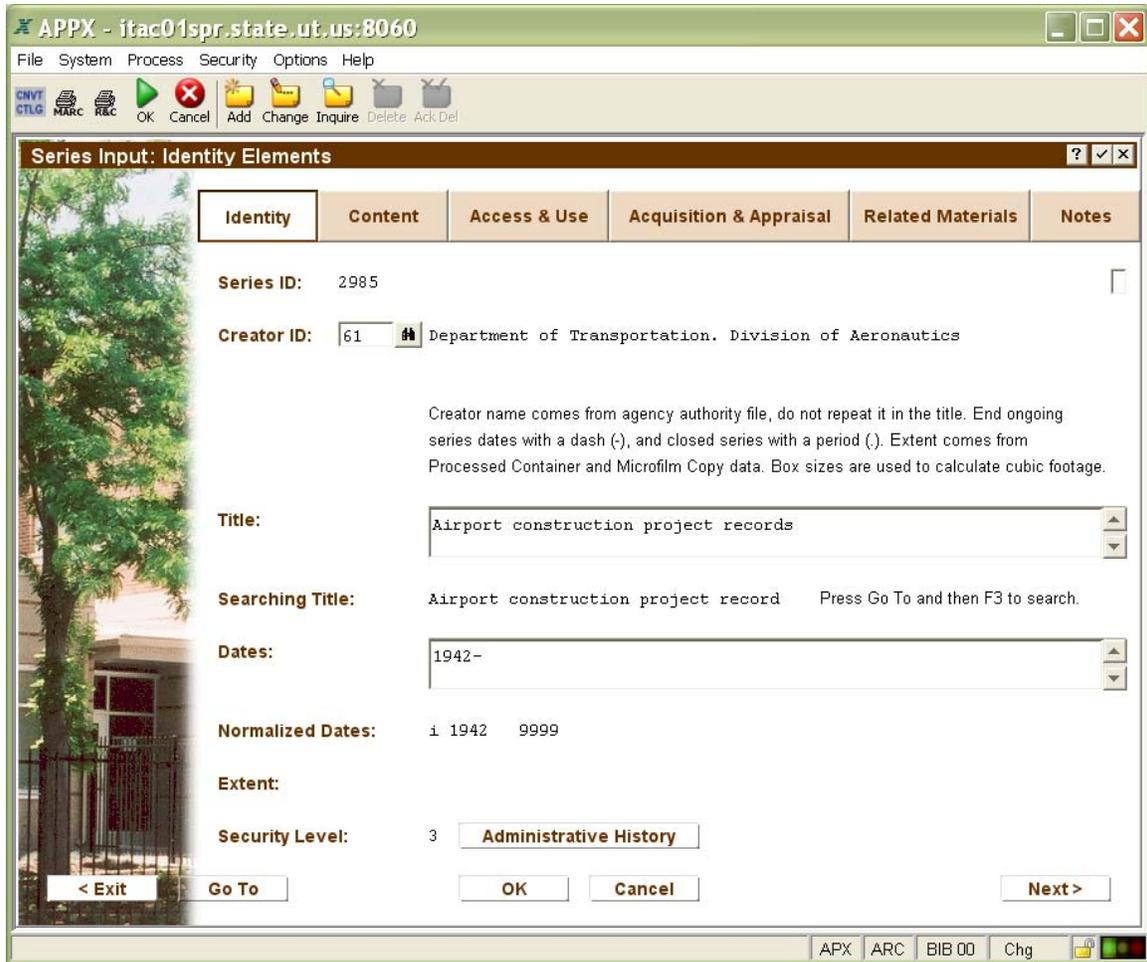
Type an agency name and bring up the list (all forms of the name will be shown):



Click on the name and then click OK to get the list of series:



To view a series, choose one from the list, then click OK to go into Bibliographic Input:

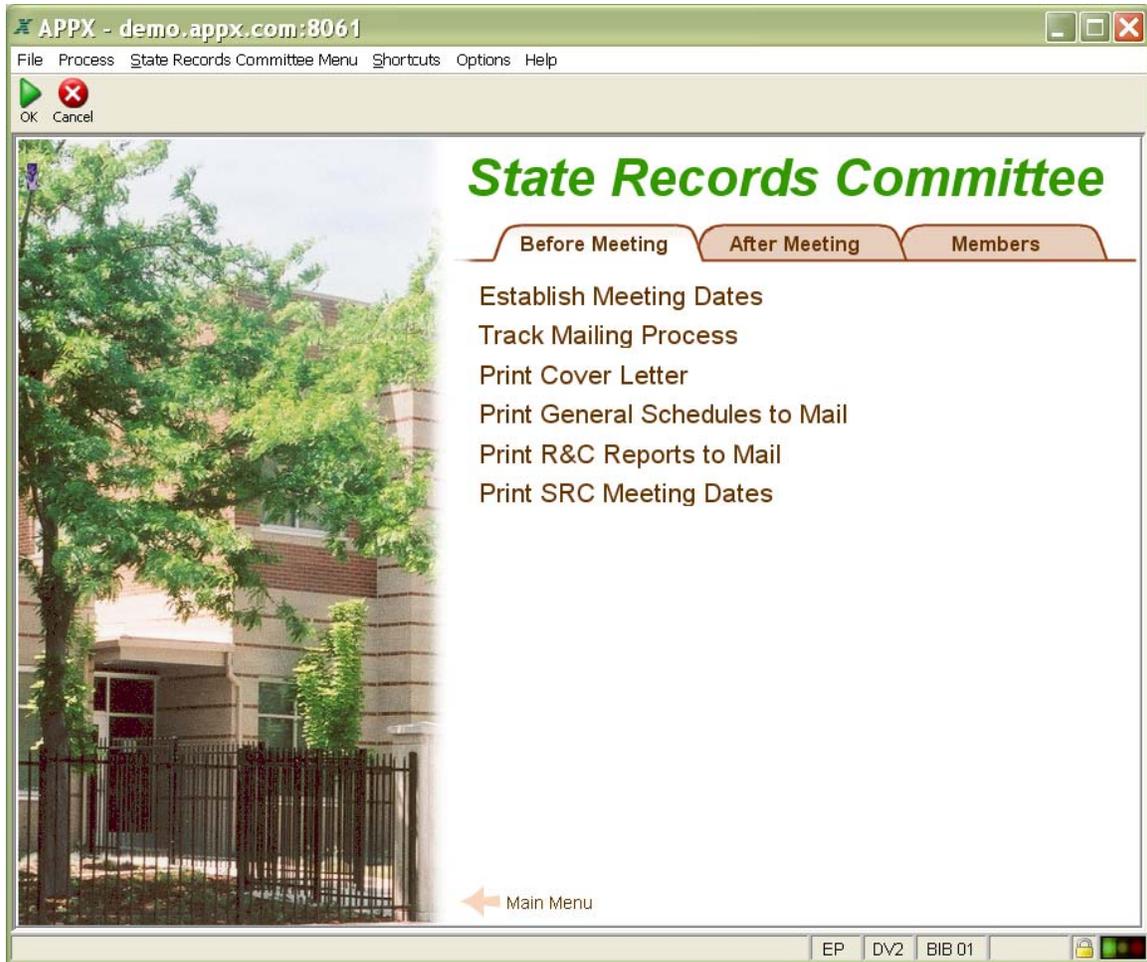


Exit to Main Menu

State Records Committee

The State Records Committee Menu manages SRC functions. It is divided into three tabs: Before Meeting, After Meeting, and Members.

State Records Committee meetings are usually held monthly, at which retention schedules are approved and access appeal hearings are heard. The timelines associated with these meetings are tight and controlled by statute, so the system helps the process run more smoothly. Meeting dates are usually set a year in advance. When meetings are added, they are given a meeting number.

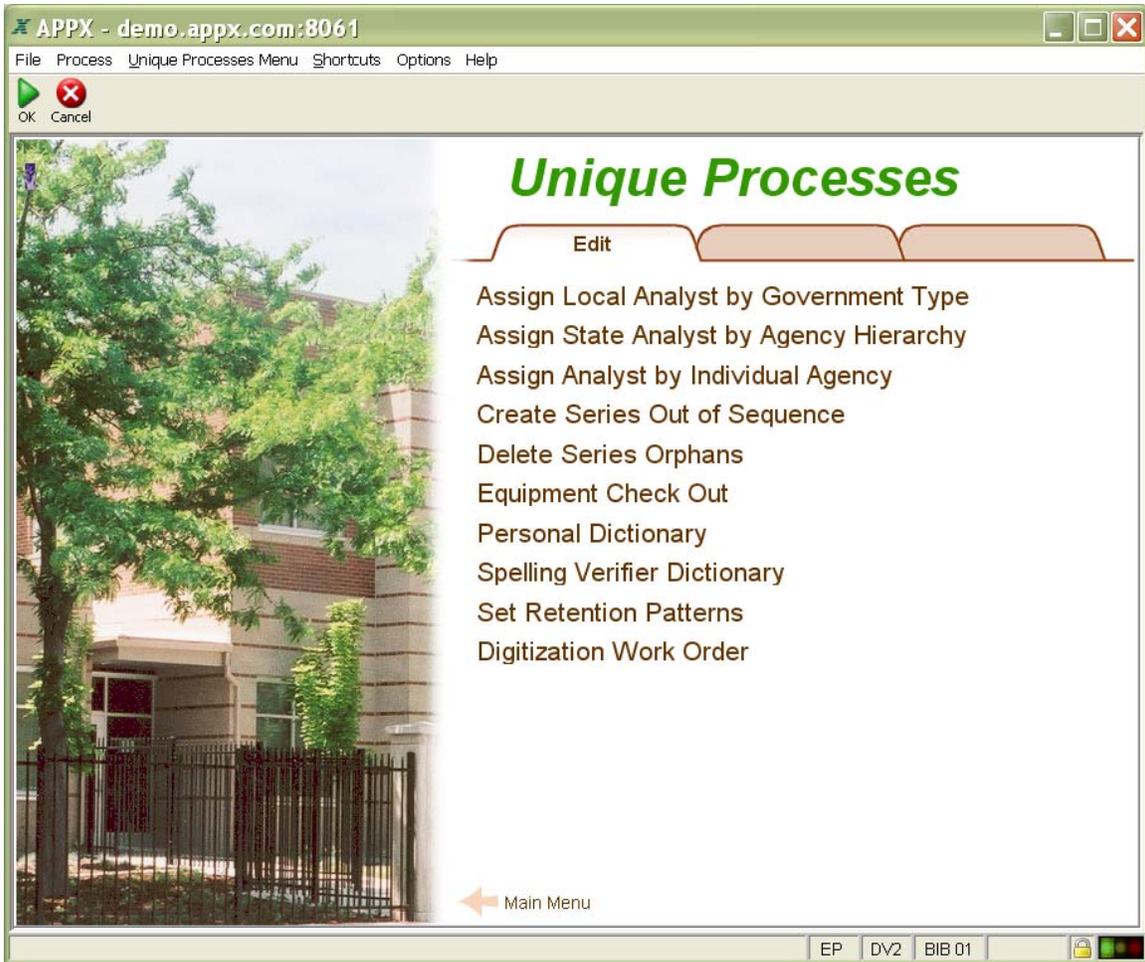


When series are submitted to the SRC, they go to a holding place and become associated with a particular SRC meeting number. At an appointed date prior to the meeting, all the series in the batch are mailed to the respective SRC members for review. Each mailing also has a number, and it becomes associated with a particular meeting number. If for some reason a meeting is canceled, the mailings can be edited to be linked with a different meeting number. This is done so that the correct approval date is associated with the series. After the meeting, those series in the batch which have been approved are printed, signed by the Executive Secretary, and updated with an approval date.

Exit to Main Menu

Unique Processes

The Unique Processes Menu is for miscellaneous menu items that don't really fit anywhere else. This is where records analysts are assigned to agencies, where you can add words to your personal dictionary, or go to fix retention problems in case Series Input stops you with an error. Most people will spend little time here.



Exit to Main Menu

Web Development

The Web Development Menu manages some of Axaem's interaction with our website. The first tab offers processes to control Axaem's version of the online catalog [currently not in use]. It also offers reports that wrap HTML code around data so that general retention schedules or agency lists can be copy/pasted into website documents. Generally only the Axaem administrator or office website administrator spends time here. Most website interaction with the database doesn't need day-to-day control files since the system just points to existing CSS stylesheets on the web server.

Axaem has the following features available on our website:

- Search retention schedules by agency name, and pull up the reports in HTML or PDF
- Search name indexes with pointers to imaged records
- Order records from indexed entries
- Add or edit retention schedules through a web form
- Provide a report of microfilm accessioned from each agency
- Provide finding aids of processed series in EAD



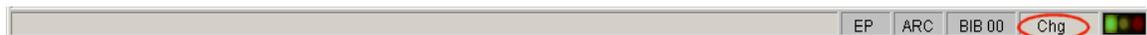
Exit to Main Menu

Navigation

Navigation through Axaem menus and processes follows standard rules and patterns, some of which are unique to the APPX environment, but all should be consistently applied from one place to another in the system.

Modes

APPX offers four modes of operation: Add, Delete, Inquire, and Change. Each process you work in has a default mode, which APPX will stay in until you change it to something else. Usually the default mode is either Inquire or Change. You can tell what mode you are in by looking at the status bar at the bottom of the Window:



Add Mode allows you to add new records. To access this mode, click on the Add button in the toolbar or press F9 on the keyboard. The Add button looks like this:



Delete Mode allows you to delete records. In some parts of the system Delete Mode is disabled, and you need to use other procedures to make mistakes go away. To access Delete Mode, click the Delete button on the toolbar or press F10 on the keyboard. The Delete button looks like this:



Before a deletion is recorded, the system will ask you to acknowledge the delete request. Click the Acknowledge Delete button or press Ctrl-F10 on the keyboard. The Acknowledge Delete button looks like this:



Inquire Mode allows you to view a record but not edit it. This is the safest mode to be in when exploring the system or looking something up. To access Inquire Mode, click on the Inquire button on the toolbar or press F11 on the keyboard. The Inquire button looks like this:



Change Mode allows you to edit a record and save the change. To access Change Mode, click on the Change button on the toolbar or press F12 on the keyboard. The Change button looks like this:



Key Entry

Input processes can be designed one of two ways: 1) you go into a process and the first record in that process automatically pops up, or 2) you go into a process and it asks you which record you want first. In the first instance, it's expecting you to want to scroll through all the records starting with the first one. In the second instance, it expects that you know exactly where you want to go and you just want the quickest way to get there.

No matter which behavior the system is displaying, you can cause it to do the other one. If it is displaying the first record, and you want to go to record number 1005, you tell

Access to go into Key Entry (a blank screen), which means you click or press one of the mode buttons described above. If you choose the same mode that you are already in, it will immediately bring up the blank Key Entry screen. This is exactly the same thing that the Go To button does for you. If you choose a different mode (i.e. you move from Inquire Mode to Change Mode), you will need to click it twice. The first click will change the mode, and the second will give you the blank screen.

Once you have a blank screen, type the record key that you want and click OK or press Enter and it will go there. Do not click the Scan button:



The Scan function (available on the keyboard as F2) is for looking up values for a field when you are not sure what the correct value might be. If you already know which record you want, clicking Scan will only add a couple of unnecessary steps to getting you there.

If you are at a blank screen and just want to bring up the first record, just click OK or press Enter without first entering a record key.

When “Go To” Won’t Work

If you go into a process from a menu, the Go To button should always work. There are a couple of cases where the Go To button is not available. If you are in Series Input, in a series, and then click the Agency button to see contact information, the Go To button on Agency Input has been disabled because it’s limited to viewing just the agency that the series was tied to. The agency key is being constrained to the specific series number. This same phenomenon is true when you are searching for a series by a field other than the series number. You can’t use the Go To button on the Series Input screen in that case, but you can navigate by going back to the scrolling list of records where you first entered your search criteria and use the Go To button there.

Sorting and Scrolling through Records

All processes sort in a default order that the application designer has chosen, such as by series number, but you can cause the records to be sorted in the order that you prefer instead. You may sort the records by a different key, or by a field that isn’t a key. To choose a different key, while in Key Entry (a blank screen), use the Select function (F3) to choose the one you want. A little menu will come up showing you all the keys available. Double-click a key from the list, and type the record key where you want to start. Click OK or press Enter to go there.

To sort by a field that isn’t a key, first go into a record, place the cursor on the field that you want to sort, press Select (F3) and then press or click the mode you are in, such as Change (F12). Type the starting point where you want the index to begin, and click OK

or press Enter. APPX will warn you that you are about to create a dynamic index. That's ok, just continue and let it sort the records. If the file is large, this will take a few minutes.

Once you find the starting point you want and are in your record of choice, you may scroll down by using Next Record (F5), or Page Down. Using Next Record takes you to the records one by one. Using Page Down will display a page-full of records at a time. Scrolling records can take up a single line, a whole screen, or something in-between. Clicking OK or Enter works when scrolling, too, provided there is no automatic subfile the system is designed to access from a main record. Scrolling lists allow you to move forwards or backwards (using Page Up), back to the point where you started. It won't go above where you started. Selecting the Previous Activity function (F4), will take you back to the previous step you were doing.

End of the Road

If you are scrolling through a set of records, and keeping hitting OK, Enter, or Next Record (F5), eventually you will come to the end of the table, where there are no more records (table rows). APPX will then display this in the status bar at the bottom of your window:



No More Records

You may come across this message even if you weren't trying to scroll to the next record, just updating the current one (see below).

Saving Changes

To edit an existing field in Axaem, you must first be in a record, in Change Mode, and have security rights to allow editing. Type your change into the field as necessary, then click OK or press Enter to begin the save process. APPX will respond in one of four ways. It will

- 1) advance to the next record (if there is one) and save your change;
- 2) display the green bar with the No More Records message, meaning there's no next record to advance to, thus saving your change;
- 3) display lookup values onscreen related to your change, essentially asking, "Is this what you meant?" If this is the case, your change is not saved yet. You must click OK or press Enter again, and watch it advance to the next record. Then the change is saved.
- 4) display some error or warning message first that needs to be dealt with. Errors must be corrected but warnings can be ignored. To save the change, click OK or press Enter again.

Exiting or Canceling a Process

Every input process has a button called “Exit.” This works similar to a “back” button on a browser, but it actually means End—to end the current process. Clicking Exit will take you out, but won’t necessarily take you back to the prior screen. It may take you all the way out to a menu. The system is designed so that often it will just take you back to the prior screen, however. The End/Exit function can be accessed by clicking the Exit button or through the keyboard by pressing F8.

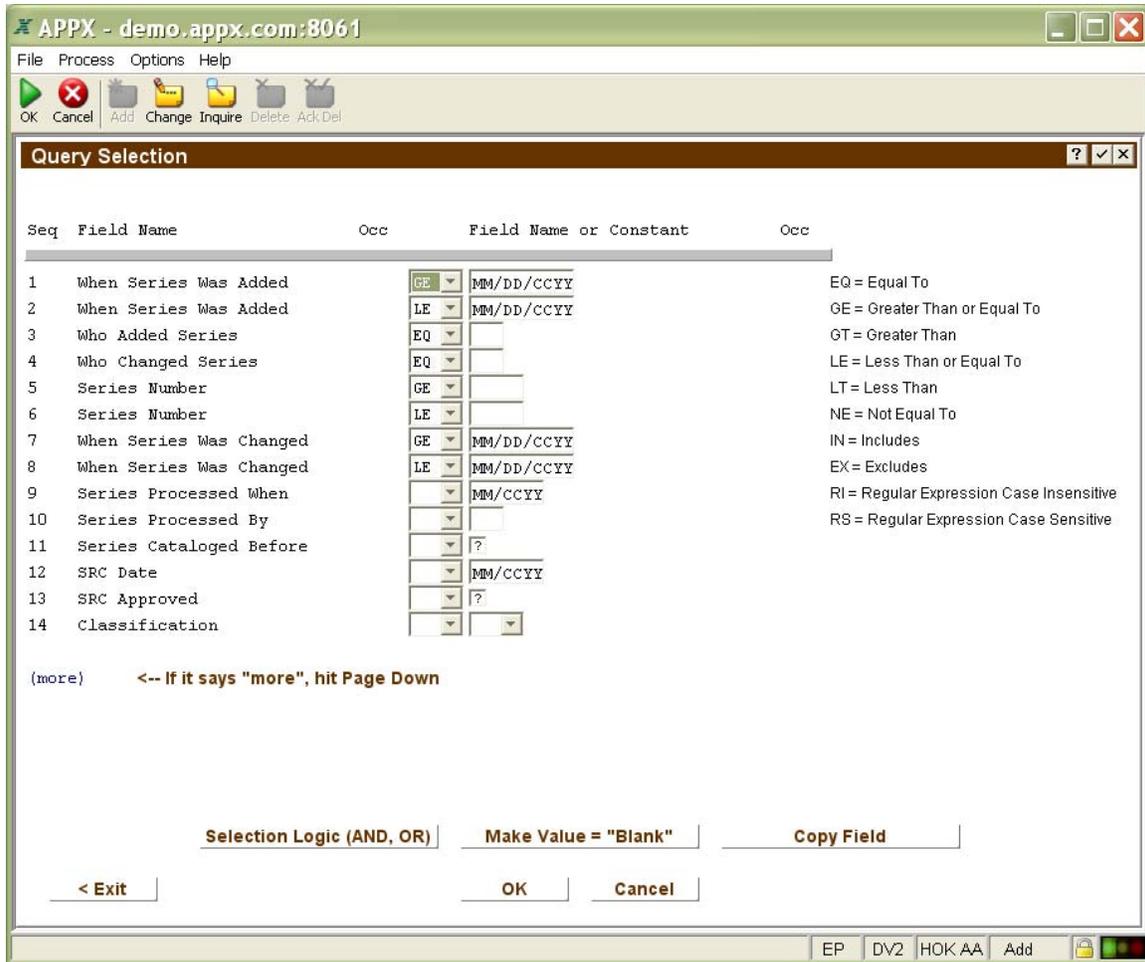
The Cancel button is used to get out of a process and not save your changes. This is especially useful if you accidentally wipe out something complicated like a series description or decide not to proceed with what you were doing. You may issue a cancel command by clicking the Cancel button or by pressing Ctrl-F8. If you’ve already saved the change, however, using Cancel won’t reverse that. Instead, it will just exit you out of the process.

Printing

To print data from APPX, you first run a report. Reports have been pre-designed to reflect the most common needs in the system. Reports generally have three components: the query, the print disposition screen, and the data output. Depending on the report, sometimes the query will display first, and sometimes the print disposition screen will display first. Since the data output is the result of your query, it always comes last.

Queries

A query is like a question that you are asking the database. You want to know everything it has that fits certain search criteria. Your criteria limit the response to particular records. If you don’t specify anything in the query, the database will return all records, which could take a long time to run and kill a few trees if you print it, so be careful. A query usually looks something like this, but it will be different from report to report:



Sometimes fields are listed twice in the query to allow you to specify range spans, i.e., “greater than or equal to 1” through “less than or equal to 20,” meaning records 1-20. All the fields have an understood “and” between them. If you want to use Boolean logic (and, or, not), click the Selection Logic button. In the text field provided, you can say “1 or 9,” meaning that the first and ninth fields from the query screen will behave as if they have an “or” value between them instead of “and.”

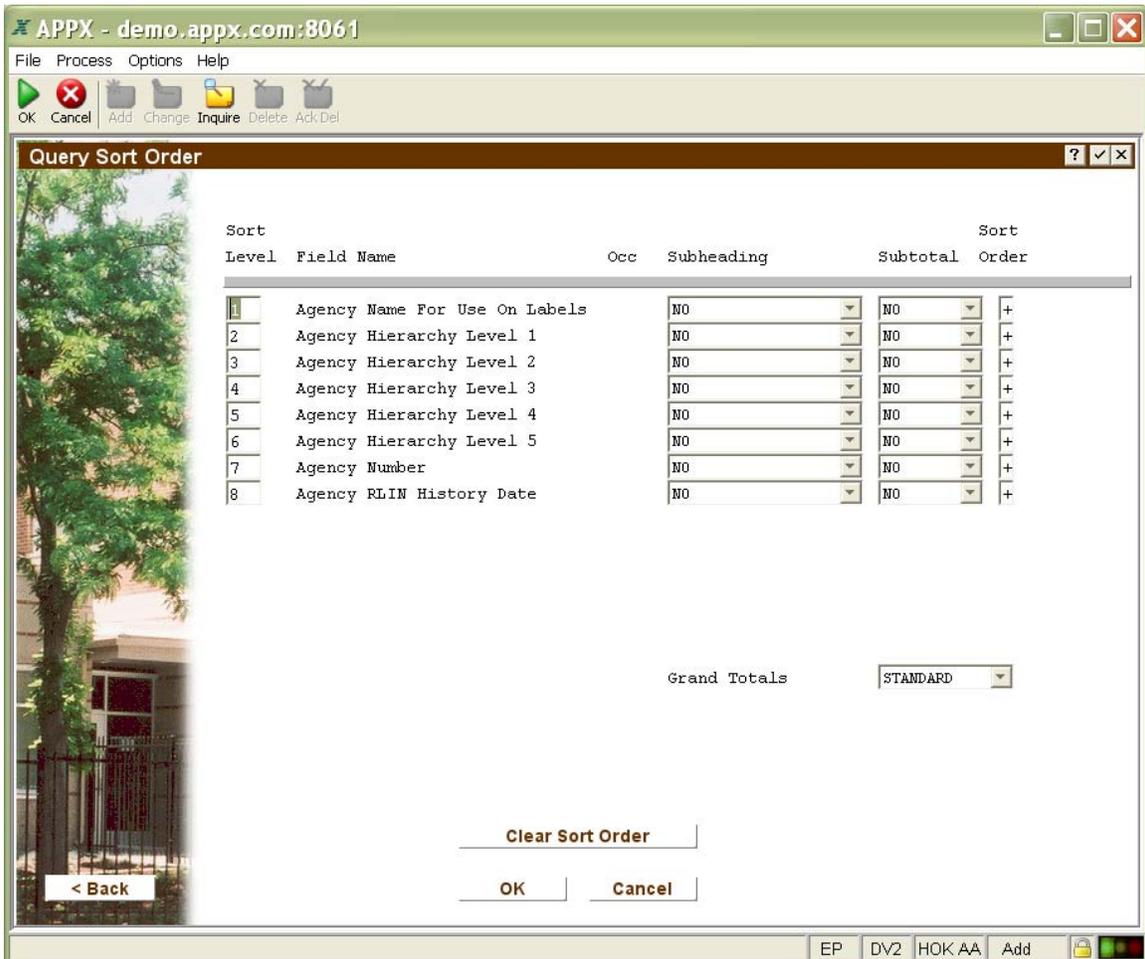
To test for null values (when a field contains no data), put your cursor on the field value (under the “field name or constant” column), and click Make Value = “Blank.” If you need another instance of a field to do a range search, but one hasn’t been provided, place your cursor on the field that you want to duplicate and click Copy Field.

When you are done, click OK or press Enter to move to the next step. Note that on queries, clicking Exit will not take you out of the report. If you want to stop the report job, click Cancel.

Sometimes reports are designed to have a special query process, usually one that looks and behaves a lot like an input process. This input/query process lets you add records to a memory file, and then the contents of the memory file are used to print the report.

Sometimes these processes are also used to ask you questions that will limit your query or change the look of the report even though there's no field value to specify. Answer all questions and tell the system which records you want, click OK to save the change, and then click Exit or press F8, to proceed to the next step.

Queries sometimes have sort order screens attached to them. They show up after you have entered your initial criteria. The sort order screen will list the fields you can sort by. Often there is a default order, but you can change that. Click Clear Sort Order, enter the order level number by the field name in the order you want them, then click OK or press Enter to proceed to the next step. You can ignore the subheading, subtotal, and + fields.



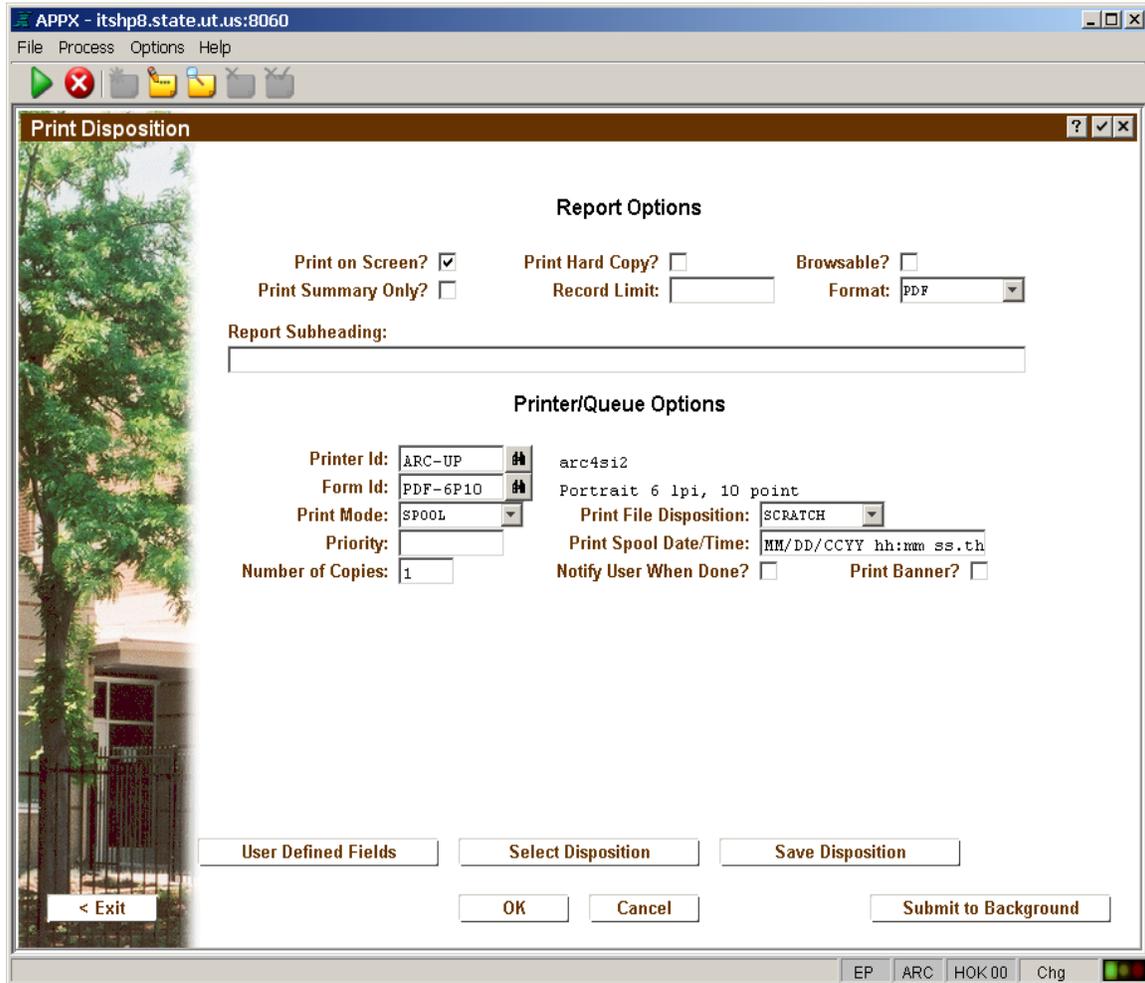
Print Disposition

The print disposition screen gives you the option of printing your results onscreen or on paper. You can also choose which printer to send it to, and if you want it to be a PDF report or not. To make it a PDF report, you will need to change some of the defaults. On the Format field, go to the dropdown list and choose PDF. Then on the Form ID field choose one of the three forms set up for PDF reports:

- PDF-6P10

- PDF-6P12
- PDF-8L16.5

The first two print portrait style. The PDF-6P10 has slightly smaller font size than PDF-6P12. The form PDF-8L16.5 is for printing landscape style and the font size is very small.

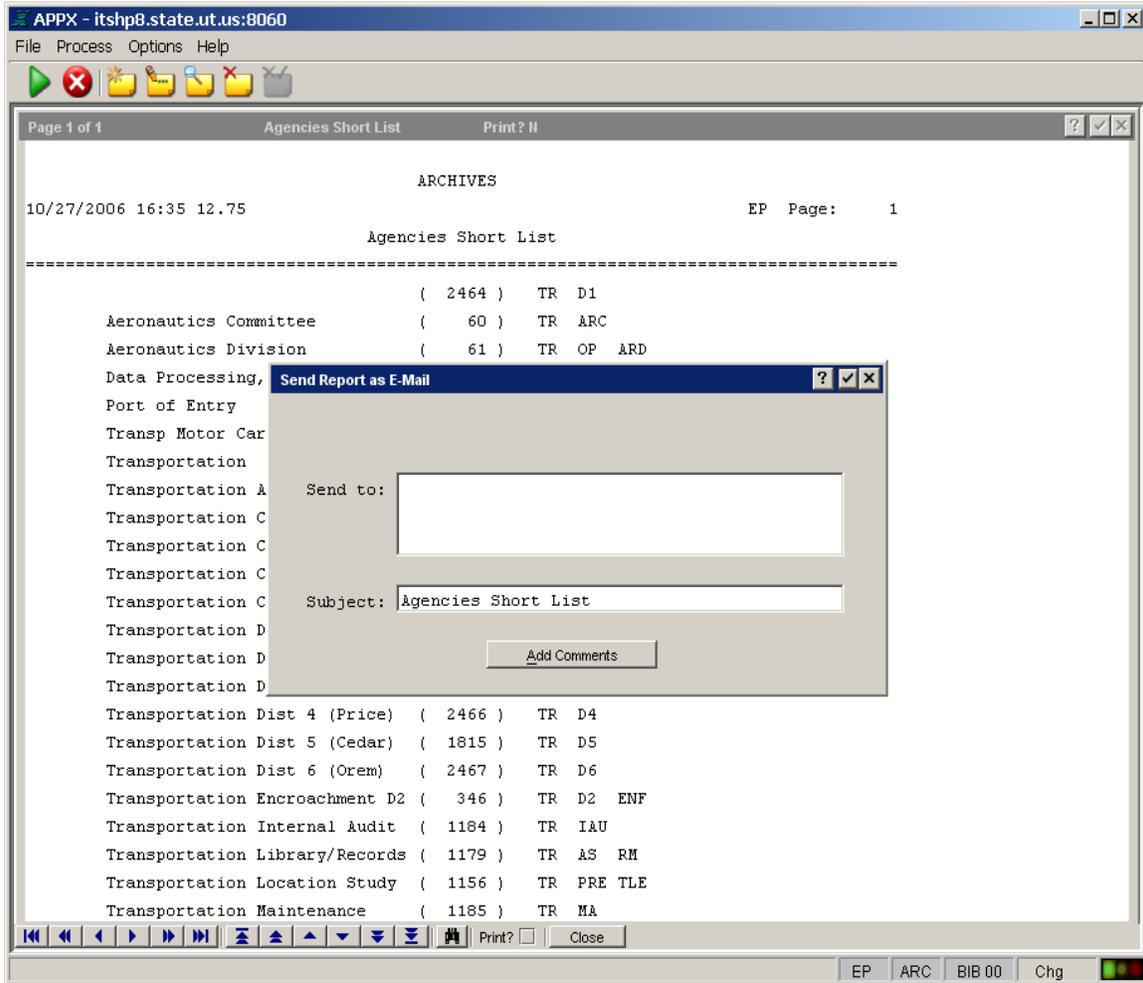


Other options on this screen you typically won't use. Click OK to run the report or Exit or Cancel to stop the report job.

When the report comes up on screen as a text file, it will give you the option to search the results (note the button with the binoculars at the bottom), tell you how many pages there are (upper left-hand corner) and give you the option to change your mind about printing them (checkbox at bottom of screen). If you decide to go ahead, click Close or press F8.

Alternately, you can email this report to yourself or someone else by clicking Option 7. The option key is the same one that has the ~ (tilde) and ` (backtick). Press that key once and then the number 7, and a field will pop up allowing you to enter an email address.

Type the address and press Enter to save the change, and then exit the report. Be aware that the email is being sent from the APPX server, not your local email account. Someone you send it to may reply to that server address and you will never know it. The email option is most useful when you want a text copy of the data to manipulate, so you send it to yourself. Or you can send it to yourself, then forward it (using your local email account) on to someone else—with an explanation of how to understand the report.



PDF reports behave a little differently. After the query and print disposition processes have finished, APPX sends the PDF file to your PC. It will then open in Adobe Acrobat. At that point, you can print it or save it to a location on the LAN. Don't save it to the local temporary location on your hard drive where it came in. That will go away.