



Version 7.0, User's Guide

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KeyesArchive

Introduction

Spooled Files:

KeyesArchive is used to archive whole spooled files to your IFS, giving them a name of your choice, and optionally index *SCS printer file data to make them easy to find when you need them. While archiving the system can convert each document to a PDF, with a name and destination of your choosing. It will either give you the PDF's, or it can archive them along with the spooled files. It gives you the tools needed to restore whole spooled files or individual documents within larger spooled files. You can view any archived PDF's at any time. It also contains the tools needed to browse through your archived spooled files so you can convert them into PDF files or TIFF images, print them, fax them, or e-mail them, at any time in the future. Each type of document can be set to Expire after a given time period (from 0 to 999 months), after which the documents will be removed from archive.

Archiving, indexing, and PDF creation tools are included with this package. KeyesOverlay can be added, as an option, which can add full color graphical overlays to your standard *SCS printer files when you convert them to PDF documents. KeyesFax can be added to fax your archived documents or KeyesMail to e-mail them.

Spooled files can be standard *SCS printer files, *AFPDS spooled files, or *USERASCII spooled files with HP-PCL code. You can extract whole spooled files or individual archived documents as PDF documents, TIFF images, or ASCII text files and place them in your IFS or onto a Network drive.

Output Queue Monitoring:

KeyesArchive includes an automatic output queue processing program. It will monitor an output queue called KAOUTQ. When any spooled file appears in this output queue, in a "RDY" status, it will be automatically archived and optionally indexed and placed in the desired destination on your IFS.

Each page of *SCS printer files are processed to extract information about your documents. This information is stored in an Index Master file that you will use to browse through your documents for retrieval. After archiving a spooled file, you can have the system *Hold* the spooled file, *Delete* the spooled file, or *Move* it to another output queue and *Release* it for printing, completely automated.

Stream Files:

KeyesArchive can archive and index other types of documents that you might want to include. Other types of documents are referred to as "Stream Files", in this manual. The other documents can include Word Processing files, Scanned images, Spread Sheets, or most any other type of PC document, that you want to archive.

Indexing of Stream Files is accomplished by having an operator key important information about each document, while it is being displayed to them. The keyed information is then stored in the Index Master file, for later browsing.

Installation Instructions

Sign on as a Security Officer

The following installation procedure will require that you have *ALLOBJ authority, when you restore the library as an update.

Copying KeyesArchive Programs to a Library

You may place the **KeyesArchive** programs into any library that you wish. However, we suggest that you install the programs into a permanent program library called KALIB.

Restoring Instructions:

1. Follow the instructions found in the **Readme.txt** file that you download from our website (www.ckeyes.com). It will use FTP to transfer Save File data to your IBM i.
2. *If this is a New Installation:*
Enter: RSTLIB SAVLIB(KA07LIB) DEV(*SAVF)
SAVF(QGPL/KA07SVF) MBROPT(*ALL)
RSTLIB(**KALIB**)

If you are Updating an Existing System:

Enter: DLTLIB LIB(KAUPD)
Ignore any "Library not found" message.
Enter: RSTLIB SAVLIB(KA07LIB) DEV(*SAVF)
SAVF(QGPL/KA07SVF) MBROPT(*ALL)
RSTLIB(**KAUPD**)

Add KeyesArchive library to your library list

Enter: ADDLIB KALIB

Updating an Existing System

This command will update the programs in your KeyesArchive library. If this is a New Installation, skip this step.

1. Prompt the KeyesArchive Update program.
Enter: KAUPDATE then press F4 (Prompt)
2. Fill in the appropriate library names and press Enter:
KeyesArchive Program library . . kalib
KeyesArchive Update library . . . kaupd

Creating the KeyesArchive Subsystem

You will need to run this if you are installing a new system or if you are updating KeyesArchive to a new Version number. The KeyesArchive programs run in their own subsystem, called KASBS, with their own job queues, etc. All of the subsystem objects will be created in the KeyesArchive library.

Enter: CRTKASBS

Installing KeyesArchive Files

This step will create or update all of the appropriate files for the KeyesArchive system. You must rerun this command if you update KeyesArchive to a new version number (such as from Version 6.0 to Version 7.0).

1. Be sure that the KeyesArchive library is on your library list.

Enter: ADDLIB KALIB

2. Run the KeyesArchive installation program.

Enter: KAINSTALL

Enter your KeyesArchive License number

The KeyesArchive programs will not function until they are activated with a license number. The license number is based on your IBM i, i5, iSeries or AS/400 serial number and the Logical Partition that you will be using. The Logical Partition can be seen on the KALICENSE screen.

You must contact Computer Keyes to get a valid license number. You may call or e-mail your request. Be sure to specify your name, company, and other contact information along with the serial number of your IBM i, (iSeries or AS/400) and logical partition, if you e-mail the request.

Note:

You may use DSPSYSVAL QSRLNBR to display the serial number of your computer. You can see the Serial Number and the Logical Partition on the screen below.

Recording the KeyesArchive License Number:

1. Switch your current library to your KeyesArchive library, usually called KALIB.

Enter: CHGCURLIB *kalib*

2. Start up the program that will record your KA License.

Enter: KALICENSE

3. Key your KA License number in the field provided, then press Enter.

KeyesArchive License Number:

Permanent:	_____	S#	-	_____
Temporary:	_____			_____
	_____			_____
	_____			_____

KeyesArchive Menu

The KeyesArchive programs can be run using commands, or from a menu. After the installation has completed (described on the following pages), you may use the menu.

Displaying the Menu

1. Be sure that the KeyesArchive library is on your library list.
Enter: ADDLIBLE KALIB
2. Display the KeyesArchive Menu.
Enter: GO KAMENU

KAMENU user-id	KeyesArchive Menu	Date Time
Select one of the following:		
Output Queue: 1. Start KAOUTQ processing 2. End KAOUTQ processing 3. View KAOUTQ spooled files 5. Display KAOUTQ messages 6. Archive a Spooled File	Administration: 31. Archive System Setup 32. Work with Spooled Files 33. Work with Stream Files 34. Purge Expired Archives 41. Start HTTP Server 44. End HTTP Server	
Browsing: 21. Browse the IFS 22. Browse Archive Master 23. Browse by Indexed Fields 24. Browse PDF Master	Menu: 51. KeyesOverlay Menu 90. Sign Off	
Selection or command ====> _____		
F3=Exit F4= Prompt F9=Retrieve F12=Cancel F13=Information Assistant F16=AS/400 main menu		

KeyesArchive System Setup

The KeyesArchive System Setup (item 31 on KAMENU) is used to define a data area (KADATA). The information is used in the archiving programs to direct how and where the spooled files should be archived when they are automatically processed through the KAOUTQ. You can change the values in the data area at any time, and it will take effect immediately.

Default Archive path

This parameter specifies the default path that your archived spooled files will be sent to. All directories in the path must already exist. New directories are not created.

Default Archive filename

Use this to create a default filename for the archived spooled files. This name will be used only if no other name is given. A filename extension of .SPLF or .ZIPF will be automatically added to the filename for you.

You may code substitution characters in the name, that will be resolved at the time the spooled file is processed.

-UI/-UD for -M/-D/-Y -H:-MI:-S

This is the default stream file name, that will be used if you do not set it to something else. You may code any of the following escape sequences. They will be replaced by the value shown below:

- UI = User-ID of the Spooled file
- UD = User data field
- Y = Current year
- M = Current month
- D = Current day
- H = Current hour
- MI = Current minute
- S = Current second

Default duplicate name option

This specifies the default response that the program will have if it finds a duplicate archive name already in the archive directory.

The possible values are:

*INCR

The file name will be incremented with "Copy(x)" to make a new archive object.

*REPLACE

The original files will be replaced with the new archive.

*FAIL

The spooled file will not be archived. An error message will be sent.

Default Compression

To compress the archive, to make smaller files, you may choose one of these compression codes. Options 1-3 will require PKZIP software to be installed on your iSeries and available on the library list.

The possible values are:

0

This will save the archive as-is, with no compression.

1

Fast PKZIP compression with good compression amounts.

2

Normal PKZIP compression with better compression amounts at a reasonable speed.

3

Maximum PKZIP compression that will take the longest time.

4

Java Archive Compression. This compression is built into the operating system and will reduce the size to roughly 25%.

Spooled file disposition

This parameter tells the system what to do with a spooled file after it has been successfully archived.

The possible values are:

***HOLD**

The spooled file will be placed on Hold in KAOQTQ. You can release the spooled file to re-archive it, or move it to another output queue.

***REMOVE**

The spooled file will be deleted from KAOQTQ.

New OutQ name

The spooled file will be moved to the new output queue, and released.

Default Image type

This parameter will set the default type of image that you like to convert your archived spooled files into, during the archive process or when you extract them from archive.

The possible values are:

PDF

The spooled files will convert to Portable Document Format (PDF) documents. This will work for *SCS, *USERASCII, or *AFPDS printer files.

TIF

TIFF image files will be created. This type cannot be used when converting *SCS printer files.

ASC

ASCII text files will be created. This type can only be used when converting *SCS printer files.

Text or Image based PDF

This parameter sets the default type of PDF that will be produced. This parameter is used when converting *USERASCII or *AFPDS type spooled files to PDF's. Text based PDF's are searchable and will usually print a cleaner crisper image. However an Image based PDF will prevent anyone from altering the data and is usually faster to print.

The possible values are:

T

Text based PDF file.

I

Image based PDF file.

Encode text streams

This parameter will set whether or not Text streams with PDF documents will be encoded. Encoded text streams cannot be read or changed by a text editor. This is intended to make the PDF document difficult (if not impossible) to alter.

The possible values are:

Y

Encode PDF text streams.

N

Do not encode PDF text streams.

Default Paper size

This parameter specifies the default size of paper that PDF images should be created for. This parameter is only used for *AFPDS and *SCS spooled files. *USERASCII spooled files set the page size in the PCL.

The possible values are:

S

Standard paper 8.5 x 11 inches in size.

L

Legal paper 8.5 x 14 inches.

A

A4 size paper 8.3 x 11.67 inches.

Company Name

Enter your company name surrounded by 'quotes' to allow both upper and lower case text. The company name is used by the HTTP Server.

Conversion output path on IFS

This parameter specifies the default path that your converted spooled files will be sent to, in the IFS. All directories in the path must already exist. New directories are not created.

Default Restore output queue

This parameter specifies the default Output Queue that your spooled files will be restored into, for reprinting.

Default PDF Printer

This parameter specifies the default printer that will be used when sending PDF's to a printer for auto printing. The printer must have direct PDF printing capability.

Source path for Stream Files

This parameter specifies the Source path where you can send other types of documents to be archived. All directories in the path must already exist. New directories are not created.

The Stream Files will be viewed one at a time, so that they can be indexed into the system. They will be renamed and moved to the desired destination, as described in the Stream Files Setup screen.

Default path for PDF Browsing

This parameter specifies the Default IFS path where you would like the HTTP server to start when you view archived PDFs.

Archiving a Spooled File (KAARCSPL)

This program is an API that can be used to archive a spooled file. It will optionally index the documents within the spooled file, using the specifications that you define in the Spooled File setup parameters. It can also convert the individual documents into PDF (or TIFF) files, while it is archiving. To do this, you must define the desired IFS path and filenames also in the Spooled File setup parameters.

Note:

You can index *SCS or *USERASCII printer files only. *AFPDS printer files cannot be indexed, but they can be archived.

Spooled file (SPLFILE)

Specifies the name of the spooled file that you wish to archive. This comes from the name of the printer output file that is defined in the program that created it.

Archive Path (TOPATH)

Specify the Path where the spooled file will be located in the IFS. The Path can be up to 50 characters long, and must already exist. New directories will not be created. For a Network drive, specify "/QNTC/server-name/directory".

The default value of *DFT will set this parameter to the value that you have set in the Archive Setup parameter (Default Archive path). This path may be overridden using the Spooled File setup parameters.

Archive Filename (TOSTMF)

Specify the Name to call the Archived spooled file, up to 60 characters long. Do not specify a filename extension. The program will add an extension of either SPLF or ZIPF depending on whether or not it was compressed.

The default value of *DFT will set this parameter to the value that you have set in the Archive Setup parameter (Default Archive filename). This name may be overridden using the Spooled File setup parameters.

To PDF Printer (TOPRINT)

This parameter can be used for sending a PDF to a PDF Printer during archiving. The printer must have direct PDF printing capability.

The possible values are:

***AUTO**

Follows the directions that were entered in the Work with Spooled Files screen for the spooled file being processed.

***DFT**

Uses the value entered in the PDF Setup parameter (Default PDF Printer).

***NONE**

The PDF will not be sent to a printer.

PDF-Printer

The name of a PDF capable Printer.

Duplicate archive name option (DUPOPT)

Specify the response that the program will have if it finds a duplicate name already in the archive directory.

The possible values are:

***INCR**

The file name will be incremented with “Copy(x)” to make a new archive object.

***REPLACE**

The original file will be replaced with the new archive.

***FAIL**

The spooled file will not be archived. An error message will be sent..

Job name (JOBNAME)

Specifies the name of the job that created the spooled file to be archived.

The possible values are:

The job that issued this command is the job that created the spooled file.

job-name

Specify the name of the job that created the spooled file.

User (USER)

Specify the user name that identifies the user profile under which the job was run.

Job number (JOBNR)

Specify the system-assigned job number.

Spooled file number (SPLNBR)

Specifies the number of the spooled file, from the job whose data records are to be archived.

The possible values are:

***ONLY**

Only one spooled file in the job has the specified file name; therefore, the number of the spooled file is not necessary.

***LAST**

The spooled file with the highest number and the specified file name is used.

spooled-file-number

Specify the number of the spooled file whose data records are to be archived.

Compress to IFS (COMPRESS)

To compress the archive, to make smaller files, you may choose one of these compression codes. Options 1-3 will require PKZIP software to be installed on your iSeries and available on the library list.

The possible values are:

0

This will save the archive as-is, with no compression.

1

Fast PKZIP compression with good compression amounts.

2

Normal PKZIP compression with better compression amounts at a reasonable speed.

3

Maximum PKZIP compression that will take the longest time.

4

Java Archive Compression. This compression is built into the operating system and will reduce the size to roughly 25%.

Original file key (FILEKEY)

Normally, you should let this default to *NEW. This tells the system to create a new File Key. Specifying an original key that already exists, is only used for replacing an original archive.

Auto convert to Image (AUTOCVT)

This parameter allows the system to automatically convert your documents to Images (PDF or TIFF), while it is archiving the spooled file. This will only work if you have coded an Output Path and Filename, in the Spooled File setup screen for at least one of the Level Breaks, for the spooled file being processed.

The possible values are:

***NO**

The system will not make Image documents while archiving.

***YES**

The system will automatically convert the documents to Image.

Sample Code

The following code creates a spooled file. It then archives that spooled file into the IFS folder called ARCHIVE.

```
PGM

OVRPRTF  FILE(QPRINT) HOLD(*YES)
CALL     PGM(your-pgm)
DLTOVR   FILE(QPRINT)

KAARCSPL SPLFILE(QPRINT) TOPATH('/WEBFILES') +
          TOPRINT(PRT01) TOSTMF(*DFT)

SNDPGMSGMSG('Printer file QPRINT was archived +
            to the IFS') MSGTYPE(*COMP)

ENDPGM
```


Output Queue Processing

The output queue called KAOUTQ can be monitored for spooled files that you wish to archive. As each spooled file becomes **Ready** in this output queue, it will be automatically archived and optionally indexed using the KAARCSPL API. The system will follow the instructions that you define in both the Spooled File setup parameters and the Archive System setup. The Spooled File setup parameters will override the default values that you code in the Archive System setup.

The AUTOCVT parameter in the KAARCSPL API will be set to *YES for this auto archiving process. This means that PDF or TIFF files will be automatically created for any of the spooled files that you have defined the Output Path and Filename for in the Spooled File setup parameters.

After each spooled file is archived, it will either be **Held**, **Deleted**, or **Moved** to another output queue and **Released**, depending on the parameters that you have defined.

Starting KeyesArchive Out Queue Processing (STRKAOUTQ)

This program is used to start a program that will automatically archive spooled files. It monitors an output queue called KAOUTQ, archiving any spooled files that go into a "RDY" status.

The archived spooled files will be named and placed in a path of your choice.

Notes:

This will start the monitoring program CHKKAOUTQ that will run in the KASBS subsystem.

Each spooled file will be archived and optionally indexed, based on the definitions you define in the Spooled File setup parameters. The default values used for all spooled files are coded in the Archive System setup parameters. The *Work with Archive Spooled Files* screens, described on the following pages, will override the default values.

End KeyesArchive Out Queue Processing (ENDKAOUTQ)

This program is used to end the program that is monitoring the KAOUTQ output queue. The program (CHKKAOUTQ) runs in the KASBS subsystem archiving all spooled files that go into a "RDY" status in the KAOUTQ output queue. You can end the program using this command.

Work with Archive Spooled Files

Archiving and Indexing parameters can be specified for each of your spooled files, using the *Work with ARC Spooled Files* program (shown below). This program can be started from the KeyesArchive menu (Item 32) or using the KASPOOL command.

WRKASF user-id	Work with ARC Spooled Files	Date Time
		Position to: _____
Options: 2=Change 3=Copy 4=Delete		
Option	User Data or Spooled File	
	_____	Enter the User Data value or Spooled File name to add
-	FORMS	
-	INVOICES	
-	ORDERS	
		Bottom
F3=Exit	F12=Cancel	F10=Define Indexes F17=Top F18=Bottom

You may add a new spooled file description by entering either the User Data value or the spooled file name on the top line.

Option **2** (Change) may be used to change existing spooled file descriptions.

Option **3** (Copy) may be used to copy a description to another name.

Option **4** (Delete) may be used to remove entries that are no longer needed.

F10 (Define Indexes) will take you to a new screen where you can define each of the fields that will be used to index or keep track of your archived documents.

Define Index Titles

You will use this screen to define the titles for each of the fields that you will be extracting out of your *SCS spooled files, for indexing.

WRKASF		Define Index Titles		Date
user-id				Time
Enter titles, press Enter.				
	Date Fields	FMT	5 Char Index Flds	10 Char Index Flds
D1	Inv Date	MDY	01 Invoice #	11 PO Number
D2	_____	_____	02 Cust #	12 _____
D3	_____	_____	03 Dealer #	13 _____
D4	_____	_____	04 _____	14 _____
D5	_____	_____	05 _____	15 _____
D6	_____	_____	06 _____	16 _____
D7	_____	_____	07 _____	17 _____
D8	_____	_____	08 _____	18 _____
D9	_____	_____	09 _____	19 _____
	20 Char Index Flds		30 Char Index Flds	40 Char Index Flds
21	_____		31 Customer Name	41 Description
22	_____		32 Vendor Name	42 _____
23	_____		33 _____	43 _____
24	_____		34 _____	44 _____
25	_____		35 _____	45 _____
26	_____		36 _____	46 _____
F3=Exit F12=Cancel				

Field Id

There are up to nine different date fields, 5 character long fields, and 10 character long fields. There are up to six fields that are 20 characters long, 30 characters long, and 40 characters long.

The number to the left of each field is the Field Id. You will refer to this Id when defining fields for extraction, sorting, or display.

Note:

If you run low on Field Ids, you may be able to double use some of them. For example, instead of defining two different fields for Invoice numbers and Purchase Order numbers, you could define a single field called Document Number that could be used for both.

Date fields

When defining date fields, you must also define the format that your date field will be found in. Use **C** for Century, **Y** for Year, **M** for Month, and **D** for Day, in the correct combination. All date fields will be converted to **CYMD** format to be stored in the Index Master file. This is done so that you can select dates within ranges. Any of the 4 date values that are not part of your date will be substituted with the current values. For example, if your date format is **DM** (Day and Month only), the current Century and Year will be used in the converted **CYMD** date value that is stored in the file.

Spooled File Setup Screen

After adding a new spooled file or selecting option 2 (Change) the following screen is used to define how and where the spooled files will be archived and optionally indexed.

WRKASF	Setup Screen	Date
user-id	Spooled File: INVOICES	Time
Type choices, press Enter.		
IFS Path.	/Archive/Invoices _____	
File name.	-L1 for -4 -UD _____	
To PDF Printer . .	PRT01 _____ *DFT, *NONE, Printer Name	
Duplicate option :	*INCR *REPLACE, *INCR, *FAIL	
SplF Disposition :	*HOLD New OutQ name, *HOLD, *REMOVE	
Exit Program . . .	EXITINV _____	
Expire # months.:	000 SplF 012 PDFs	
Level Break Fields:	Other Scan Fields:	
Lin Col Siz Id Index Title	Lin Col Siz Id Index Title	
L1 7 68 5 01 Invoice #	1 4 41 4 03 Dealer #	
L2 _____	2 7 68 4 02 Cust #	
L3 _____	3 10 58 8 D1 Inv Date	MDY
L4 _____	4 14 8 30 31 Customer Name	
	5 25 14 40 41 Description	
	6 _____	
Code -Ln for Level Break fields or -n	7 _____	
for Scan fields into the Path or File	8 _____	
name. -UD=User Data -UI=User-ID	9 _____	
-Y=Yr -M=Mo -D=Da -H=Hr -Mi=Min-S=Sec	10 _____	
F3=Exit F10=Indexes F12=Cancel		More . . .

IFS Path

Specify the path in the form (/directory/...) where you want this type of spooled file to be archived in your IFS. The path can be up to 50 characters long.

You may code any of the escape sequences defined at the bottom of the screen, as part of the path name. **-UD** for example, is the User Data field and **-1** is the first Scan field you define. If you leave the Path blank, the default path from the KeyesArchive System Setup will be used.

File name

Specify the name that you want to call the archived document in your IFS. The name can be up to 60 characters long. Do not code a filename extension. The archived files will be given an extension of either .SPLF or .ZIPF (depending on whether or not they were Compressed).

You may code any of the escape sequences as part of the filename. If you leave this field blank, the system will use the default filename as defined in the KeyesArchive System Setup.

To PDF Printer

You can use this parameter to print PDFs while archiving. PDFs of converted spooled files will only be printed the first time they are archived. The printing will not automatically occur during subsequent re-archiving requests. Type the name of a printer that has direct PDF printing capability that you would like to use, or enter one of the options below:

*NONE

The PDF will not be sent to a printer.

*DFT

Uses the value entered in the PDF Setup parameter (Default PDF Printer).

Duplicate option

This defines the response that the program will have if it finds a duplicate file already existing in the archive path. It can Replace the file with the new one, Increment it, or Fail with an Error message.

If you leave this parameter blank, the system will use the default value that you define in the KeyesArchive System Setup.

SpIF Disposition

This parameter tells the system what to do with a spooled file, after it has been successfully archived. It can place the spooled file on **Hold**, it can **Remove** it, or it can **Move** the spooled file to another Output Queue and **Release** it for further processing or printing.

If you leave this parameter blank, the system will use the default value that you define in the KeyesArchive System Setup.

Exit Program

An exit program can be used to alter the path or filenames, etc. All the parameters including the Scan Field and Level Break values are passed to the exit program for each page of the spooled file, as it is being processed. The exit program can add to or change any of the parameters. The Scan Field or Level Break values can be used by the exit program for chaining or substitution into other fields, such as the *Path* or *Filename*.

A sample exit program called EXITPRGM can be found in the source file called QRPGSRC in KALIB. You may copy this source code to any other name, in any library so that you can add your own custom code, to make your own exit programs.

Expire # months

These values allow the system to automatically remove archived documents after they have expired. Enter the number of months to keep each type of document. If you leave a value blank or zero, the documents will never expire and therefore not be removed. PDFs cannot stay longer than the spooled files.

Level Break Fields

Key the line number, column number, and the length for up to 4 different fields to be extracted from *SCS printer files for breaking up the spooled file pages

into different documents. Leave these 3 fields blank for *USERASCII spooled files. Level Break fields are ranked in order of importance. All lower Level Breaks are triggered when a higher Level Break field changes. The importance of a field determines how you assign the Level Breaks. For example, a Level Break containing a Department number should be higher than the Level Break containing an Employee number, if employees are grouped within departments.

You can code an Index number for your Level Break fields, if you want that field to be stored in the Index Master file. Level Break #1 is used to break a report into individual documents. Higher Level Breaks are used to gather individual documents into groups. For example, if your report includes all the Invoices for a single day, you could define LB#1 as the Invoice number and LB#2 as the Invoice Date. LB#1 will create individual entries in the Index Master file, one for each Invoice. LB#2 will cause additional records to be included in the Index Master file, one for each Date.

When you use Level Breaks higher than LB#1, the system will store the Level Break value in a record with all the other fields set to a value of *ALL. In this way you can extract all the documents that are in a group. For example, you could extract a report containing all the invoices that are for one date.

You can use the value of a Level Break as a substitution by coding `~Ln` within the other field. (n=the Level Break number)

You can only define the Lin, Col, and Len fields for *SCS printer files. You can still define Level Break fields for *USERASCII spooled files, but the values must be passed from within the PCL Spooled File using a special command string. To pass a Level Break value, print the following string on the page:

`~Ln value` (where **n** is the Level Break number)

This command string may be printed anywhere on the page. The value will be extracted and used for indexing the *USERASCII spooled file documents. It is recommended that the command string be printed in position 0:0 of the page. In this way, the string will not be visible on printed documents, as it will fall outside of the normal printable area.

Other Scan Fields

Key the line number, column number, and length for up to 10 different fields to be extracted from each *SCS spooled file page. These fields can be used as substitution values and in the Exit program. If you code an Index number for a field that you are extracting, the value will also be stored in the Index Master file for each of the Level Break #1 entries. You may use F10 to define the Index titles.

To specify a substitution value, you may code `~n` (where **n** is the Scan Field number) within the other field. For example, the filename field could be coded as simply `~1`, if you define the location of a document name in Scan Field #1.

You can only define the Lin, Col, and Len fields for *SCS printer files. You can still define Scan fields for *USERASCII spooled files, but the values must be passed from within the PCL Spooled File using a special command string. To pass a Scan field value, print the following string on the page:

`~Sn value` (where **n** is the Scan field number)

This command string may be printed anywhere on the page. The value will be extracted and used for indexing the *USERASCII spooled file documents. It is recommended that the command string be printed in position 0:0 of the page. In

this way, the string will not be visible on printed documents, as it will fall outside of the normal printable area.

PDF Setup Screen

You can use the Roll keys to get to the next screen for setting up automatic PDF or TIFF image creation of your documents.

WRKASF user-id	Setup Screen Spooled File: INVOICES	Date Time
Type choices, press Enter.		
L1 Invoice #	Path: <u>/PDF/Invoices</u>	
	Filename: <u>Invoice ^L1 for ^1</u>	
L2 Inv Date	MDY	
	Path: <u>/PDF/Invoices for a Day</u>	
	Filename: <u>Invoices for ^L2</u>	
L3	Path: _____	
	Filename: _____	
To automatically convert each document to an image while Archiving, enter an IFS output Path and a Filename for the desired Level Break. Hint: Include a Level Break substitution variable to make each Filename unique.		
Substitution variables:		
Code ^Ln for Level Break fields or ^n for Scan fields into the Path or File name.		
^UD=User Data ^UI=User-ID ^Y=Yr ^M=Mo ^D=Da ^H=Hr ^Mi=Min ^S=Sec		
F3=Exit F10=Indexes F12=Cancel		Bottom

Output Path and Filename

To automatically convert each document to an image while archiving, enter an IFS output Path and a Filename for the desired Level Break. The titles for the Level Breaks that you have defined will be displayed on the setup screen for you. You must define the filename in such a manner that each name will become unique, otherwise the duplicate names will replace each other in the output path. To do this, it is suggested that you use the Level Break substitution variables (**^Ln**) to make each filename unique.

If no level break fields have been defined, you can still make a single PDF out of the whole spooled file. Use the L1 fields and be sure to specify a naming scheme that uniquely defines each PDF.

Work with Archive Stream Files

Archiving and Indexing parameters can be specified for each of your Stream Files, using the *Work with ARC Stream Files* program (shown below). This program can be started from the KeyesArchive menu (Item 33) or using the KASTRMF command.

WRKAST user-id	Work with ARC Stream Files	Date Time
		Position to: _____
Options: 2=Change 3=Copy 4=Delete		
Option	Document Type	
	_____ Enter new Document Type to add	
-	PO	
-	CONTRACTS	
F3=Exit F12=Cancel F10=Define Indexes F17=Top F18=Bottom		Bottom

You may add a new document type definition by entering the document type name on the top line.

Option 2 (Change) may be used to change existing document type definitions.

Option 3 (Copy) may be used to copy a definition to another name.

Option 4 (Delete) may be used to remove entries that are no longer needed.

F10 (Define Indexes) will take you to a new screen where you can define each of the fields that will be used to keep track of your archived documents.

Define Index Titles

You will use this screen to define the titles for each of the fields that you will be extracting out of your stream files, for indexing.

WRKAST user-id	Define Index Titles			Date Time
Enter titles, press Enter.				
	Date Fields	FMT	5 Char Index Flds	10 Char Index Flds
D1	Doc Date	MDY	01 Invoice #	11 PO Number
D2	_____	_____	02 Cust #	12 _____
D3	_____	_____	03 Dealer #	13 _____
D4	_____	_____	04 _____	14 _____
D5	_____	_____	05 _____	15 _____
D6	_____	_____	06 _____	16 _____
D7	_____	_____	07 _____	17 _____
D8	_____	_____	08 _____	18 _____
D9	_____	_____	09 _____	19 _____
	20 Char Index Flds		30 Char Index Flds	40 Char Index Flds
21	_____		31 Customer Name	41 Description
22	_____		32 Vendor Name	42 _____
23	_____		33 _____	43 _____
24	_____		34 _____	44 _____
25	_____		35 _____	45 _____
26	_____		36 _____	46 _____
F3=Exit F12=Cancel				

Field Id

There are up to nine different date fields, 5 character long fields, and 10 character long fields. There are up to six fields that are 20 characters long, 30 characters long, and 40 characters long.

The number to the left of each field is the Field Id. You will refer to this Id when defining fields for extraction, sorting, or display.

Note:

If you run low on Field Ids, you may be able to double use some of them. For example, instead of defining two different fields for Invoice numbers and Purchase Order numbers, you could define a single field called Document Number that could be used for both.

Date fields

When defining date fields, you must also define the format that your date field will be found in. Use **C** for Century, **Y** for Year, **M** for Month, and **D** for Day, in the correct combination. All date fields will be converted to **CYMD** format to be stored in the Index Master file. This is done so that you can select dates within ranges. Any of the 4 date values that are not part of your date will be substituted with the current values. For example, if your date format is **DM** (Day and Month only), the current Century and Year will be used in the converted **CYMD** date value that is stored in the file.

Document Type Setup Screen

After adding a new document type or selecting option 2 (Change) the following screen is used to define how and where the stream files will be archived and optionally indexed.

WRKAST	Setup Screen	Date
user-id	Document Type: CONTRACTS	Time
Type choices, press Enter.		
IFS Path target . : /Archive/Contracts_____		
Target File name: -2 -3_____		
Duplicate option : *INCR *REPLACE, *INCR, *FAIL		
Exit Program . . : EXITINV_____		
Expire # months.: 000_____		
Code 1-9 to select/order the fields used for indexing this type of Document		
Order	Fld	Title
1	D1	Doc Date MDY
-	01	Invoice #
2	02	Cust #
-	03	Dealer #
-	11	PO Number
-	31	Customer Name
3	41	Description
		Bottom
Code -n to use selected fields in the Path or File name. -Y/-M/-D/-H/-MI/-S		
F3=Exit F10=Indexes F12=Cancel		

IFS Path target

Specify the path in the form (/directory/...) where you want this type of stream file to be archived in your IFS. The path can be up to 50 characters long.

You may code an escape sequence of -n as part of the path name. -1 for example, would be the first Index field that you have defined for this type of document. The escape sequence will be replaced with the value that the operator keys for the selected field, while indexing the documents.

File name

Specify the name that you want to call the stream file in the IFS. The name can be up to 60 characters long. Do not code a filename extension. The archived files will be given an extension of the original stream file that is being archived.

You may code an escape sequence of -n as part of the file name. The escape sequence will be replaced with the value that the operator keys for the field specified, while indexing the documents. In the above screen example, -2 would be replaced with the Customer number and -3 would be replaced with the Description.

Duplicate option

This defines the response that the program will have if it finds a duplicate name already in the archive path. It can Replace the file with the new one, Increment it, or Fail with an Error message.

If you leave this parameter blank, the system will use the default value that you have defined in the KeyesArchive System Setup.

Exit Program

An exit program can be used to alter the path or filenames, etc. All the parameters including the Indexing values that the operator keys are passed to the exit program for each document being indexed. The exit program can add to or change any of the parameter values. The Indexing values can be used by the exit program for chaining to a master file or substitution into other fields.

A sample exit program called EXITSTRM can be found in the source file called QRPGSRC in KALIB. You may copy this source code to make your own exit programs. The exit program must be compiled into KALIB. Any files that the program needs to access must be available to the HTTP server program (KAHTTCSRVA). The files should be placed in KALIB, or you must alter a program called KAADDLIB to add the appropriate library to the HTTP server job.

Expire # months

This value allows the system to automatically remove archived documents after they have expired. Enter the number of months to keep the documents. If you leave this value blank or zero, the documents will never expire and therefore not be removed.

Indexing Fields

Code a number 1-9 in each of the fields that you want to use for indexing the documents that are being archived. Code the values in the order that will be most convenient for the operator to key the values. Each document will be shown to the operator so that they can key the values for the selected fields.

You can use the value of an indexing field as a substitution in the Path or File name fields by coding -n in those other fields. (n=the coded number).

Browsing the IFS for Archives

This program (shown below) can be used to browse through the IFS for spooled files that have been archived. The entries are sorted by the Paths where they were stored in the IFS. You may select a spooled file to restore it, by moving the cursor to an entry and pressing the **Enter** key.

This program can be started from the KeyesArchive menu (Item 21) or using the KABRWIFS command.

Note: Be aware that this program will be slower and less useful than the *Browse Archive Master* program, that is described next.

This program will only restore spooled files, that have a filename extension of either .SPLF or .ZIPF.

BRWIFSA	Browse IFS for Archive	Date
user-id		Time
Position to: _____		
Path: /Karchive/Invoices		
.. Up one level		
+ Previous Year Directory		
G1234 for IBM Corporation.ZIPF		1320
G1241 for Warehouse Corp.ZIPF		1452
G1242 for Pacific Fishery Co.ZIPF		1320
G1244 for Oregon Mushrooms.ZIPF		1320
G1246 for C&H Sugar Inc.ZIPF		1452
G1247 for Georgia Pacific Lumber.ZIPF		1320
G1248 for Pacific Bell.ZIPF		1320
		Bottom
Move cursor to file or folder and press Enter to select file or open folder		
F3=Exit F12=Cancel F17=Top F18=Bottom		

Position to:

Type one or more characters in the Position to field and press **Enter** to jump directly to a specific Spooled File entry in the current Path.

Path:

You are shown all the files that were saved into the current Path. You may change the Path by either typing in a new value, or by selecting the desired directories from the listed items. The “.. Up one level” entry will move back to the previous directory. The “+” entries will move you into another directory. You select an item by moving the cursor to it and pressing the Enter key.

Browsing the Archive Master

The program (shown below) can be used to browse through the spooled files that are listed in the Archive Master file. The entries are sorted in sequence by the Path where they were stored in the IFS.

This program can be started from the KeyesArchive menu (Item 22) or using the KABRWARC command.

```
BRWARCM                Browse Archive Master                Date
user-id                user-id                            Time
Position to: _____
Options: 1=Select      2=Restore    3=Move      4=Delete    5=Display    6=PDF Print
           7=ReArchive  8=Convert    E=E-mail    F=Fax
Path: /Karchive/Invoices
Opt Files and Folders/                Pages    Date
- .. Up one level
- Previous Year Directory/
- G1234 for IBM Corporation.ZIPF          1    06/01/20
- G1241 for Warehouse Corp.ZIPF         2    06/01/20
- G1242 for Pacific Fishery Co.ZIPF      1    06/01/20
- G1244 for Oregon Mushrooms.ZIPF        1    06/01/20
- G1246 for C&H Sugar Inc.ZIPF           2    06/01/21
- G1247 for Georgia Pacific Lumber.ZIPF  1    06/01/21
- G1248 for Pacific Bell.ZIPF            1    06/01/21
- G125 Transfer contract.TIF             07/10/15
                                           Bottom

F3=Exit  F12=Cancel  F17=Top  F18=Bottom
```

Position to:

Type one or more characters in the Position to field and press **Enter** to jump directly to a specific entry in the current Path.

Path:

You are only shown entries that were saved into the current Path. You may change the Path by either typing in a new value, or by selecting the desired directories from the listed items. The “.. Up one level” entry will move back to the previous directory. The entries that end with a “/” will move you into another directory. You select a new directory using option 1.

Option 1 - Select

Use option 1 to select directories that you wish to browse. Option 1 only works on directories, it will do nothing to Archive entries.

Option 2 – Restore

This option is used to restore a spooled file to any output queue and optionally release it for printing. The original Archive will remain.

Option 3 – Move

Option 3 can be used to Move an Archive file to another Path, or to rename the Archive file entry to another name.

Option 4 – Delete

Use option 4 to remove an Archive entry from the system, if it is no longer needed. All index entries for this Archive will also be removed.

Option 5 – Display

This option is used to restore a spooled file to KAOUTQ temporarily. It then displays the file using IBM's DSPSPLF command. This only works for *AFPDS and *SCS printer files. You cannot use this to display *USERASCII spooled files or other Stream Files.

Option 6 – PDF Print

Option 6 will allow you to convert a spooled file into a PDF document and send it to a printer for printing. The printer must have direct PDF printing capability.

Option 7 – ReArchive

Use option 7 to restore the spooled file from archive, remove it from archive, then rearchive the same spooled file over again. This is especially useful if you have changed or corrected the Spooled File Indexing definitions and want to correct the Archive Master files.

Option 8 – Convert

Option 8 will allow you to convert a spooled file into either a PDF document, a TIFF image, or an ASCII text file. It will place the result anywhere on your IFS that you wish. The type of Spooled File (*SCS, USERASCII, or *AFPDS) determines the type of conversion that you can select.

Option E – E-mail

This option will restore a spooled file to KAOUTQ temporarily. It then calls an API to e-mail the entry. The e-mail library must exist on the library list for this option to work. Spooled files are typically converted to PDF documents for emailing. Stream files can also be emailed, but are sent as-is, without any translation.

Option F – Fax

This option will restore a spooled file to KAOUTQ temporarily. It then calls an API to fax the entry. The fax library must exist on the library list for this option to work. Stream files can also be faxed, if they are TIFF images that can be converted to fax images.

Browsing the Index Master

This program (shown below) can be used to browse through the individual documents that were written to the Index Master file during the Archiving process. Before you browse the Index Master file you will define Selection criteria to narrow down what you are looking for. This program can be started from the KeyesArchive menu (Item 23) or using the KABRWIDX command.

The first screen is used to select existing instructions or create new Selection instructions. Each entry can be set up to select then sort different records from the Index Master file for browsing.

WRKSLTA	Work with Selection by Field	Date
user-id		Time
	Position to: _____	
Options: 1=Select 2=Change 3=Copy 4=Delete 5=Assign Logical File		
Option	Select Name	Logical File
Add	_____	
-	Documents by Customer #	CUSTOMER
-	Invoices by Dealer	DEALER
-	Invoices by Invoice #	INVOICE
-	Invoices for a Month	
F3=Exit F12=Cancel F17=Top F18=Bottom		Bottom
Enter new Select Name on top line to add		

Position to:

Type one or more characters in the Position to field and press **Enter** to jump directly to a specific Select Name.

Option 1 - Select

Use option 1 to select one of the existing set of instructions. After confirming the selection, the system will create a logical file using those instructions. You can then start browsing through the selected Index fields using that Logical file.

Option 2 – Change

This option is used to change one of the existing Select Name set of instructions.

Option 3 – Copy

Option 3 can be used to Copy a Select Name to a new entry. You will be asked to supply a new Description for the new Select Name.

Option 4 – Delete

Use option 4 to delete a Select Name that is no longer needed.

Option 5 - Assign Logical File

Use option 5 to assign or change a Logical File name for one of the existing Select Names.

Note: When you assign a Logical File to a Select Name, this causes the system to keep that Logical File on the disk. It will not have to recreate the Logical File each time a user wishes to use it. The HTTP Server will only allow users to browse for entries using a Select Name that has been assigned a Logical File.

Defining Sort and Display Instructions

This screen will help you select the fields that you wish to use for Sorting and Displaying the records in the Index Master file.

WRKSLTA	Define Sort/Display Fields		Date
user-id	Select Name: Invoices by Invoice #		Time
Code 1-8 to select up to 8 fields for Sorting & Displaying			
Sort	(D)	Fid	Title
2	D	D1	Inv Date MDY
1	-	01	Invoice #
-	-	02	Cust #
3	-	03	Dealer #
-	-	11	PO Number
4	-	31	Customer Name
-	-	32	Vendor Name
5	-	41	Description
			Bottom
'--> Enter 'D' for Descending Sequence			
F3=Exit F12=Cancel			

After selecting one or two fields for Sorting, you may add additional fields to be displayed on the Browse screen. The more fields that are displayed, the easier it will be to identify the desired documents. You may select a total of 8 fields for Sorting and Displaying.

Enter the numbers 1 through 8 to select the desired index fields. All the available fields and their titles are listed for you on the screen. These fields are defined in the Work with Spooled Files program (Item 32).

You may enter a D in the (D) column to sort the selected field in reverse order, or Descending sequence. The default sort will be in ascending sequence.

After selecting the desired Sort/Display fields, press the **Enter** key. You will be moved to the next screen.

Defining Select/Omit Instructions

This screen will help you select the records from the Index Master file that you wish to include in your sort.

WRKSLTA	Define Select/Omit		Date
user-id	Select Name:	Invoices by Invoice #	Time
2D D1	Inv Date	32 Vendor Name	
1 01	Invoice #	5 41 Description	
	02 Cust #		
3 03	Dealer #		
	11 PO Number		
4 31	Customer Name		
			Bottom
Code up to 8 Select/Omit statements:			
Fld	Title	S/O	Oper 'Constant' or Field Nbr
01	Invoice #	O	EQ '*ALL'
01	Invoice #	S	GT ' ' _____
--		--	_____
--		--	_____
--		--	_____
--		--	_____
--		--	_____
--		--	_____
			>EQ,NE,GT,LT,GE,LE,NG,NL
F3=Exit	F12=Cancel		

Use this screen to select or omit records from the Index master file. When defining Select or Omit statements, specify **S** for Select, **O** for Omit or leave it blank for ANDing the comparison statements.

Each time you specify an **S** or an **O** the statements will be ORed together. Each of the ORed statements are treated independently from one another. That is, if the Select or Omit comparison is met, the record is either selected or omitted. If the condition is not met, the system proceeds to the next comparison.

After the last statement specified, the action taken for the records that do not meet the values will be the converse of the type of the last statement. Records that do not meet selection values are omitted, or records that do not meet omission values are selected.

Fld column

Enter one of the fields from the Index records that you intend to select or omit. They are listed at the top of the screen.

Title column

After entering or changing any of the Fld values, press **Enter** and the corresponding Titles will be included on the screen for you.

S/O column

Enter "S" to define a Select statement, "O" to define an Omit statement or leave this column blank to AND this comparison with the previous one.

Oper column

You may specify any of the Relational operators for the comparison.

EQ = Equal	NE = Not equal	
LT = Less than	NL = Not less than	LE = Less than or equal
GT = Greater than	NG = Not greater than	GE = Greater than or equal

'Constant' or Field Nbr column

The field specified in the first column will be compared to the 'Constant' or Field Number that you define in this column. Constants must be surrounded by single quotes. Field numbers are specified in the first two characters only. After naming a Field number, press Enter to have the Title for that field included on the screen.

Note:

All date fields are stored in the file in the CCYYMMDD format. This was done to assist you in selecting or omitting dates within a range.

Browsing Archive by Index

After confirming your selection, the system will either use the assigned Logical File or create a temporary one using the selected instructions. The entries that are included from the Index Master file are sorted. Up to 8 Index fields will be presented to you as they were defined in the selected instructions, as much as will fit on the screen.

BRWIDXA		Browse Archive by Index				Date
user-id		Invoices by Invoice #				Time
Position to:	_____					
Lock Sort:	20140420	_____				
	Inv Date			Invoice #		
Options:	1=Details	2=Restore	5=Display	6=PDF Print	8=Convert/Copy	
	E=E-mail	F=Fax				
Opt	Inv Date	Invoice #	Dealer #	Customer Name	Descriptio	
-	20140420	G1234		IBM Corporation		
-	20140420	G1241		Warehouser Corp		
-	20140420	G1242	1775	Pacific Fishery Co.		
-	20140420	G1244	1680	Oregon Mushrooms		
-	20140420	G1246	1775	C&H Sugar Inc.		
-		/Karchive/Invoices/G1246 for C&H Sugar Inc.PDF				
-	20140420	G1247		Georgia Pacific Lumber		
-		/Karchive/Invoices/G1247 for Georgia Pacific Lumber.PDF				
-	20140420	G1248	1886	Pacific Bell		
-		/Karchive/Invoices/G1248 for Pacific Bell.PDF				
						Bottom
F3=Exit F5=Refresh F12=Cancel F17=Top F18=Bottom						

Notes: If a PDF document has been archived for any of the entries, it will show just below its Index entry. You may print, copy, or E-mail either the original spooled file entry or the archived PDF for similar results. If you select the original spooled file Index (rather than the PDF), the archived spooled file will be temporarily restored and a new PDF will be generated from the appropriate pages. This gives you a way to make an Encrypted PDF, if you want to. Whereas, the archived PDF documents are not encrypted.

Position to:

Type one or more characters in the Position to field and press **Enter** to jump directly to a specific entry defined by one of the sort fields. The Position to is used to start a selection after the last Locked Sort field. When both Lock Sort fields are blank, it selects the first sort field. When the first Lock Sort field has a value, the Position to selects entries from the second sort field. When both Lock fields have values, the Position to selects entries from the third sort field.

Lock Sort:

The Lock Sort fields allow you to isolate the entries from the first and the second sort fields to certain values. In the above example, the first sort field (Inv Date) has been locked to only show the entries from 2014/04/20. The Position to field

will therefore allow you to select entries from the second sort field (Invoice #). In this example, the second sort field (Invoice #) does not repeat values, and therefore should not be Locked to certain values.

Option 1 – Details

Use option 1 to display all the fields that have been gathered for each entry.

Option 2 – Restore

This option is used to restore the selected document to an output queue and optionally release it for printing. If the document was part of a larger spooled file, the entire spooled file will be restored. However, the page range will be set to include only the selected document.

Option 5 – Display

This option is used to restore the document to KAOUTQ temporarily. It then uses IBM's DSPSPLF command to display the spooled file. This feature will only work with *AFPDS and *SCS printer files. You cannot view *USERASCII spooled files.

Option 6 – PDF Print

This option is used to convert a spooled file entry to a PDF document and sent it to a printer. Or, if a PDF has been archived, you can send it directly to a printer without having to convert it. The printer must have direct PDF printing capability.

Option 8 – Convert/Copy

Option 6 will allow you to convert a selected document into a PDF document, a TIFF image, or an ASCII text file. It will place the result anywhere on your IFS that you wish. The type of Spooled File (*SCS, *USERASCII, or *AFPDS) determines the type of conversion that you can select. If you select this option for an archived PDF, it will allow you to copy the PDF to another location in the IFS.

Option E – E-mail

This option will restore a selected document to KAOUTQ temporarily. It then calls an API to e-mail the entry. The e-mail library must be available on the library list, for this option to work. You select either the original spooled file entry or an archived PDF for e-mailing. If you want to use PDF encryption, then you must select the original spooled file entry, so that the system can remake the PDF with encryption.

Option F – Fax

This option will restore a selected document to KAOUTQ temporarily. It then calls an API to fax the entry. The fax library must be available on the library list, for this option to work. You cannot use this option for archived PDF documents.

Browsing the PDF Master

The program (shown below) can be used to browse through any PDF document that have been archived. The entries are sorted in sequence by the Path where they were stored in the IFS.

This program can be started from the KeyesArchive menu (Item 24) or using the KABRWPDF command.

```

BRWPDFM          Browse PDF Master          Date
user-id          user-id                    Time
Position to: _____
Options: 1=Select 2=Copy 3=Move 4=Delete 6=PDF Print E=E-mail

Path: /Karchive/Invoices
Opt Files and Folders/          Pages    Date
- .. Up one level
- Previous Year Directory/
- G1234 for IBM Corporation.PDF          1    06/01/20
- G1241 for Warehouse Corp.PDF         2    06/01/20
- G1242 for Pacific Fishery Co.PDF      1    06/01/20
- G1244 for Oregon Mushrooms.PDF       1    06/01/20
- G1246 for C&H Sugar Inc.PDF           2    06/01/21
- G1247 for Georgia Pacific Lumber.PDF  1    06/01/21
- G1248 for Pacific Bell.PDF           1    06/01/21

                                          Bottom

F3=Exit  F12=Cancel  F17=Top  F18=Bottom
    
```

Position to:

Type one or more characters in the Position to field and press **Enter** to jump directly to a specific entry in the current Path.

Path:

You are only shown entries that were saved into the current Path. You may change the Path by either typing in a new value, or by selecting the desired directories from the listed items. The “.. Up one level” entry will move back to the previous directory. The entries that end with a “/” will move you into another directory. You select a new directory using option 1.

Option 1 - Select

Use option 1 to select directories that you wish to browse. Option 1 only works on directories, it will do nothing to Archive entries.

Option 2 – Copy

This option can be used to make a copy of an existing PDF document to another directory or to another name in the current directory.

Option 3 – Move

Option 3 can be used to Move an Archived PDF to another Path, or to rename the Archived PDF entry to another name.

Option 4 – Delete

Use option 4 to remove an Archived PDF from the system, if it is no longer needed. The Spooled File itself will still remain archived.

Option 6 – PDF Print

Option 6 will send this PDF document to a printer of your choice for printing. The printer must have direct PDF printing capability.

Option E – E-mail

This option will call an API to e-mail the PDF document. The e-mail library must exist on the library list for this option to work. If you want to recreate the PDF for any reason (such as to add encryption), you should find and select the original spooled file to be e-mailed, not the PDF.

Activating and Using the HTTP Server

The HTTP Server will allow you to browse the Archive Master, the Index Master, or the PDF Master files for archived documents from anywhere using an Internet browser. It will allow you to restore the documents to an output queue, print them, convert the original spooled files to PDF documents, view them or save them to the IFS. You will also be able to fax or e-mail the documents, if you have fax or e-mail software installed on your iSeries.

Configuring the HTTP Server

You should not need to change the default configuration, as we shipped it. If you decide to change the configuration file called KAHttpsrv, you will have to do this using the Administration Server. After starting the IBM HTTP server with the *ADMIN server instance, you can access it from a browser by addressing your iSeries IP address:2001.

Starting the HTTP Server

Before you can connect to the HTTP Server with your PC, you will need to start the server. This can be done by running the KeyesArchive menu item 41 or using the STRKASRV command.

Ending the HTTP Server

To end the server you can use the KeyesArchive menu item 44 or you can run the ENDKASRV command

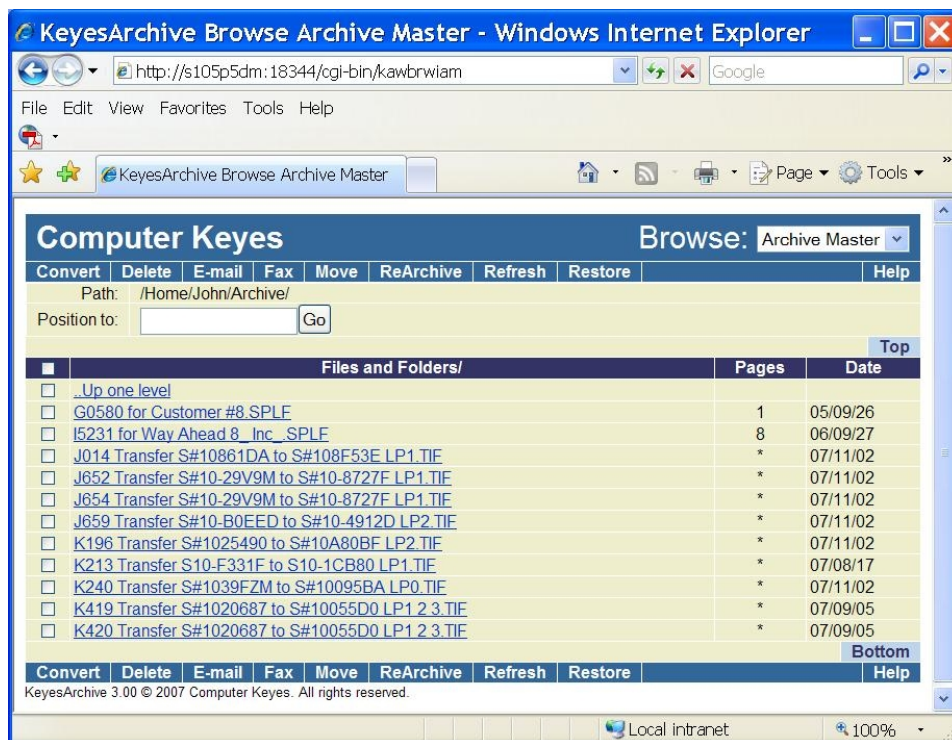
Using the HTTP Server

You can connect to the HTTP Server using an Internet browser. You will use port 18344 to connect to the KeyesArchive system. You may have to open this port in your Firewall, if you intend to connect from outside your network.

1. Start your PC browser and fill out the address field, as follows:
`http://your-iSeries:18344/`
your-iSeries is the name or IP address of your iSeries. You may use the internal address from inside your network, or the external address from outside your network.
2. For security reasons, the server will ask you to Sign On, using your normal iSeries *User-Id* and *Password*.
3. Use the “Add to Favorites” function of the browser (after the first connection), to save the address for the future.

Browsing Archive Master

The default screen for the HTTP server is the *Browse Archive Master* screen. It is used to show you all the spooled files and stream files that have been archived. It is sorted by the folders that you have stored the archived documents in.



Built-in Security

This screen has security built into it. A user must sign on with their normal iSeries User-ID and Password to access the HTTP server screens. Some of the options will not be shown to regular users. A user must have a special authority of either Job Control or Spool Control to be able to do all of the functions. Without these special authorities a user will not be able to use the Delete, Move, or ReArchive functions.

Browsing Indexed Fields

The Browse by Indexed Fields will give you a method of finding individual documents using the Indexed values that have been gathered.

1018*	Document Date	Inv #	Customer Name	Ship To (if diff)	Description #1
<input type="checkbox"/>	1018	20140301	K7556	MO-KAN SHEET METAL WELFARE FND	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20131101	K1678	PIPE FITTERS LOCAL 597 BENEFIT	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20130701	K1668	PENSION BOARDS	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20130701	K1778	SHEET METAL WORKERS	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20130601	L1491	KANSAS BUILDING TRADES	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20130301	K7555	MO-KAN SHEET METAL WELFARE FND	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20121101	K1677	PIPE FITTERS LOCAL 597 BENEFIT	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20120716	L1490	KANSAS BUILDING TRADES	KeyesPDF - Ver 3.2 LIVE
<input type="checkbox"/>	1018	20120701	K1667	PENSION BOARDS	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20120701	K1777	SHEET METAL WORKERS	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20120301	K7554	MO-KAN SHEET METAL WELFARE FND	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20111101	K1676	PIPE FITTERS LOCAL 597 BENEFIT	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20110701	K1666	PENSION BOARDS	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20110701	K1776	SHEET METAL WORKERS	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20110301	K7553	MO-KAN SHEET METAL WELFARE FND	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20101101	K1675	PIPE FITTERS LOCAL 597 BENEFIT	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20100701	K1665	PENSION BOARDS	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20100701	K1775	SHEET METAL WORKERS	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20100301	K7552	MO-KAN SHEET METAL WELFARE FND	KeyesPDF - Annual Maintenance
<input type="checkbox"/>	1018	20091101	K1674	PIPE FITTERS LOCAL 597 BENEFIT	KeyesPDF - Annual Maintenance

You can use the *Select Name* field to change the way you search for the documents desired. The *Select Names* are defined using option 23 (Browse by Indexed Fields) from KAMENU.

Position to and Lock Sort fields:

The **Position to:** field will select entries from the first Sort field that has not been Locked. In the above example, the first Sort field (Dlr #) has been locked onto Dealer #1018. This was done by entering 1018 into the **Position to:** field and then clicking on the first Sort field's Title. The Title changed from “**Dlr #**” to “**1018***” to indicate that it has been Locked to that Dealer #.

Because the first Sort field was locked, the **Position to:** field will now search on the second Sort field (Document Date in this example).

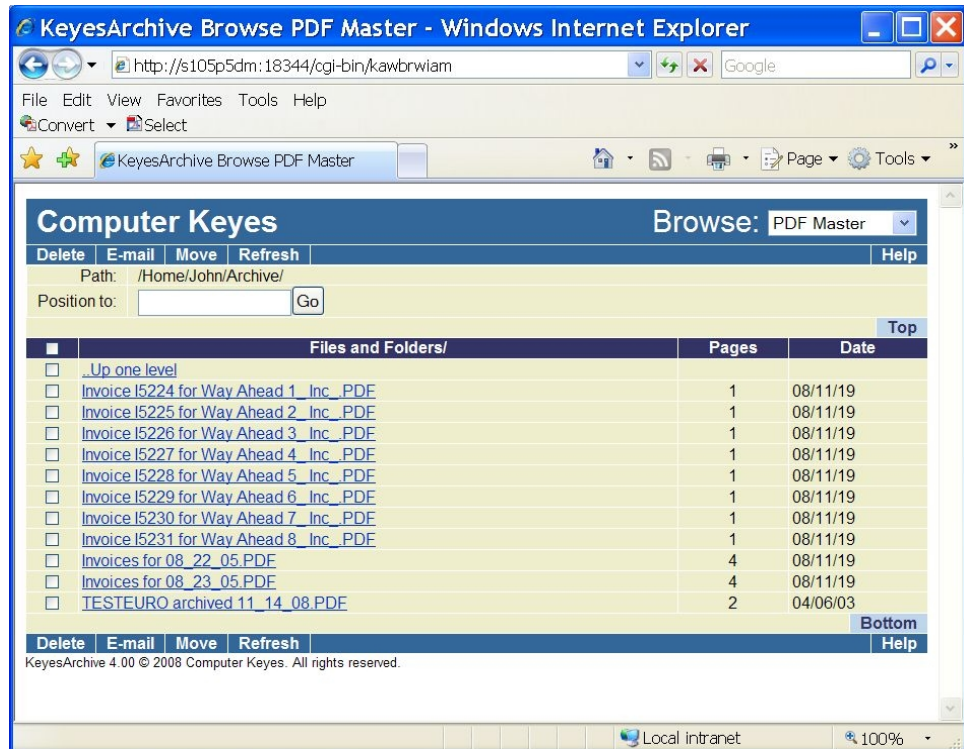
The second Sort field can also be Locked to a particular date by positioning to a desired date and then pressing the second Sort field's Title (Document Date).

If the second Sort field is locked, the **Position to:** field will search on the third Sort field (Inv # in this example).

You can press the Locked Title to unlock a Sort field.

Browsing PDF Master

The *Browse PDF Master* screen can be used to show you all the PDF documents that have been archived. It is sorted by the folders that you have stored the archived PDF documents in.



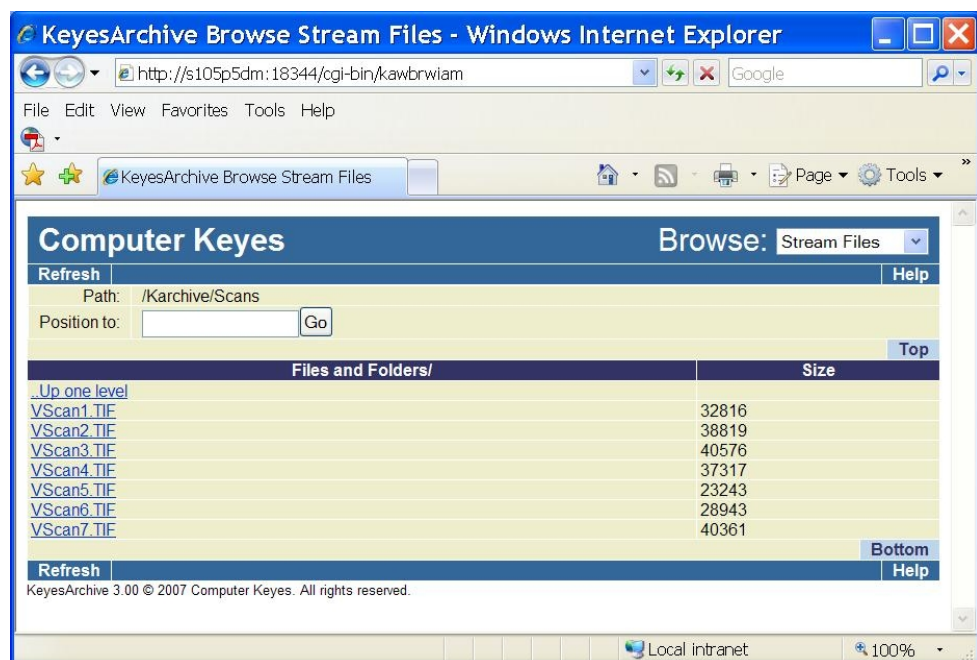
Built-in Security

This screen has security built into it. A user must sign on with their normal iSeries User-ID and Password to access the HTTP server screens. Some of the options will not be shown to regular users. A user must have a special authority of either Job Control or Spool Control to be able to do all of the functions. Without these special authorities a user will not be able to use the Delete or Move functions.

Browsing Stream Files

The HTTP server can be used to archive and optionally index other types of documents (other than Spooled files). We refer to all other types of documents as Stream Files. Stream Files can be Word Processing documents, pictures, scanned or faxed in images, Spread Sheets, or other types of PC files that you want to archive for later retrieval.

The Browse Stream Files screen will default to showing you the IFS folder that you have coded in the *Source path for Stream Files* parameter in the KeyesArchive System Setup. You can navigate to another folder by clicking on either the *..Up one level* entry or on a new folder entry. New folders are designated on the screen with a leading '+'.



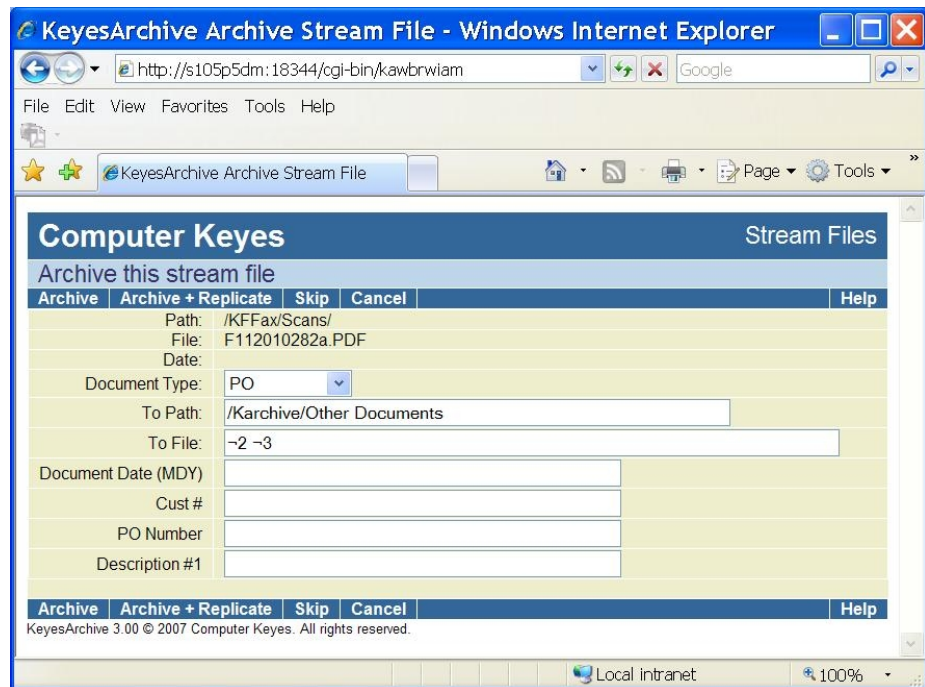
When you click on a document, it will be displayed in a separate window.

Archiving and Indexing Stream Files

As you select each of the stream files to be archived, the system will display that document to you, using the program that is associated with the filename extension. The documents will be displayed in a separate window. If your screen is of sufficient size, you should be able to size and position both windows so that you can view the documents while indexing them.

You will select the type of document from the available list. This list of *Document Types* is defined using option 33 (Work with Stream Files) from KAMENU.

Note: TIFF images will be sent to the browser with a special filename extension of **CK-TIF**. Follow the instructions in this chapter to select the appropriate TIFF viewer for these documents.



After selecting the type of document, you can key the requested information in the fields provided. After keying the data, you may select either *Archive* or *Archive + Replicate* to archive and index that stream file.

Any substitution fields (-2 -3 in the example screen shot) will be resolved by the program after you press one of the Archive buttons, using the values that you have keyed in the Indexing fields. -2 in this example would be the Cust # and -3 would be the PO Number.

Archive

This function will archive the document using the Path and File name that is entered on the screen. The file will be moved and renamed to the To Path and To File name. The document will be Indexed, using the values that you key for the requested information.

Archive + Replicate

You may want to Archive some of your documents to two or more places. This would happen if more than one value was available for any of the Indexing fields. For example, if one document pertained to more than one customer or more than one product, that you were indexing.

Selecting the *Archive + Replicate* function will archive the document using the current values that you have keyed. The entire document is then replicated, so that you can Archive the same document again with new values. You can repeat this process until the document is replicated enough times to cover all its Indexing needs. You should select *Archive* for the last set of Indexing values.

Note: If the *To File* parameter is not unique, for two or more of the archived files, the system will automatically increment each new filename using Copy[xx] at the end of the name.

Skip

There may be times when you cannot or do not want to archive a particular document. The *Skip* function can be used to set a document aside for later processing. It will mark the document with a .SKIP filename extension and return you to the Browse screen so that you can select another document.

You can archive the Skipped documents at any time, by selecting them. Or, you could ask someone with high enough authority to delete them, if the documents are damaged or not needed.

Cancel

The *Cancel* function can be used to return you back to the Browse screen so that you can select another document for archiving.

Selecting a TIFF Viewer

The following steps only have to be run once, for each PC. It is used to set the default viewer that will be used to display TIFF images on your browser.

Your PC probably contains multiple programs that can view the TIFF images. You will need to select one, the first time you view one of the images.

- ✓ Click the Document to be viewed.

TIFF images will be sent to the browser as a file with a CK-TIF filename extension. This will not be a known File Type. Windows will ask you if you would like to Save the file.

- ✓ Click the Save button, on the *File Download* screen.
- ✓ Click the Save button, on the *Save As* screen.
- ✓ Click the Open button, on the *Download complete* screen.

Windows will tell you that it cannot open the file, because of the unknown filename extension.

- ✓ Check the *Select the program from a list* radio button then click the OK button.

The *Open With* screen will show you multiple programs that you can select from. We recommend that you select the “**Windows Picture and Fax Viewer**” program, but you are welcome to try others.

- ✓ Select the desired program, type “Computer Keyes – TIFF” in the description field, remove the “Always use the selected program to open this type of file” option (if you want to try other programs), and press the OK button.

You will be able to repeat the previous steps. When you find the viewer program that you like, select the “Always use the selected program to open this type of file” option.

- ✓ View another or the same Fax image. This time, on the *File Download* screen, uncheck the “Always ask before opening this type of file” option. This will tell your system to open the CK-TIF images with your selected viewer, without asking you to Save them first.

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