iFileAudit

Version 7.07

As of June 2022

Kisco Systems LLC
54 Danbury Road, #439
Ridgefield, CT 06877

Phone:	**(518) 897-5002**
E-mail:	**Sales@Kisco.com**
WWW:	**https://www.kisco.com**
Customer Support:	**https://www.kisco.com/ifa/support**

Table Of Contents

<u>Introduction</u>

iFileAudit is a security application for your IBM i computer system which includes the Power System running IBM i, i5, iSeries and AS/400. For applications that use the OS file system for database files, iFileAudit allows you to keep track of all file changes on a record-by-record and field-by-field basis. Using iFileAudit, you can easily track when file records were changed, what fields were updated and who made those updates. Field changes are captured whether they are made by a user or as a result of batch program process updates.

For the purposes of this documentation, your system will be referred to as an "**iSeries**" system. This term is used generically and applies to all systems in the IBM i family, including your **Power** system, **i5** system, **AS/400** system or your **iSeries**.

<u>Overview</u>

iFileAudit allows you to select specific files on your iSeries and track changes made to records in that file. These changes are tracked on a record-by-record and on a field-by-field basis. To start tracking changes to any file, you must first register the file within iFileAudit. Once a file had been registered, then you just need to activate tracking and iFileAudit will start tracking all changes.

To view file changes, you must first run an analysis step. Once this is done, you can then see those changes in a variety of views. You can look at changes on a strict chronological basis, you can view changes based on record key, field name or user profile. iFileAudit also includes an automatic analysis process that can be set up to run periodically in batch so keep the audit tracking information current on your system. When fully implemented, Kisco recommends that you run the analysis process at least once a day.

When you have the software installed and before you start using it, we recommend that you check the global settings from the INSTALL menu, option #9, to make sure they are set correctly for your installation.

In addition to the terminal interface, iFileAudit is also web-enabled using an interface that is built on a web browser. When initially installed, iFileAudit supports the terminal interface. Additional installation and configuration work will be needed to use the web-enabled browser interface. Please review the separate documentation for this feature for more details including installation and configuration requirements.

<u>What's New In Release 7.07</u>

Release 7.07 includes the following updates and changes:

• A new optional feature that will allow you to track file open and file close operations at the file level.

• Security improvements to control which user profiles can control iFileAudit. Administrators now must be specifically enrolled in order to work with settings in iFileAudit.

• New journal registration problems now highlighted when reviewing all files registered.

• Clear File Member operations now captured for registered files being tracked.

What Was In Release 7

Release 7 included updates that support running iFileAudit in a auxiliary storage pool (ASP) other than the default storage pool.

What Was New In Release 6

Release 6 of iFileAudit includes the following features that have all been added to the software since Release 5 first became available in June 2012:

- Filter activity tracking based on the program name used to effect the update

- Option to view all fields updated at the same time for a record

- Filter activity tracking based on the job name used to effect the update

- New option to view registered files in iFileAudit without being able to make any changes

- Administrator user profile enabled to grant limited access to features in iFileAudit

- Provision added to copy the setup for a file over to other identical files

- New listing added to enable a report of field selection setting to be created

- Purge activity in the audit history for a file is now logged for audit purposes

- User profile selection now allows a Group Profile to be used

- Improved security with tighter control over who can work with the software and review the data contained in it. All Administrators must now be enrolled as administrators in iFileAudit to use the product. See menu option #8 on the INSTALL menu.

- New fields now captured for each field update:

  - Library name for program used for the field update
  - IP address of the device used to make the field changes
  - Port number used when the field changes were made
  - (See below for additional considerations for customers installing 6.12 as an upgrade.)

- Rendering of numeric data in iFileAudit has been improved with the correct placement of all decimal points. (**Note**: For customers upgrading to 6.12 from a release earlier than 6.05, a conversion process will be required to update existing data, see below).

- Size information about the iFileAudit history is now available when running option #1 on the MASTER menu. Both the total size and the individual file size is now available.

- When displaying a specific field update, a new F8 function key has been added that will bring up a list of all of the field updates made at the same time as the one being viewed.

• An option has been added to prevent iFileAudit from placing any customer data in the QTEMP library. This is a consideration for some security conscious customers who are using encrypted ASP technology. QTEMP is never encrypted, so this option has been added.

Decimal Field History Conversion

If you are upgrading to Release 6.12 or later from a release level earlier than 6.05, you will have to convert the existing iFileAudit history to show the decimal points correctly. All future analysis processes that run on your system, will capture these decimal points correctly following your upgrade/

You should convert prior analysis information already on file before you do any new analysis processing. To convert the information already on file in iFileAudit, do the following:

1. If you have the Automatic Analysis feature active, stop it before you continue.

2. Make sure that no users are accessing any features in iFileAudit from any workstations or web browser sessions.

3. From the command line, enter the following commands:

```
ADDLIBLE  FILAUD
CALL  CVTAUDECL
```

This will convert all field information currently on file in iFileAudit in the active database. Archived information will not be converted.

When you are done, you can resume normal use of the iFileAudit software.

New Fields Captured

If you are upgrading to Release 6.12 or later from a release earlier than 6.06, then new fields have been added to the iFileAudit History database. Your current tracking for existing files will need to have their journaling configurations updated in order to start picking up this additional information.

After installation of this upgrade, the new fields will start showing up for all newly registered files. For files that are already registered, you will need to make changes to the way the journal used for the file is configured. First, you will need to identify the journal in use for the file.

To identify the journal in use, use the IBM i OS DSPFD command for the file in question. When the information about the file is displayed, scan for the field named "Current or last journal". This will give you the name and library for the journal.

With this information, run the following command:

```
CHGJRN JRN(yourlib/yourjrnl) JRNRCV(*GEN)
       FIXLENDTA(*JOB *USR *PGM *PGMLIB *RMTADR)
```

replacing "yourlib" and "yourjrnl" with the library and journal name identified above. Once you

have made this change, then the new information will start to be captured for files using this journal. This information cannot be captured for updates processed prior to when the journal is changed.

Installation and Security

Specific installation instructions are covered in the section of this manual titled "Installation". To install your product on trial, follow those instructions. iFileAudit can be installed from distribution media supplied by Kisco Systems or from a download file from the Internet. The initial installation will allow iFileAudit to run on your system for a period of at least thirty days. At the end of the trial period, the software will no longer function.

When you decide to keep iFileAudit, you must send your payment to Kisco Systems. At that time, Kisco must know the serial number for your system and the partition number where you have iFileAudit installed. If you are not sure of your serial number, you can display it by using the following command:

      DSPSYSVAL QSRLNBR

When Kisco receives your payment and serial/partition numbers, they will issue a password to you. This password, when applied, will certify your copy of iFileAudit and will permanently activate the software on your system. The password and certification instructions will be provided in writing by email.

Kisco Software Support

Kisco Systems software support is available from 7am to 6pm eastern time. You can reach software support with the following methods:

      Phone: 518-897-5002
      Email: support@kisco.com
      Mail: Kisco Systems
              54 Danbury Road, #439
              Ridgefield, CT 06877

Off-hours support can be provided for all registered customers with advance notification. Contact our support staff at least 24 hours in advance when you think you will need off-hours support and we will provide instructions for contacting us during that time. If you have unscheduled off-hours support needs, you should place a phone call and send an email request. Support is generally available during off-hours.

Kisco Systems provides unlimited software support during your first year of ownership. This includes the time during your free trial. Following the first year of ownership, there is a modest fee structure to maintain support for your software.

The Kisco support policy program works as follows:

1.   First year support will continue to be FREE! This will include unlimited telephone support, unlimited E-mail support, free release updates and free license transfers.

2.   After the first year, an annual charge will apply for support and software maintenance.

3.   The annual fee will be charged at the rate of 15% of the current selling price.

4.   Support covered by this annual fee includes:

        a.   Unlimited telephone support (518-897-5002)
        b.   Unlimited E-mail support (Support@kisco.com)
        c.   Defect analysis and correction
        d.   Free updates to correct known defects (Kisco PTFs)
        e.   Free license transfers (when you upgrade to a different system)

5.   Customers who are not on maintenance will be charged $100 for each license transfer.

At the end of your first year of ownership, you will receive an invoice from us for your next year's maintenance charge. Non-payment of this invoice will be taken to mean that you decline maintenance.

<u>World Wide Web Support</u>

You can also use the World Wide Web to reach us and to obtain software support information. Just set your web browser to our web address at:

      https://www.kisco.com

Support information specifically for iFileAudit can be found at this address:

      https://www.kisco.com/ifa/support

At our Website, you will find:

- Product information about all Kisco software products for the IBM i.

- Customer support information including:

    ▸   Latest release level information for all products
    ▸   Technical bulletins
    ▸   Frequently asked questions and answers
    ▸   Problem reports including iFileAudit PTF availability
    ▸   Descriptions for recent enhancements to products
    ▸   E-mail contact information for getting in touch with us

- Information about consulting services available from Kisco Systems.

- Registration for automatic notification about iFileAudit enhancements and changes.

- ..... and more

The first time you visit the Customer support section of our website for iFileAudit, be sure to register for automatic notification. Once you are registered, we will automatically send Email notices to you about upgrades, enhancements and fixes for iFileAudit as soon as they become available.

We invite you to visit our Website, use the contact features to let us know what you think. We're always looking for ways to better serve you, our customer.

The Master Menu

The main menu used by iFileAudit is called MASTER and is found in the library FILAUD. There are several ways to display the menu. You can issue the following GO command from any terminal command line:

GO FILAUD/MASTER

This method does not require that the library name be added to your library list. You can also add the library to your library list and display the menu with an easier format. To add the library to your library list and display the menu, enter the following two commands:

ADDLIBLE FILAUD
GO MASTER

The main iFileAudit menu appears as follows:


```
C - 2:5250 Display                                              —   □   ×
File Edit View Communication Actions Window Help

QSECOFR                          MASTER Menu                          KISCO1

     1.   Work With iFileAudit File Registrations          WRKFILAUD
     2.   Analyze File                                      FILANZ
     3.   Display File Analysis                             DSPFILA
     4.   View Registered Files                             DSPFILAUD

     6.   Purge File History                                AUDPRG
     7.   Print Audit Report by Date & Time                 RPTFILD1
     8.   Print Audit Report by User, Date & Time           RPTFILD2
     9.   Print Audit Report by Field, Date & Time          RPTFILD3
    10.   Print Audit Report by Key, Date & Time            RPTFILD4
    11.   Print Audit Report by Key, Field, Date & Time     RPTFILD5

    15.   Export File Information                           EXPFILINF
    16.   Start Automatic Analysis                          STRIFAQ
    17.   Stop Automatic Analysis                           ENDIFAQ
    18.   Display Auto Analysis Status                      DSPIFAQ

    20.   To Install Menu                  (c) 2006-2022 Kisco Systems LLC


===>

MA     C                                                            23/007
                                                    ▲  ⟋  10.2.2.3:23
```

Each menu option handles the following functions. The right margin of the menu display shows the command that is run by that option. All commands are located in the application library named FILAUD. Each function is described in more detail later in this manual:

1. Work With iFileAudit File Registrations	Lets you work with file registrations in iFileAudit.
2. Analyze File	Processes the iFileAudit file analysis for a registered file.
3. Display File Analysis	Displays the results of the file analysis with multiple views of the data available.

4. View Registered Files	Similar to menu option #1, but a stripped down version that allows you to review information but not make any settings or registration changes. This can provide access to non-security officers to view audit information.
6. Purge File History	Lets you purge old audit information on a file by file basis.
7. Print Audit Report by Date & Time	Prints an audit report for a file in chronological sequence.
8. Print Audit Report by User, Date & Time	Prints an audit report for a file by user and time sequence.
9. Print Audit Report by Field, Date & Time	Prints an audit report for a file by field and time sequence.
10. Print Audit Report by Key, Date & Time	Prints an audit report for a file by record key and time sequence.
11. Print Audit Report by Key, Field, Date & Time	Prints an audit report for a file by record key, field name and time sequence.
15. Export File Information	Lets you extract information about a file that you are tracking into a normalized database file for your own use and reporting purposes.
16. Start Automatic Analysis	Starts the automatic file analysis process to run on a scheduled basis.
17. Stop Automatic Analysis	Stops the automatic file analysis process currently running.
18. Display Auto Analysis Status	Displays the current status of the automatic file analysis feature.
20. To Install Menu	Switches to the iFileAudit Installation tasks menu.

Work With File Registrations

To start tracking a file within iFileAudit, you must first register the file and then activate the tracking status for the file. This process is controlled from option #1 on the MASTER menu. When you start this option, the following screen will be displayed:

Initially, this display will come up with no items listed. To create your first entry, press the F6 key. Once you have entries defined, this screen will describe the file and tell you the current status of the file. If a file is showing as *INACTIVE, that indicates that the file has been registered but it is not currently tracking activity.

Registration Exceptions

If there are any issues with an existing file registration, you may see some exceptions on this display as follows:

- If a file shows in red, then that file is no longer present on your system
- If the Audit Status column shows in pink, it indicates that the audit journal has been changed for the file and no longer matches how the file is registered in iFileAudit. This needs your attention.
- If the Audit Status column shows in yellow, it indicates that the audit journal is no longer active for this file. This also needs your attention, see option 9 below.
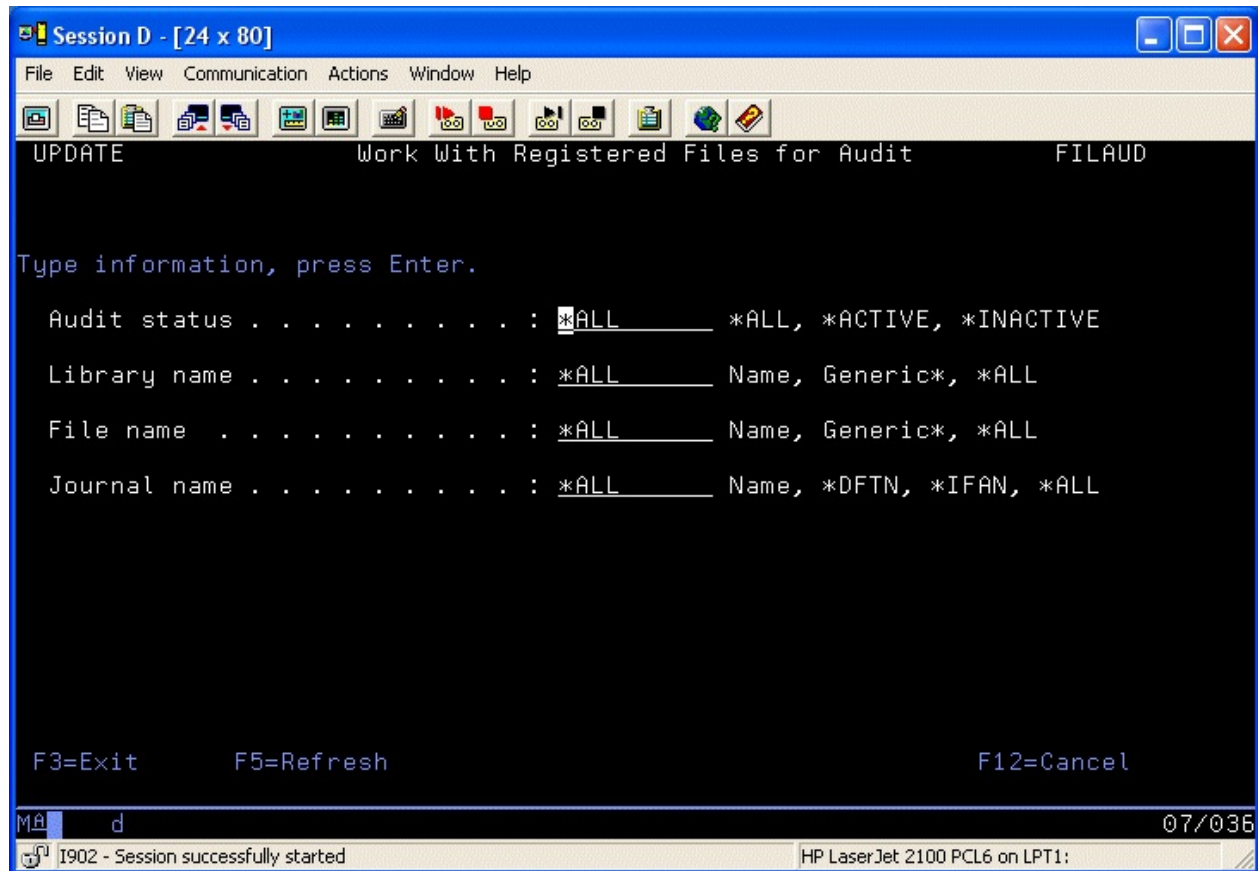
The following options can be used on files that are registered to iFileAudit:

1   Will activate a registered file for tracking purposes.

2   Will allow you to make changes to certain descriptive fields and settings for the file being tracked.

3   Will deactivate a registered file to stop tracking processing.

4   Will delete a registered file. The file must be at inactive status before it can be deleted.

5   Will display descriptive information for the file.

6   Will run the iFileAudit analysis process based on the current tracking information stored for the file.

7   Will display the tracking information on file from the most recent analysis process.

8   Will display information about the system journal objects being used for change tracking purposes.

9   Will reset the journal registration for the file. This should be used if a file is recompiled due to file changes and journalling needs to be reactivated. If a file journal is no longer active, it will display in yellow on this screen.

From this display, you can generate a listing of the files registered by using the F10 function key.

You can limit the number of files that are displayed from this option by applying filter selections. The change the selections, press the F9 key and the following will be displayed:

```
UPDATE                    Work With Registered Files for Audit            FILAUD



Type information, press Enter.

   Audit status . . . . . . . . . . :  *ALL        *ALL, *ACTIVE, *INACTIVE

   Library name . . . . . . . . . . :  *ALL        Name, Generic*, *ALL

   File name  . . . . . . . . . . . :  *ALL        Name, Generic*, *ALL

   Journal name . . . . . . . . . . :  *ALL        Name, *DFTN, *IFAN, *ALL









   F3=Exit      F5=Refresh                                        F12=Cancel
```

Fill in the selection criteria that you want applied and press ENTER. The display will now only

show those files that meet the filter selection rules. You can start the display with filters in place by using the WRKFILAUD command. Type the command on the command line and press the F4 key to prompt the parameters.

When you press the F6 key to register a new file for tracking purposes, the following screen will be displayed:

To register a file, you will only need to supply the name of the file and the name of the library where the file is stored. When you have completed these two fields, press ENTER and the other fields specified will be filled in. If you are note sure about the library name or the file, you can use the F4 prompt key to see a list of libraries or files that are available on your system. When you find the library or file you want to register, select it using option '1' and the name will be posted on your file registration screen.

iFileAudit uses file journals available from the IBM i operating system. Choose the journal library and name as follows:

*DFTL/*DFTN	Use this value to use default journal setup. If a journal already exists for the file, it will selected and used. If a journal does not exist, one will be created with the same name as the file and it will be stored in the default journal library as specified on the WEBSET command. As shipped from Kisco, this library name is FILAUDJRN.
*IFAL/*IFAN	To conserve some disk space, you may choose to use a special shared journal set up by iFileAudit and stored in the default journal library. Multiple files can be journalled into the same journal

objects and this will take advantage of this capability of the operating system. It will also give you fewer journals to manage. The journal objects in the default journal library are named IFAJRNL.

Library/Journal To use a specific journal, enter the specific library and journal reference here. These must already exist on your system.

When registering new files, the only other variable that you should be concerned about is the option for "Record lvl changes only?". The default shipped with iFileAudit is *NO, but that default value can be changed from the INSTALL menu. If you leave this value set to *NO, then full support for field level change information will be enforced by iFileAudit. For some customers, existing journals on their system do not capture both "before" and "after" file content images. When this happens, the effectiveness of iFileAudit is limited and a large number of additional analysis records are created by iFileAudit which are of dubious value to you. To adjust for this, you can tell iFileAudit to only create records that indicate which records were changed. This will save on disk space and eliminate a lot of information that is basically unusable. If at all possible, we recommend that you update your journals to allow storage of both the "before" and "after" images to allow for meaningful field level reporting.

After a file has been registered, you just need to activate it in order for tracking to start happening.

When you initially register the file, the file's object description will be stored with the iFileAudit registration. You can change this once the file has been registered. In addition, several other fields are filled in to help describe the file as follows:

Journal Setup If this is set to "Kisco", then the journal is one that is set up by iFileAudit. If this reads "User", then a pre-existing journal was found during registration and it is the one in use.

Journal Type "Full Support" indicates that both "before" and "after" field images are available and supported. This is strongly recommended. If this reads "Partial Support", then only the "after" field images are available and the usefulness of iFileAudit is limited. This will only happen when using your own pre-existing journals that are configured for this limited support.

Last Trans Post These two fields will report to you the date and time of the last transaction analysis that has been run against this file. On a new registration, these will be blank.

File Key Type If the file is keyed, this will read "Keyed File". If the file is a sequential file, this will read "Sequential File, Key maintenance allowed". For sequential files, iFileAudit supports creation of a manual key to help you identify records in a sequential file. See the following section on function keys from this display screen. If a sequential file has had a key manually entered, this field will show as "Manually Keyed File".

Include Activity Type These are four fields that give you options for what kind of file activity you will be tracing. The default when you first register a file is to track all activity types by placing the letter 'X' in each of these fields. If you want to remove some of these activity types, you can

remove the 'X'. The four file activity types are as follows:

Adds	You are tracking records added to the file
Deletes	You are tracking records that are deleted from the file
Mgmt	You are tracking management changes made to the file
Changes	You are track record content change made to the file

Record lvl changes only?	It is strongly recommended that you leave this parameter set to the default setting of *NO.
	For those customers that have pre-existing journals and those journals are only capturing "after" record images, then you might want to consider changing this value to *YES as the detail field level changes will not have much meaning as reported by iFileAudit.

User Profile Selection	Choose one of the following options:
*INCALL	This is the recommended setting. When set this way, all updates to the file will be captured by iFileAudit, regardless of the user profile used to make the update. If you are tracking file changes for security purposes, this is the setting you should use.
*INCLUDE	This option will let you specify a list of user profiles for iFileAudit to be included for file tracking. Once this parameter is set, then you must use the F14 option to create and maintain the user profile selection list.
*EXCLUDE	This option will let you specify a list of user profiles for iFileAudit to exclude from file tracking. Once this parameter is set, then you must use the F14 option to create and maintain the user profile selection list. All user profiles will be selected by iFileAudit except those that are on the list.

Program Name Selection	Choose one of the following options:
*INCALL	This is the recommended setting. When set this way, all updates to the file will be captured by iFileAudit, regardless of the program used to make the update. If you are tracking file changes for security purposes, this is the setting you should use.
*INCLUDE	This option will let you specify a list of programs for iFileAudit to be included for file tracking. Once this parameter is set, then you must use the F15 option to create and maintain the program selection list.
*EXCLUDE	This option will let you specify a list of programs for iFileAudit to exclude from file tracking. Once this parameter is set, then you must use the F15 option to create and maintain the program selection list. All programs will be selected by iFileAudit except those that are on

the list.

Job Name Selection   Choose one of the following options:

*INCALL   This is the recommended setting. When set this way, all updates to the file will be captured by iFileAudit, regardless of the job used to make the update. If you are tracking file changes for security purposes, this is the setting you should use.

*INCLUDE   This option will let you specify a list of jobs for iFileAudit to be included for file tracking. Once this parameter is set, then you must use the F17 option to create and maintain the job selection list.

*EXCLUDE   This option will let you specify a list of jobs for iFileAudit to exclude from file tracking. Once this parameter is set, then you must use the F17 option to create and maintain the job selection list. All jobs will be selected by iFileAudit except those that are on the list.

Collect record reads?   This option controls whether or not you want to collect and report on record read operations on the registered file. Please review the separate section of this documentation about this feature. Kisco recommends that you set this to *NO initially and then that you fully review how the feature works and consider the cautions about its use before activating it.

Collect Open/Close?   This option will default to *NO. If you want to collect file open and close operations for a file, change this to *YES. When set to *YES, you should be aware that this will probably add a significant amount of hew tracking records being captured by the file journals and in the history tracked in iFileAudit.

iFileAudit Member   This is an identifier for an internal name used by iFileAudit and may be requested from you by Kisco support staff in the event of support issues for the product.

Current File Level   This shows you the current file level identifier registered to iFileAudit. If the actual file level identifier for the file changes, then the next time the file is analyzed, iFileAudit will automatically adjust itself to the new file level identifier.

From this screen, you can choose function key options to further tailor how iFileAudit treats the file you are registering.

F8 - lets you build your own record key on a sequential file.

F9 - lets you change iFileAudit processing for specific fields by letting you exclude some.

F14 - lets you build a list of user profiles for include/exclude filtering

F15 - lets you build a list of programs for include/exclude filtering

F16 - lets you make changes to the read tracing filters set for this file

F17 - lets you build a list of job names for include/exclude filtering

See the following sections for more information on each of these functions.

Key Maintenance

For sequential files, iFileAudit gives you the ability to define a key structure for the file using existing fields in the file. Without a key structure defined, records changed in a sequential file are only identified by their relative record number (RRN). When you select the F8 option for a sequential file, the following display will appear:
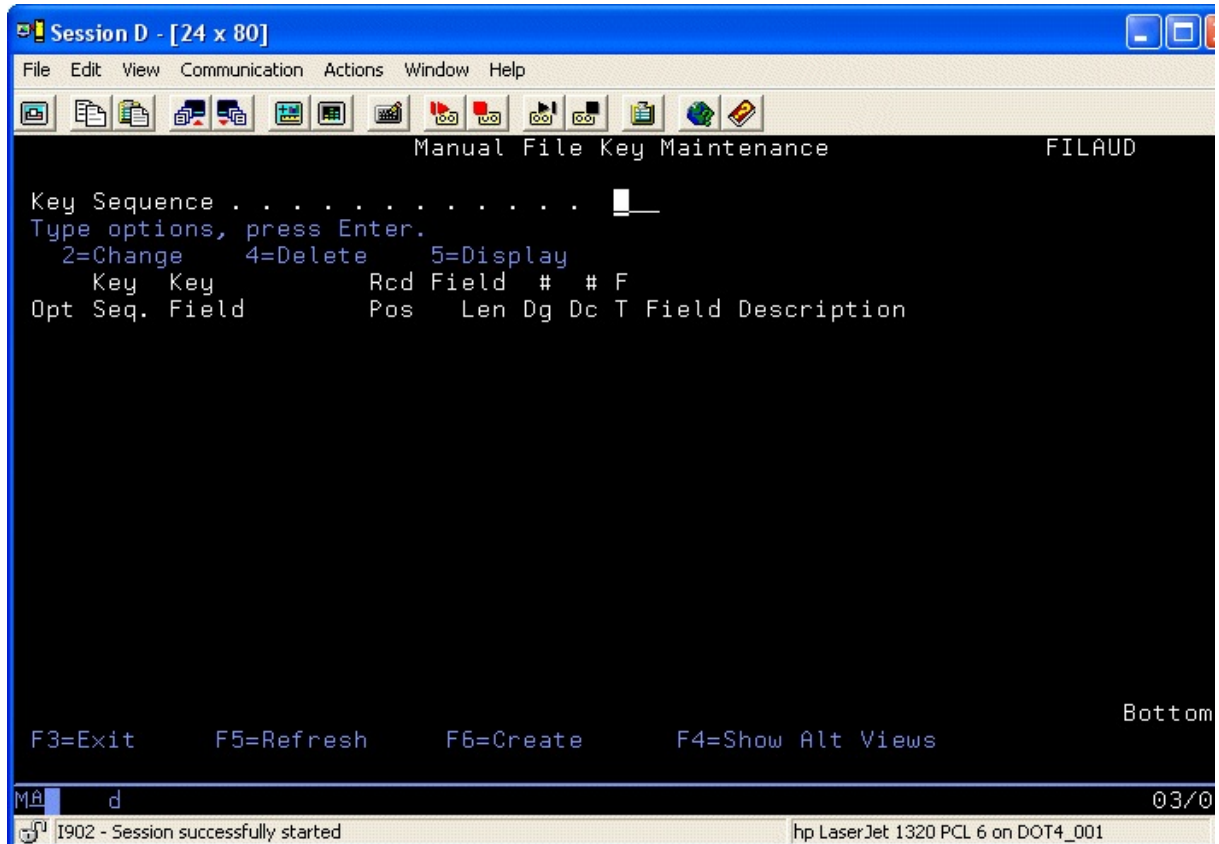

From here, you can build a manual record key using fields that are available in the registered file itself.

To select a field to be used as the key (or part of the key), press the F6 key and the display on the next page will appear:
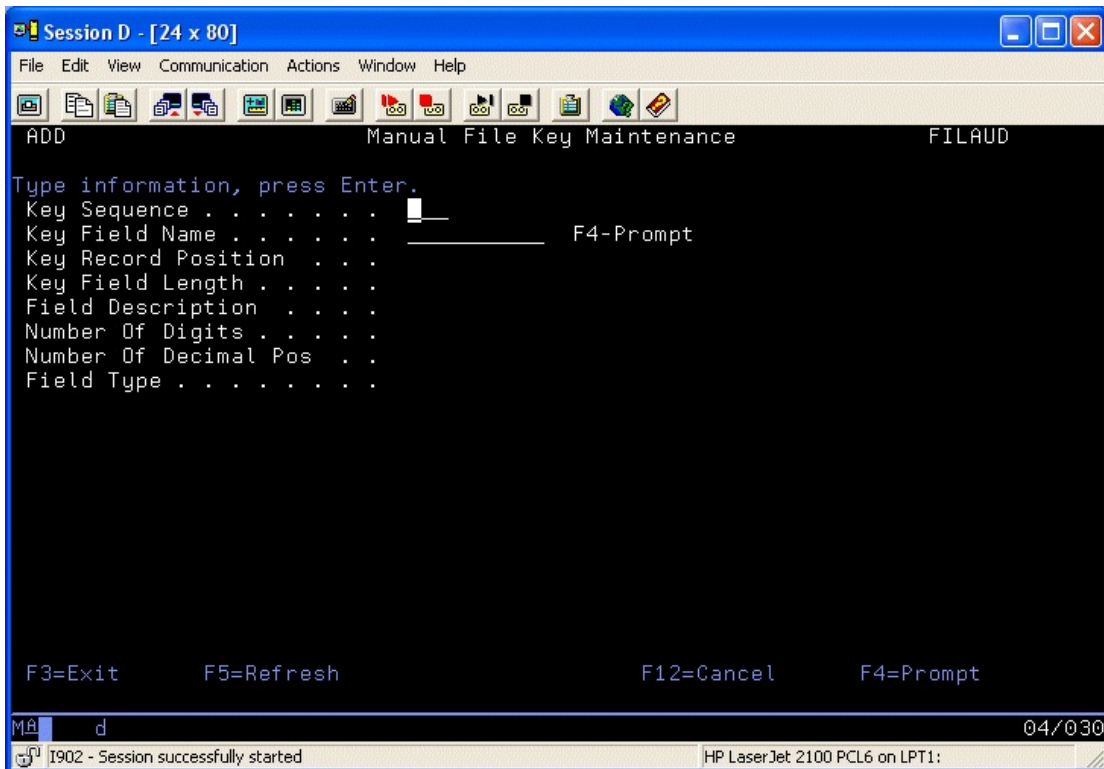
The key sequence field controls the position of the field within the key. Assign these values sequentially starting with the number one. To choose field names, position the cursor in the Key Field name and press the F4 key. A field selection window will appear as follows:
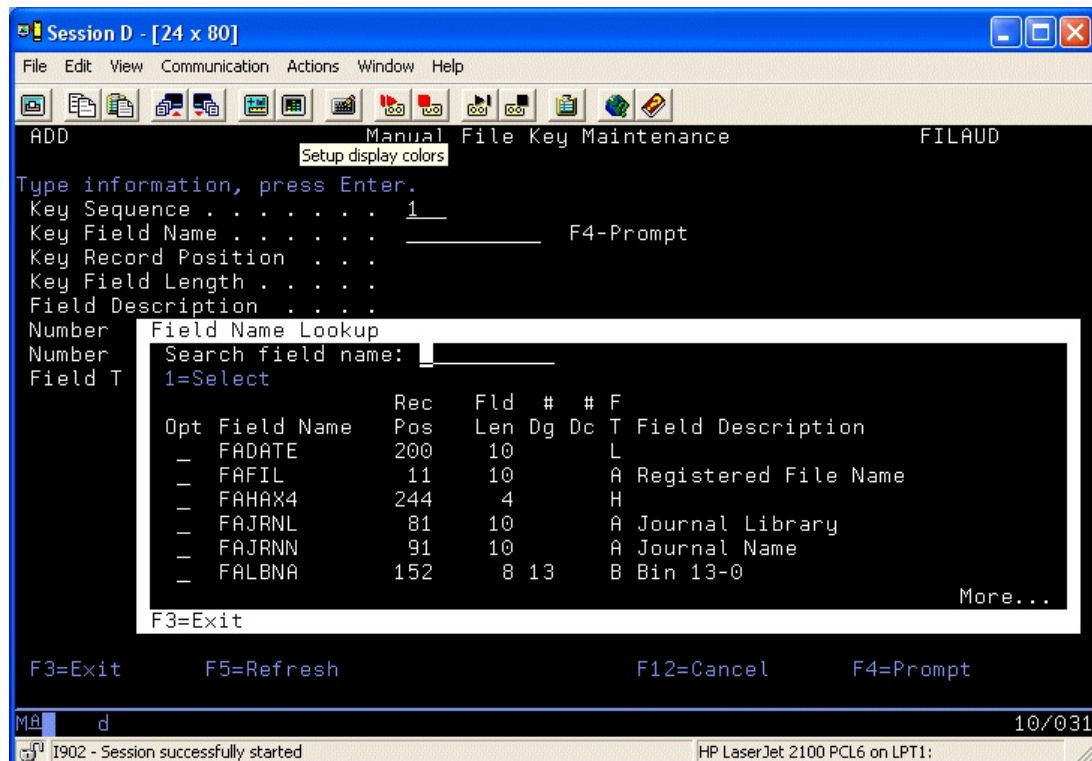
If your non-keyed file has associated logical files that contain key structures, you can ask iFileAudit to locate and list all of these logical files by using the F4=Show Alt Views functions from the initial key maintenance screen. To use one of these key structures, just select the one you want from the list and iFileAudit will automatically adapt to that key structure.

Field Exclusion

For some customers, there may be critical fields that you are interested in and other fields that you are really not interested in tracking using iFileAudit. You can optionally decide to exclude specific fields from processing by the iFileAudit analysis function.

When you select the F9 Field Maintenance option, the following will be displayed:

```
Session E - [24 x 80]
File  Edit  View  Communication  Actions  Window  Help

UPDATE                    Field Selection Maintenance              FLDMNT

Input buffer position  . . . . . . .  _____
Type options, Press enter.
  2=Change               5=Display
                         Inc   Rec   Fld Fld
Opt File       Field Name Exc   Pos   Len Typ Field Description
    TESTUSER   ADDELX      1      1     1  A   Delete-X
 _  TESTUSER   ADSOCS      1      2    11  A   Soc Sec#
 _  TESTUSER   ADTYPE      1     13     1  A   Address Type
 _  TESTUSER   ADNAME      1     14    33  A   Addressee Name
 _  TESTUSER   ADLIN1      1     47    33  A   Addr Line 1
 _  TESTUSER   ADLIN2      1     80    33  A   Addr Line 2
 _  TESTUSER   ADLIN3      1    113    33  A   Addr Line 3
 _  TESTUSER   ADLIN4      1    146    33  A   Addr Line 4
 _  TESTUSER   ADCITY      1    179    20  A   City
 _  TESTUSER   ADSTAT      1    199     2  A   State
 _  TESTUSER   ADZIP1      1    201     5  A   Zip Code 1
 _  TESTUSER   ADZIP2      1    206     4  A   Zip Code 2
 _  TESTUSER   ADCMNT      1    210    36  A   Comment
 _  TESTUSER   ADLDM       1    246     6  S   Last Date Mtn
F9=Print List                                              More...
F3=Exit      F5=Refresh     F6=Add mode

MA    e                                                    08/003
128  I902 - Session successfully started          hp LaserJet 1320 PCL 6 on DOT4_001
```

The default setting for all fields is that they are automatically included in the iFileAudit analysis process.

Once you have your field selections specified, you can use the F9 function key from here to obtain a listing of the field selections as they are set. This listing can also be generated by using the LSTFIELDS command in the FILAUD library.

To exclude a field, find it in the field list and place a 2 next to it. Press ENTER and the display on the following page will come up:
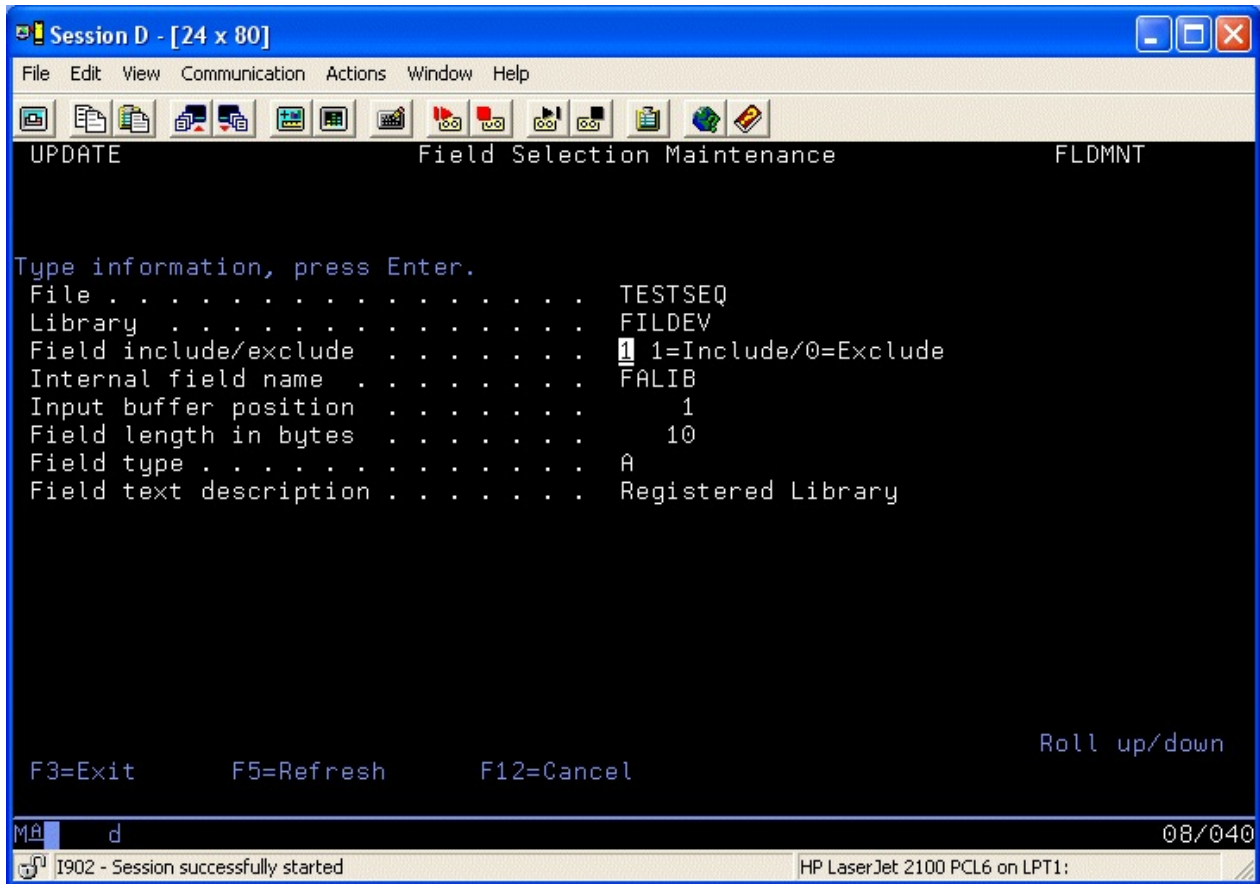
The only field that you will have access to is the Field Include/Exclude field. Leaving the value set to '1' will include the field in the iFileAudit analysis process. Changing the value to '0' will exclude the field from all iFileAudit processing.

<u>User Profile Selection</u>

iFileAudit will let you control which user profiles are included in the analysis process. The default setup option of *INCALL will include all user profiles and no additional setup is needed. If you want to only include certain user profiles or exclude certain profiles, then you must change this option to either *INCLUDE or *EXCLUDE. When you have done this, then use the F14 function key to bring up the following screen where you can enter the user profiles you want to either include or exclude from processing:
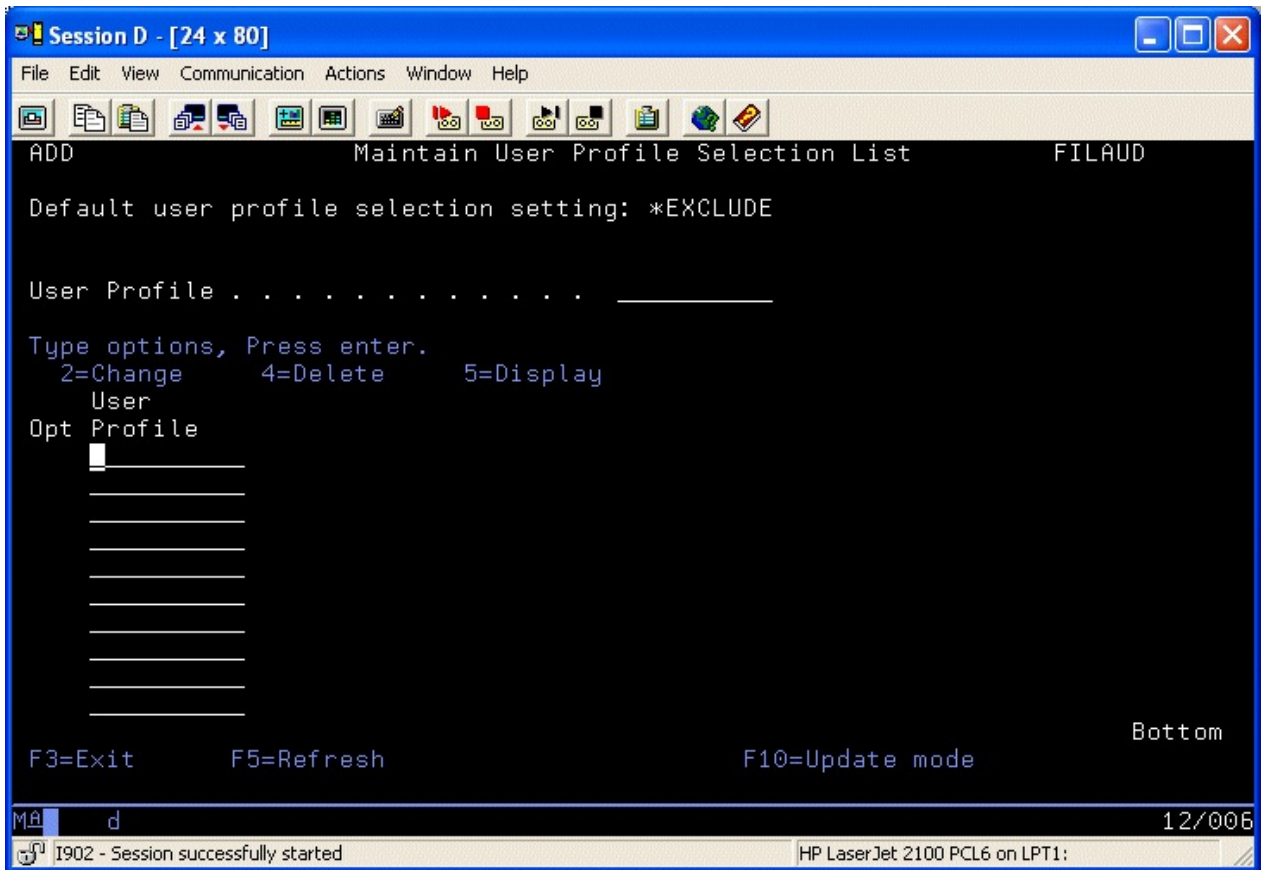
From this screen, you can enter user profiles and build a list of include or exclude profiles. After this is done, whenever you run an analysis process, these user profiles will either be included or excluded from the analysis depending on the global option set for this file. iFileAudit allows you to enter either an individual user profile or you can use a Group Profile. iFileAudit will first check the specific user profile, it that is not found then the Group profile associated with the user profile will be checked.

Program Name Selection

iFileAudit will let you control which program names are included in the analysis process. The default setup option of *INCALL will include all programs and no additional setup is needed. If you want to only include certain user programs or exclude certain programs, then you must change this option to either *INCLUDE or *EXCLUDE. When you have done this, then use the F15 function key to bring up the following screen where you can enter the program names you want to either include or exclude from processing:
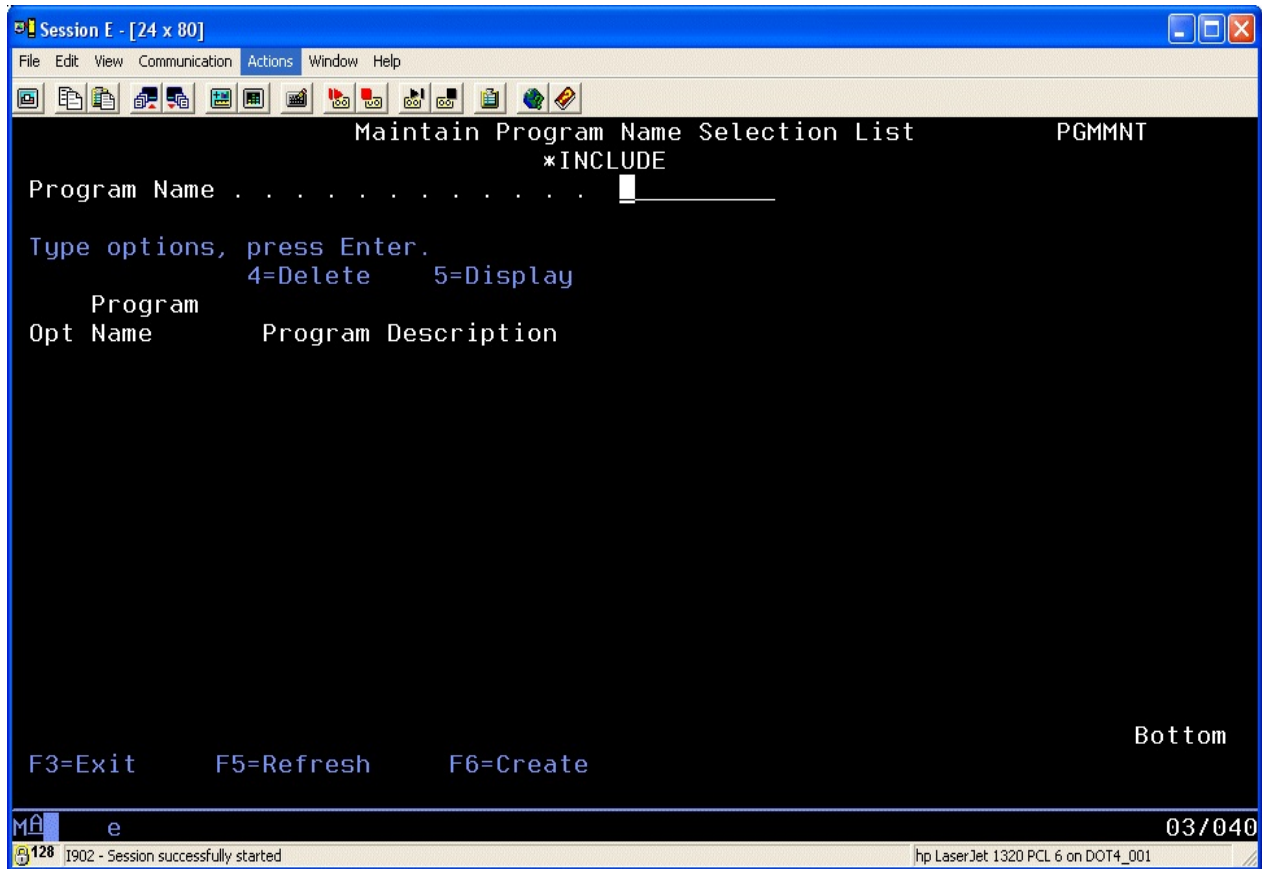
From this screen, you can enter program names and build a list of include or exclude programs. After this is done, whenever you run an analysis process, these program names will either be included or excluded from the analysis depending on the global option set for this file. When entering program names, if the library where the program resides is in the library list of your current job, then the description for the program will be picked up automatically by iFileAudit. It is the user's responsibility to make sure that the program name is correct when the library is not in the library list.

<u>Job Name Selection</u>

iFileAudit will let you control which job names are included in the analysis process. The default setup option of *INCALL will include all job namess and no additional setup is needed. If you want to only include certain user job names or exclude certain job namess, then you must change this option to either *INCLUDE or *EXCLUDE. When you have done this, then use the F17 function key to bring up the following screen where you can enter the job names you want to either include or exclude from processing:
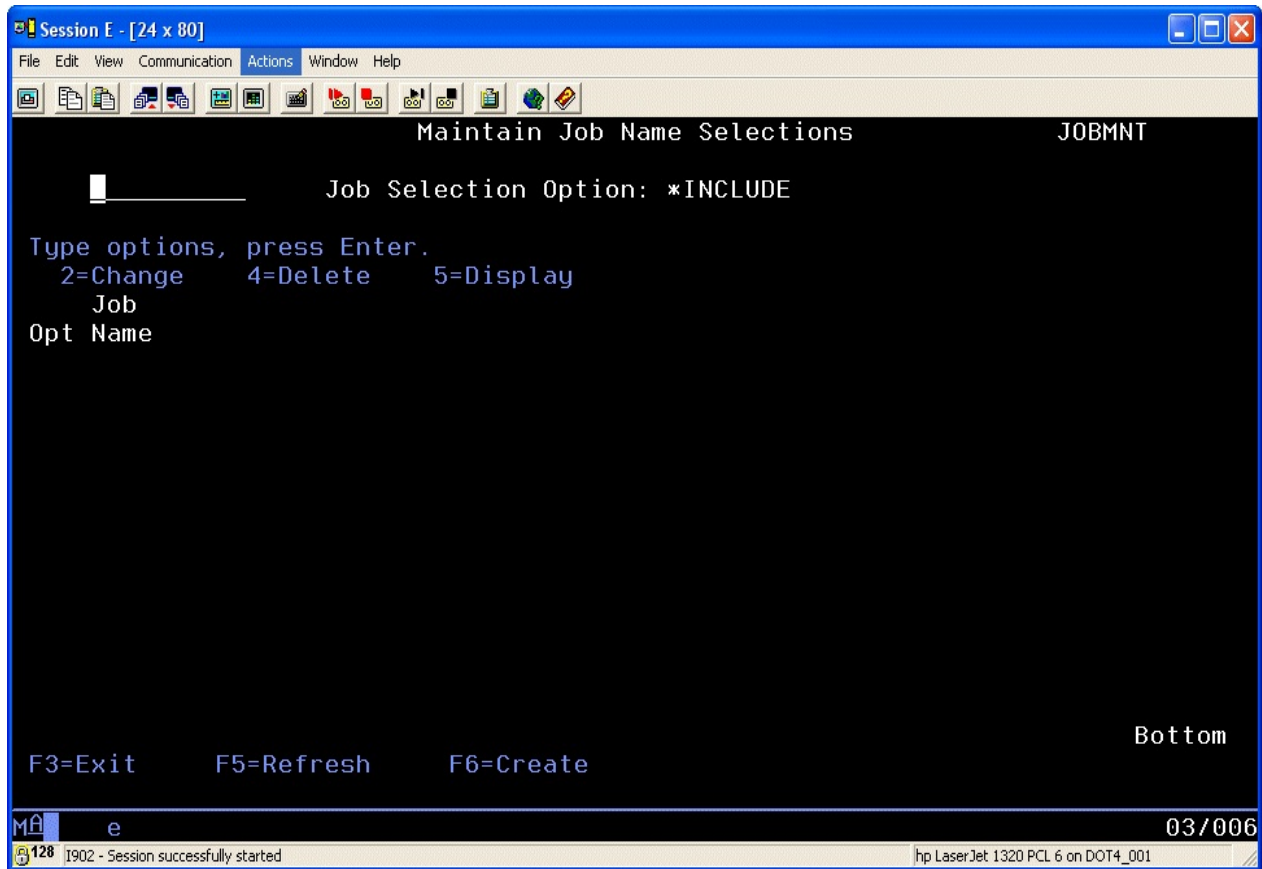
From this screen, you can enter job names and build a list of include or exclude job names. After this is done, whenever you run an analysis process, these job names will either be included or excluded from the analysis depending on the global option set for this file.

Additional Commands

File Registration Commands

In addition to the menu options already documented, iFileAudit contains two more standard commands that will help with registering files and updating the registration status of files. Both of these commands let you work on multiple files with a single processing of the command.

The two additional commands are:

Create iFileAudit Registration (CRTIFAREG)

Work with iFileAudit Status (WRKIFAREGS)

The Create iFileAudit Registration (CRTIFAREG) command will help you when initially setting up iFileAudit. Using this command, you can register multiple files in a library (or all files) with a single call of the command. You can also, optionally, activate iFileAudit tracking on the files during the registration process.

The Work with iFileAudit Status (WRKIFAREGS) command lets you activate or deactivate iFileAudit tracking on multiple files in a library with a single call to the command. When deactivating files, options are provided to also remove the file registrations giving you an easy way to perform mass updates to your registered files if needed.

To use either command, add the iFileAudit application library to your session library list with the following command:

ADDLIBLE FILAUD

The type in the command you want to use and press the F4 key to prompt the parameters.

User Profile Selection Copy

iFileAudit includes a command to help with setting up the user profile selection criteria for multiple files within a library. Prior to this change, the user profile selection process needed to be set up manually for each and every file.

To use this feature, you must first register all of the files that you want to track in a specific library. Then, using option #1 from the MASTER menu, pick one of the files in the library and set up the user profile selection criteria that you want to use. This file will then become your source file (from file) for the new user profile selection copy feature.

To copy the user profile selection configuration from your source file over to the other files that you want to track, use the new "Copy iFileAudit User Setup (CPYFILUSRS) command. Type this command at the command line and press the F4 key to prompt the parameters. The screen at the top of the next page will be displayed:
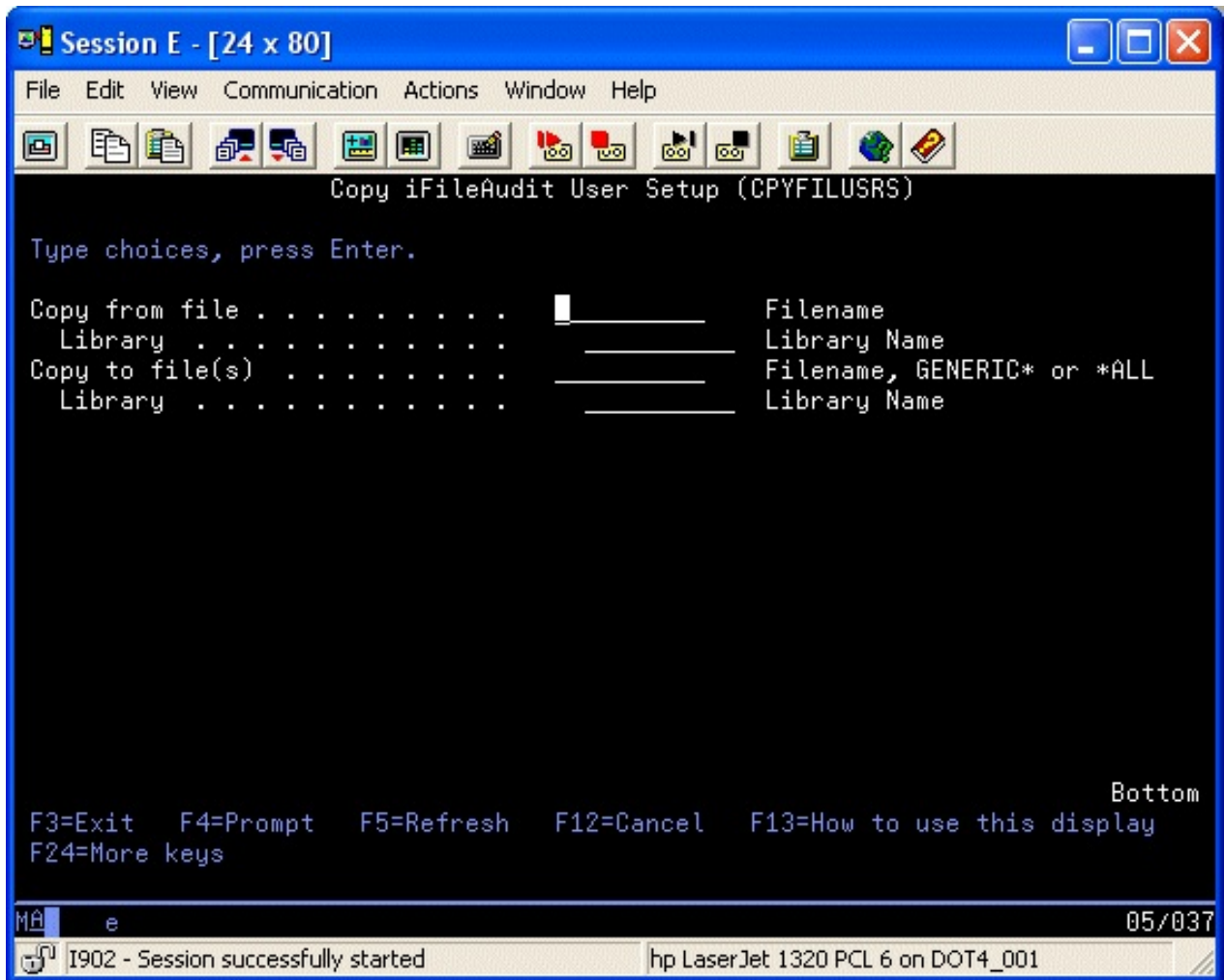
In the copy from file, enter the specific filename and library for the file where you set up the configuration you want to use.

In the copy to file, you can enter either a single specific file name and library, a GENERIC* file name and library or you can specify *ALL files in a specific library.

When you process this command, the user profile selection criteria set up for your source file, will be copied over to all of the target file that iFileAudit finds registered. Using this process can significantly reduce the amount of time needed to set this up for a large group of files.

Read Tracing Feature

As a result of customer request we provide the ability to trace when specific files have been read, even when they have not been updated. This is required for additional security concerns to know if specific users or jobs are looking at specific records.

When you first register a new file, the default for this feature is that read tracing will not be performed on a file. In order to activate the feature, you must select the registered file and then change the setting to activate read tracing. You should be aware that when you activate read tracing for a file, a trigger program is registered for the selected file. From that point, whenever a read operation is performed on the file, the trigger program will be called. This could have a negative effect on application performance and we recommend testing the feature for a file before you adopt it in normal production.

Before activating any files for read tracing, you should review the options on the IFASET command (option #9 on the INSTALL menu) that affect how read tracing is processed. Review these options before you get started. The HELP text on the IFASET will help explain how the settings work.

Read tracing **requires** filters to be put in place. Using the options on the IFASET command, you can specify how these filters will be treated. We recommend that you configure read tracing to ignore all reads performed in a batch environment. You must also include specific selections by user profile and job name. If you select by user profile (*INCLUDE on the IFASET option), then you must set up to ignore job name (*EXCLUDE). If you select by job name, then you must ignore given user profile.

When you activate read tracing from the Work With File Registrations option (option #1 on the MASTER menu), the following filter screen will be displayed:
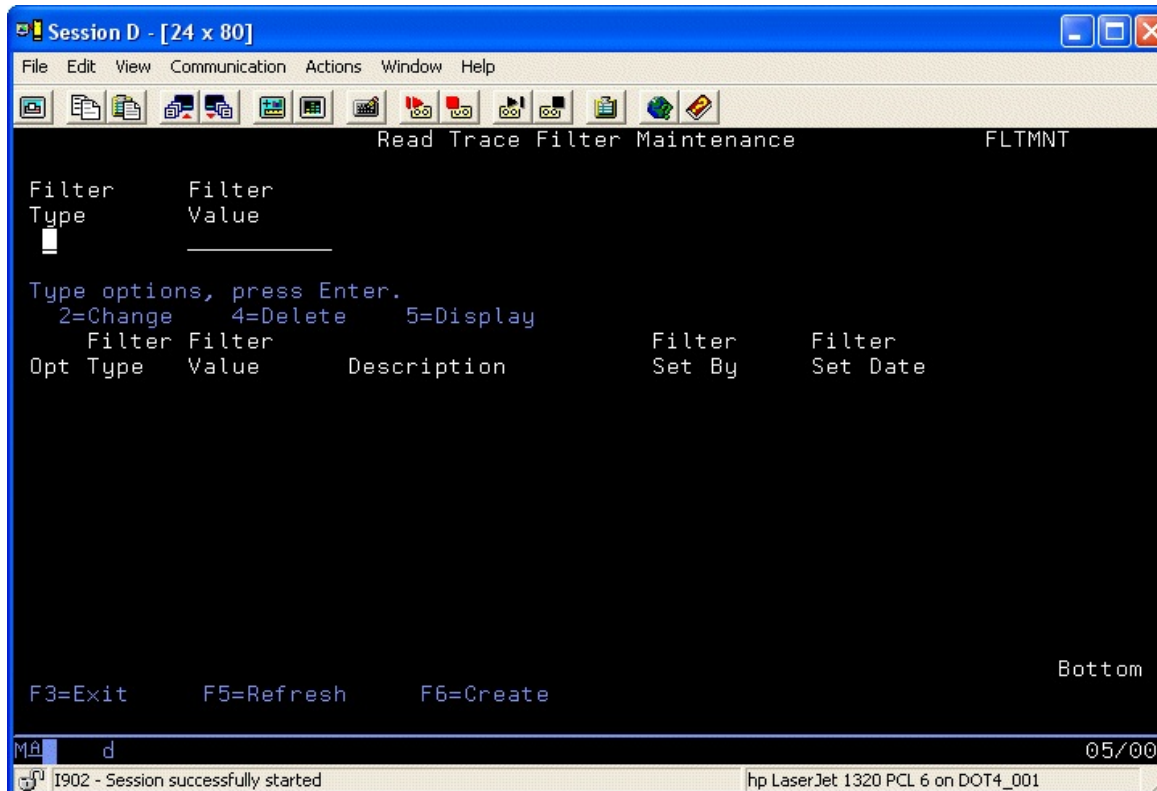
Initially, this screen will be blank as shown here. When initially setting up a file for read tracing, you are required to enter at least one filter record. You can create filter records for user profiles or for job names. To create a new record, use the F6 option. When you select to create a new filter record, the following screen will be displayed:

Fill in the three entry fields as follows:

Filter Type J/U	Enter the type of filter record. J indicates this is a job name filter. U indicates that this is a user profile filter.
Filter Value	If you are entering a job name filter, enter the job name here. If it is a user profile filter, enter the user profile here.
Description	Enter any descriptive information you want associated with the filter.

When these three fields have been entered, press ENTER and the previous list screen will be displayed.

As an example of how the read trace can be set up, if you want to trace all changes done interactively for a specific file by a single user profile, then you would set up to *INCLUDE user profiles, *EXCLUDE job names and ignore all batch update. Then, when registering the file and activating read tracing, you would enter a single user profile record for the user you want to follow.

Here is what the list would then look like if you were tracking update done under the user profile RICH:

When file read activity is traced, keep in mind that all of the individual fields will not be captured by iFileAudit, just the record key for the file. Because of this, it is important that any non-keyed files have a key structure specified for them to make record identification easier.

You can also update the read trace filters from the command line using the ADDTRGFLT (Add Read Trigger Filters) command. The command lets you set the above values for a given file that is already registered in iFileAudit and set up for read trace activity.

The parameters on the ADDTRGFLT command are:

>   FILE   Enter the name of the file registered to iFileAudit
>
>   LIB   Enter the name of the library where the file resides
>
>   FLTTYPE   Enter the Filter Type, U=User/J=Jobname

FILTER   Enter the Filter Value. For a User filter, enter the user profile. For a
                Jobname filter, enter the job name.

DESCR   Enter a description of the filter being added

Once the parameters have been filled in, press ENTER and the new filter will be posted. If the
filter already exists, this second post will be refused.

Read Tracing Performance Considerations

This information is provided for customers who absolutely must use the Read Trace feature.

The Read Trace feature works by setting a trigger program on your system that is associated with
the physical file that you are tracing activity for. Every time a record is read from your file, the
trigger program is activated and some processing takes place. This can adversely affect
performance on your system, especially for batch processing. Even if you have the "Exclude batch
read tracing" option set to *YES (option 9 on the INSTALL menu), the trigger program still has to
get called during batch processing. For some customers, this can result in an increase in
processing and a lengthening of batch run times by a factor of 2 or 3 times.   (Note: Prior to
Release level 6.12 of iFileAudit, this performance penalty was more like 20 to 30 times.)

If this is a concern for your shop, there is a step that you can take in your application processing to
mitigate the batch performance hit of the iFileAudit Read Trace feature. In your program, at the
start, you can temporarily turn the read trace off by suspending the trigger program. Then, when
your process is completed, you will need to reactivate the trigger program.

This is done using the IBM command Change PF Trigger (CHGPFTRG).   To temporarily stop the
trigger from firing, use the *DISABLED setting and then, when you are done, use the *ENABLED
setting to reactivate the trigger. If you need help with this process, please contact Kisco Systems
technical support for more details.

 Database Notes Feature

iFileAudit includes a feature that will let you enter text notes for any database change that has been recorded for any file. This feature can be used when special manual updates are made, for example, and your auditors will need to know why the change was made.

Notes entered for a change are kept on file until the record is purged through normal purge processing. If you purge your file into an Archive, the notes will also be purged. Normal purge activity transfers detail records into a database file named FAANZARC in the application library named FILAUD. The notes that are purged will be transferred into a separate database file named FAANZARCN in the same library. If you are saving the archives off-line, you should make changes in your procedures to save the notes file as well.

To enter a note, use the Display File Analysis interactive feature. This can be accessed from the MASTER menu using option #3 or from the Work With iFileAudit File Registrations, option 7. Use the interactive program to locate the change log that you want to document with a note. When you find it, display the details by placing a 5 next to it. On the details screen, you will see a new function key option added, F6=Note. Press the F6 key and the following entry screen will be displayed:


```
ADD                          Note Maintenance                        NOTEMN

Note Key . . . . . . . . . . . . . . .    000022

Note:

   |_____
    _____
    _____
    _____
    _____

Note Author: _____

Created By:  User Profile . . . . QSECOFR
             Date . . . . . . . . 2012-06-14
             Time . . . . . . . . 150442

Changed By:  User Profile . . . . _____
             Date . . . . . . . . _____
             Time . . . . . . . . _____

F3=Exit       F5=Refresh       F12=Cancel
```

Enter the note information you want to save. You will have up to five lines of detail and you must also enter the author information. Press ENTER and the note will be recorded for the documented change.

When you bring up the detail screen, if a note is already on file, you will see an indication of a field in red which tells you that a note is already on file. Using the same F6 function key, you can display the contents of the current note and make changes if you want.

The user profile used to create the note is captured automatically and shown with the note along with the date and time when the note was created. If a note is changed in any way, including the author description, then the user profile used to make the change is also automatically captured along with the date and time of the change. If a note is subsequently changed again, the change user profile, date and time will be updated again.

There is a function key option on the Display Audit Details screen that will let you generate a report for Notes that have been recorded for a file. You can also generate this report from the command line using the NOTELIST command. It will prompt you for the file name and library. A listing of all field notes on file will be generated.

Copy File Setup Command

iFileAudit includes a command, the Copy iFileAudit File Setup (CPYFILSET) command. This command is for customers who register multiple copies of identical files in iFileAudit. Using this command, you can register and configure one of the identical files including field selection, record key information, user selection, program selection and job selection. Then, to use these settings on an identical file, just register that file normally but do not do the detailed configuration work.

Using the CPYFILSET command, you can copy the detailed configuration information from the initial file that you set up to the new file. Prompt the command and specify the from and to file/library names. When the process runs, it will copy the configuration in iFileAudit from the "from" file over to the "to" file.

It is the customer's responsibility to make sure that the two files are identical in all respects including field layout and field names.

Analyze File

Once a file has been registered and activated, you will need to run the Analyze File option before you can see the tracking information. You can do this using option 6 from the Work With iFileAudit File Registrations display or you can select option #2 from the MASTER menu. When running from the menu, you will need to fill in the file name and library name. The analysis will then run and prepare the tracking information for viewing. If you want to analyze all files in a given library, the command supports the *ALL option. To analyze a group of files, the command also supports the GENERIC* option. An option on the prompt will also allow you to run the analysis process in a job queue. If you leave this blank, then the analysis job will run immediately and tie up your terminal session until it is completed.

When running the file analysis from the menu option or the FILANZ command, you can also specify an optional purge for historical information stored for the file being tracked.

Display File Analysis

Once the Analyze File process has been run, you can then display the results on-line. This can be done from option 7 on the Work With iFileAudit File Registrations display or by running option #3 on the MASTER menu. When you run it from the menu, you will have to enter the filename and library.

The initial file information display will appear as follows:

This display will show you all of the file changes that have been made to this file in chronological order. If there is a manual note associated with the change, the Changed Field will display in red. For details about a specific change, place a 5 next to the line in question and press ENTER. A detail screen will be displayed. You can also use option 6 on any line to start a report prompt using the values for the record displayed.

Option 9 on an individual line display will change the display to show all record updates that were processed at the same time as the selected update. This will let you see all changes that might have been made at the same time in a single view.

From this screen, you can choose alternate views of the information that may help you to zero in on the specific information you are looking for:

F7   Will display the information organized by the user profile

F8   Will display the information organized by field name

F9   Will display the information organized by the record key for the file

F10   Will display the information by record key and field name for the file

F11   Will start a report session for this information to produce this on a printed report

F14   Will generate a report showing all field notes that have been entered for the file

The detail information screen will provide you with detail information about the specific change.
A typical detail screen might look like this:

Information on this screen will tell you the type of change that was made, a date and time stamp of
when the change was made, the user profile that was used and the job name and program name
that was used. Field contents will also be displayed. For new fields added and fields deleted, the
field contents will be shown. For field changes, both the before and after field contents will be
displayed as shown in this example. If a manual note is on file for this database change, a message
will be shown near the bottom of the display in red. Please see the "Database Notes Feature"
section of this documentation for more details.

The F8 function key will change the display to show all record updates that were processed at the
same time as the selected update. This will let you see all changes that might have been made at
the same time in a single view. The F9 function key will let you see fields with content longer
than what is allowed on this display format.

<u>View Registered Files</u>

This is a restricted version of option #1 on the MASTER menu. When you start it, the following screen will be shown:

```
 Session E - [24 x 80]                                                   _ □ ×
 File  Edit  View  Communication  Actions  Window  Help
  ▣  ▣▣  ▣▣  ▣▣  ▣  ▣▣  ▣▣  ▣  ▣ ◈ ◈
                        View Registered Files                   FILAUD
   ▮_____  _____
 Type options, press Enter.
  7-Disp Analysis

     *ALL         *ALL      <---- Current Selections ----> *ALL        *ALL
     Reg.         Reg.                                      Audit       Journal
 Opt Library     File Name  File Description               Status      Name
  _  ARNEGTEST2 C#LISTOF    LIST Listino                   *ACTIVE     *DFTN
  _  FILAUD     FILAUDA     iFileAudit (c) 2006-2014 Kisco *ACTIVE     FILAUDA
  _  FILDEV     PR.TEST     Test File                      *ACTIVE     *IFAN
  _  FILDEV     PRODFLAT    Test File                      *ACTIVE     *DFTN
  _  FILDEV     PRODTEST    Test File                      *ACTIVE     *IFAN
  _  FILDEV     TESTFILE    File Used for Journal Testing- *ACTIVE     *DFTN
  _  FILDEV     TESTTYPES   File Used for Journal Testing- *ACTIVE     *IFAN
  _  FILTEST    AAP050      DATE CONTROL                   *ACTIVE     *DFTN
  _  FILTEST    ADDRESS     Address Master File            *ACTIVE     *DFTN
  _  FILTEST    ADDRESSX    Address Master File            *INACTIVE   ADDRESSX
  _  FILTEST    C#LISTOF    LIST Listino                   *ACTIVE     *DFTN
  _  FILTEST    DISTHISTZ                                  *ACTIVE     *DFTN
  _  FILTEST    FLATFILE                                   *ACTIVE     *IFAN
                                                                        More...
  F3=Exit      F5=Refresh

 MA▮    e                                                             02/006
 128  I902 - Session successfully started          hp LaserJet 1320 PCL 6 on DOT4_001
```
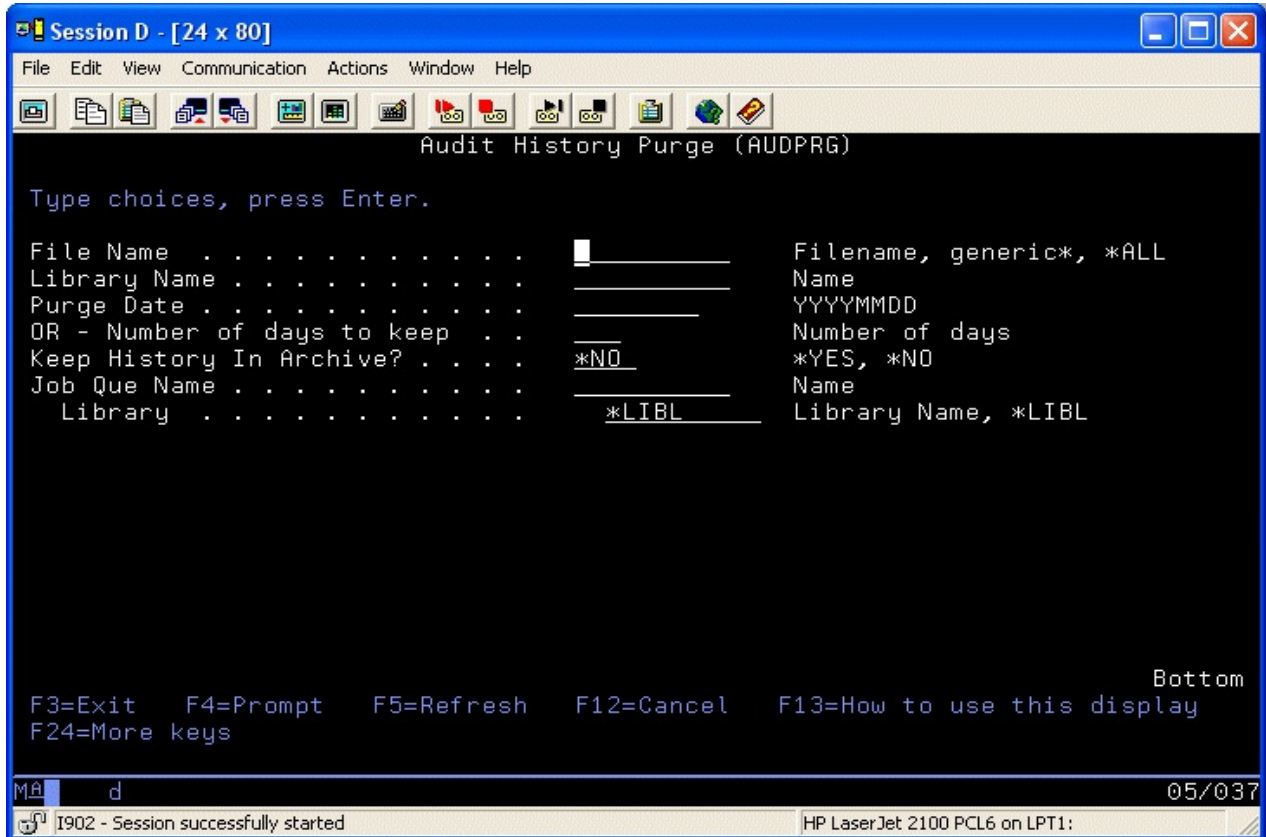
There are limited options here to just look at information and analysis detail, but no changes can be made to file registrations. This can be used to grant access to the information in iFileAudit by an auditor, for example, to track information without having to grant them security officer access to your system.

Purge File History

Option #6 on the MASTER menu will let you remove audit information about a file from the history kept by iFileAudit. When you select this option, the following screen will be displayed:

```
Session D - [24 x 80]
File  Edit  View  Communication  Actions  Window  Help

                         Audit History Purge (AUDPRG)

 Type choices, press Enter.

 File Name  . . . . . . . . . . .   ▊            Filename, generic*, *ALL
 Library Name . . . . . . . . . .   _____   Name
 Purge Date . . . . . . . . . . .   _____     YYYYMMDD
 OR - Number of days to keep  . .   ___          Number of days
 Keep History In Archive? . . . .   *NO          *YES, *NO
 Job Que Name . . . . . . . . . .   _____   Name
   Library  . . . . . . . . . . .   *LIBL        Library Name, *LIBL





                                                                  Bottom
 F3=Exit    F4=Prompt    F5=Refresh    F12=Cancel   F13=How to use this display
 F24=More keys

MA     d                                                          05/037
    I902 - Session successfully started            HP LaserJet 2100 PCL6 on LPT1:
```

Enter the parameters as follows:

File Name	Enter the name of the file for which you want to purge audit information from iFileAudit. To purge for all files in a library, use the special value of *ALL. To purge a group of files in a library, use the generic* option.
Library Name	Enter the name of the library where the file or files to be purged are stored.
Purge Date	Enter the purge date you want to apply in form YYYYMMDD. All records prior to this date will be removed from iFileAudit.
Number of days to keep	If you prefer, you can enter this value instead of the previous parameter. You cannot enter both. If you choose this parameter, enter the number of days (ie: 30) that you want to keep on file. Older records will be purged.
Keep History In Archive?	If you change this value to *YES, the purged audit history

will be transferred to a member in file FAANZARC in the FILAUD library.

Job Que Name This optional parameter can be used to run the purge in a system job queue. If you leave it blank, the purge will run from your terminal session and tie up your session until it is completed.

When the parameters are set, press ENTER and the information purge will process. This purge uses a standard OS command object called AUDPRG which can be used in your own CL programs if you choose to automate this process.

When a purge is run, a record of the purge event taking place is posted to the new audit history file the purged file so that an audit review will show that the purge was run.

When running this purge, make sure that no file analysis jobs are also running as they may not be run concurrently. Doing so will result in errors and unpredictable results. If you choose to implement the analysis and purge processes in your own CL programs, it is the user's responsibility to make sure that they do not conflict with one another.
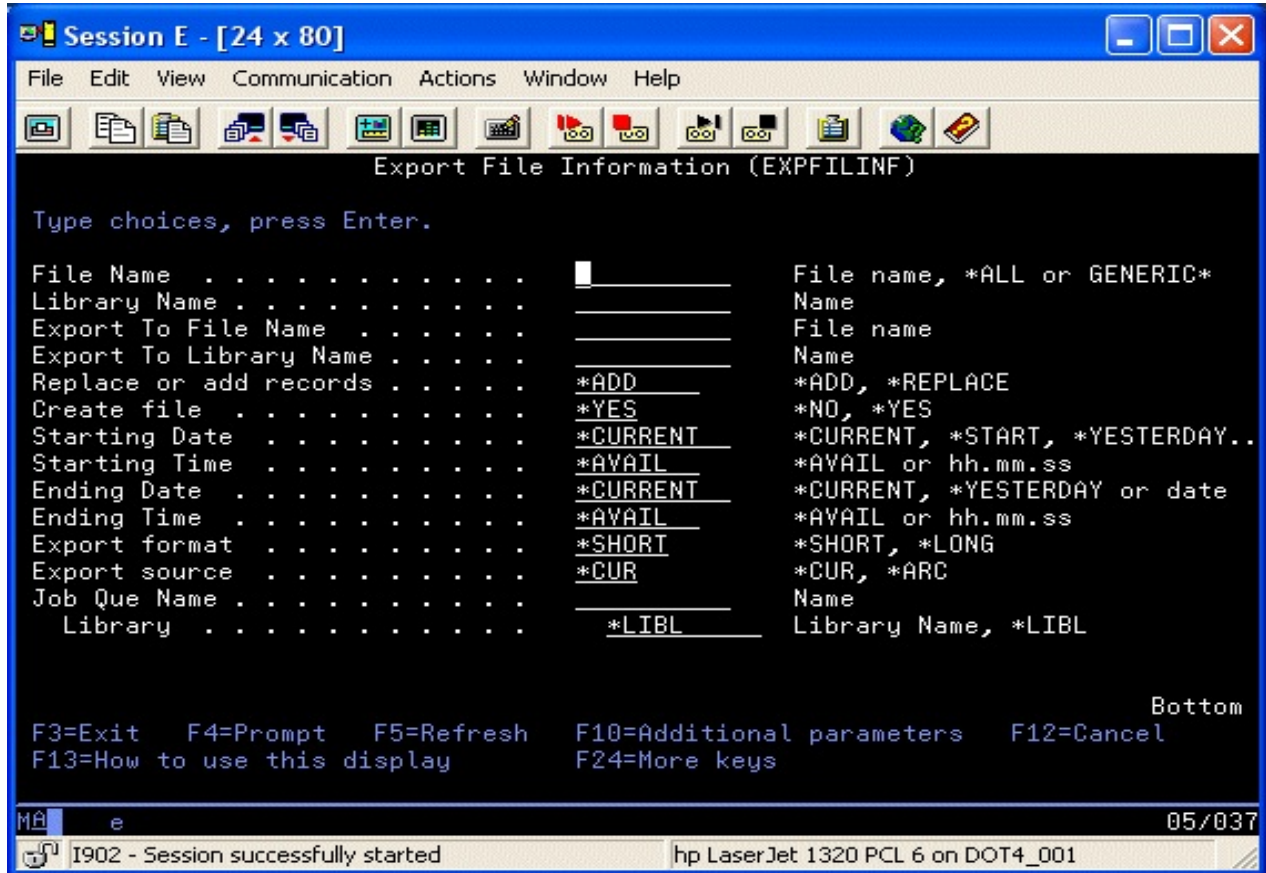
<u>Reports</u>

Using menu options 7 through 11 on the MASTER menu, you can run a variety of reports for iFileAudit information on the files that are registered and active. Each of these reports can be run for selected information. When you choose each menu option, it will prompt you for the file to be reported and the selection criteria for the specific report in question.

You can also run any of these reports from the analysis display function. Generally, the F11 function key will prompt for the report associated with the display. You can also use option 6 on the displayed record line to prompt for a report using the record values.

When running the reports from the menu options, you can request that the reported information be taken from the archived information and not from the current history. The default value for this is set to use the current information. This provides you with a method of accessing historical information that has been previously purged.

Export File Information

If you want to create your own custom reports based on the data captured and normalized by iFileAudit, you can use the Export File Information function, menu option #15. When you start the menu option, it will prompt the EXPFILINF command as follows:

Fill in the parameters as follows:

File Name	Enter the name of the file that you want to to extract information for. If you want to export information for all files in the library, use the special value *ALL. Or, to export information about a set of files that all start with the same character, use the GENERIC* option.
Library Name	Enter the name of the library where the file is stored on your system.
Export To File Name	Enter the name of the file where you want the extracted information placed. This file will be created during the process. If a file already exists with this name, it will be deleted and re-created during the export process.
Export To Library Name	Enter the name of the library where you want the export file

placed.

|	
Replace or add records	This option controls whether you add records to the output file or replace records that are already in the output file. Choose one of the following values:
*ADD	Exported records are added to the output file.
*REPLACE	Existing records in the output file are replaced with the new records from this export process.
Create file	Controls whether the output file is to be created during this export process. Choose one of the following values:
*NO	The output file will not be created. The file named must already exist before you start this export.
*YES	The output file will be created during this process. If a file already exists with the specified name, it will be deleted and rebuilt.
Starting Date	Enter one of the following values to specify the starting date for updates to be exported:
*CURRENT	Use today's date.
*START	Export for all transactions currently on file.
*YESTERDAY	Use yesterday's date.
*WEEK	Use the date from one week ago.
date	Enter a specific date in the format of YYYY-MM-DD, including the dashes.
Starting Time	Enter one of the following values to specify the starting time for record to be exported:
*AVAIL	Export for all transactions starting at midnight for the date specified in the STRDAT parameter.
time	Enter a specific time in the format HH.MM.SS, including the dots.
Ending Date	Enter one of the following values to specify the ending date for updates to be exported:
*CURRENT	Use today's date.
*YESTERDAY	Use yesterday's date.
date	Enter a specific date in the format of YYYY-MM-DD, including the dashes.

Ending Time   Enter one of the following values to specify the ending time for updates to be exported:

   *AVAIL   Export for all transactions through midnight for the date specified in the ENDDAT parameter.

   time   Enter a specific time in the format HH.MM.SS, including the dots.

Export format   Choose the level of detail that is exported for your purposes:

   *SHORT   The field level detail will only include the first 32 characters of each field being reported. This is the new default value for this parameter.

   *LONG   The full 256 chararacter possible field is exported.

    Note: If you have built your own analysis process using the Export feature in iFileAudit from a prior release, you may have to continue to use the *LONG option to maintain compatibility with your current application.

Export source   Choose the input that you want to export for this process:

   *CUR   Use the current transaction history file

   *ARC   Use the archived history file

Job Que Name   To run the export on-line, leave this parameter blank. To run the export in batch, enter the name of the batch jobque you want to use (ie: QBATCH) and press enter. If you are using a jobque name that is not in your library list, change the second part of this parameter to the name of the library where the jobque is located.

The file created by this process is a normal database file that you can then use to create your own reports using Query, SQL, RPG programs or any other data handling utility that you prefer.

Automatic File Analysis

iFileAudit works by periodically analyzing the journals for the files that have been registered and are at active status. Using this feature, a background task can be established and controlled that will periodically run the file analysis process for all registered files.

To start the Automatic File Analysis, select option #16 from the MASTER menu. The following prompt will be displayed:
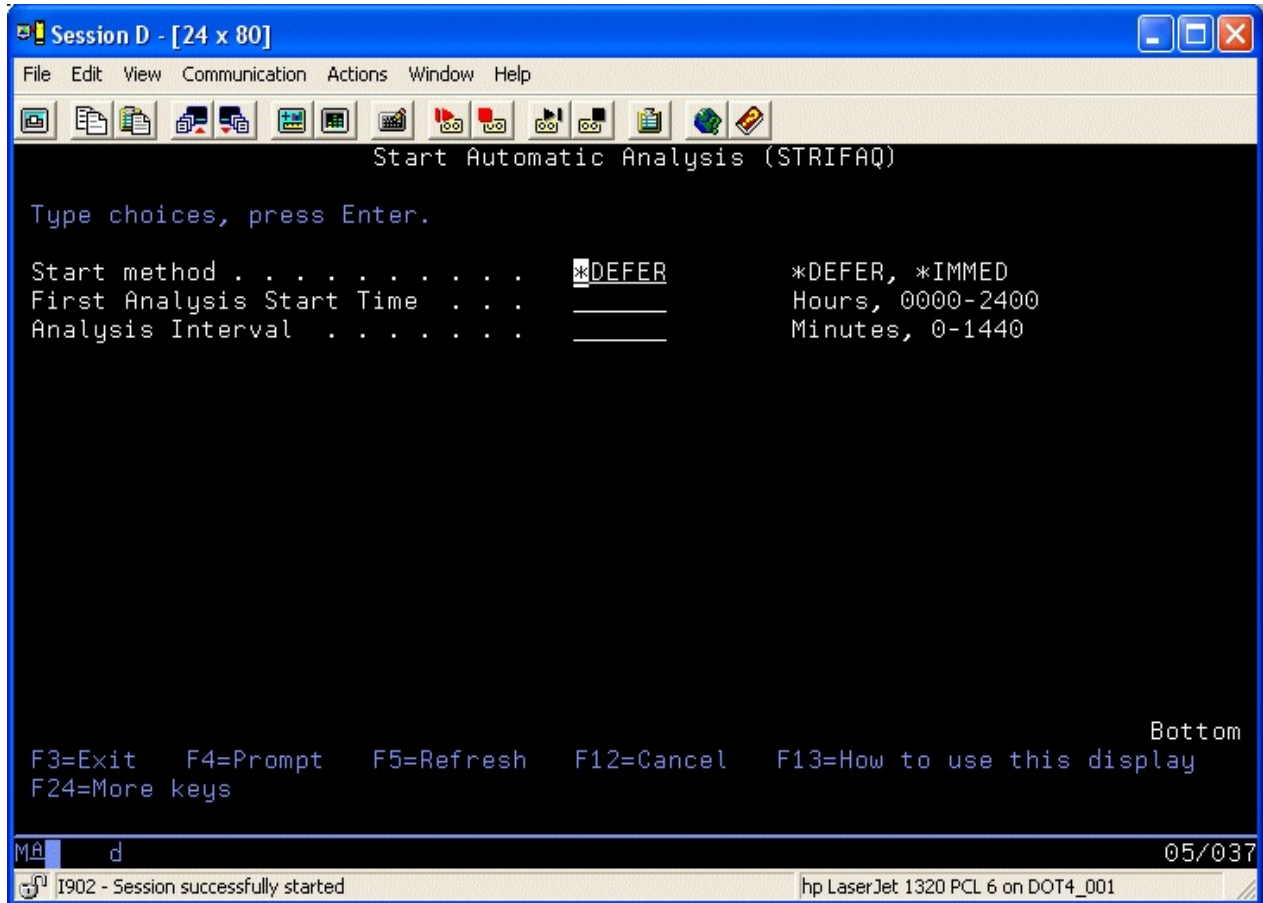
Complete the parameter options as follows:

Start method		Choose one of the following options:
	*DEFER	Do not run a file analysis right away. Wait until the scheduled time specified in the next parameter.
	*IMMED	Run a file analysis right away.
First Analysis Start Time		Specify the time when you want the next analysis process to start. If you want to run the analysis once per day at 8pm, for example, enter the value "2000" here.

A special option will let you enter an analysis start time of all blanks when the start method is set to *IMMED. When you use this option, the analysis process will run as soon as the automatic process kicks off. The analysis interval will time itself from the actual task start time.

Analysis Interval   Enter a value in minutes for the time pause between when you want the analysis to run. If you want to run the analysis once per day, then enter the maximum number of minutes allowed, "1440".

When you complete the parameters and press ENTER, iFileAudit will activate a new subsystem on your system named IFILEAUDIT and a single job will be started named IFANZ. If you indicated that you want an immediate analysis done, all of your registered files will then be analyzed. If you indicated you wanted the analysis deferred, then the job will wait until the specified start time. In either case, once the analysis of all files has been completed, the job will go into a wait state for the analysis interval time period entered and then the analysis process for all files will be repeated.

To end automatic analysis processing, select menu option #17. The analysis task and the subsystem will be ended gracefully.

To view the current status of the analysis process, use menu option #18. The current status of iFileAudit automatic file analysis processing will be shown on your terminal session.

Installation and Configuration

Before any iFileAudit functions will work, the initial install procedure must be run.   iFileAudit can be installed from a download file obtained from the Internet.

This installation procedure will only install the base support for iFileAudit when used with a standard terminal-based interface. To use the web-enabled features of iFileAudit from your web browser, you must do additional installation and configuration steps. Please see the separate documentation that arrived with your software for these instructions.

Installation from Download

Use the install instructions from the iFileAudit Download web page.

https://www.kisco.com/ifa/ifadload.html

After you download the install file from the website, please print the Download page and use it for reference while completing the installation.

Release Upgrade Installation

When Kisco Systems completes work on a new Release of iFileAudit, you will be notified of the availability for the new release. New releases are available via download from the Kisco website for iFileAudit.

To install an upgrade from media received from Kisco Systems, follow the above link.

The Install Menu

When you select item 10 from the main menu, the installation menu is displayed as follows:

Menu items perform the following functions. Each function is discussed in greater detail later in this document:

1. Run initial install procedure -   Do not use this option unless directed to do so by Kisco Support staff. This option is automatically run during normal install processing.

2. Display installation status -   Displays a screen showing the current installation status for the software.

3. Change installation status -   Displays the current software installation status and allows for changes to be made.

4. Print documentation -   Prints this documentation manual to the default print device.

5. Check Version Information -   Displays information about the specific version of iFileAudit that is installed on your system.

7. Install Kisco PTF package -   Allows you to process a corrective PTF package received from Kisco for program fixes.

8. Work With End User Table   Lets you configure end user profiles to be able to access display and reporting functions within iFileAudit.

9. Set iFileAudit Default Values   Lets you set up default settings for iFileAudit.

10. To Main Menu -   Will display the iFileAudit MASTER menu.

Display Installation Status

At any time, you can check the current installation status of your copy of iFileAudit by selecting this menu option. You must be signed on with security authority of QSECOFR or equivalent. The following screen will be displayed:

The message at the center of the screen indicates your current installation status. You should also check the Sec. expire date for an expired trial period. iFileAudit may still show as installed on a trial basis but, if the trial is expired, it will no longer function.

The following are the possible status messages that can appear on this display:

Message	Explanation
Z-001 NOT INSTALLED	Trial installation not started
Z-002 TRIAL EXPIRED	Trial period has ended
Z-003 PERMANENTLY INSTALLED	Software is permanently installed
Z-004 INSTALLED ON TRIAL	Software is installed on trial
Z-005 PASSWORD NOT ACCEPTED	Password keyed is not valid
Z-006 WRONG LIBRARY	Programs must run from our library
Z-007 PLEASE RUN TRIAL INSTALL	Must have trial install before perm.
Z-008 INVALID INSTALL REQUEST	Must be P or T
Z-009 INVALID SECURITY (REC#6)	Call Kisco
Z-010 INVALID SECURITY (NO ZZ)	Call Kisco
Z-011 INVALID SECURITY (HASH.)	Call Kisco

Change Installation Status

To make changes to your installation status, use this menu option. The changes processed can

include both a trial period extension and permanent installation. You must be signed on with QSECOFR security authority or equivalent. When you select this option, the following screen is displayed:

Trial extension

To extend a trial period, contact Kisco Systems and request an extension. We will provide you with an extension password and new expiration date. On the above screen, enter the following:

Type of install	Enter 'T' for trial
Install password	Enter all six digits of the extension password provided, including any leading zeros
New expire date	Enter the new expiration date in the format YYMMDD (ie: Jan 12, 2006 would be 060112)

When the parameter fields have been completed, press enter to reactivate your software.

Permanent installation

To permanently install your software package, use the permanent password provided by Kisco Systems following receipt of payment. On the above screen, enter the following:

Type of install	Enter 'P' for permanent
Install password	Enter all six digits of the extension password provided, including any leading zeros

New expire date   Enter all 9's (ie: 999999)

When the parameter fields have been completed, press enter. Your software is now permanently installed.

Print Additional Documentation

At any time, you can reproduce the additional documentation by using this menu option. A full copy of the additional documentation topics will be printed.

Display Software Version Information

This menu option will display the current release level and PTF information for your version of iFileAudit. The developer may need to verify this when working with you on a support issue.

Install Kisco PTF Package

Kisco distributes updates for iFileAudit via email attachments. The current instructions for PTF installation can be found at our support website for iFileAudit using the following link:

https://www.kisco.com/ifa/support/ifptfupd.htm

Application Security

Early releases of iFileAudit would only work with the QSECOFR user profile or profiles with all object authority. The software now has tightened up on security for which users can administer the software and also use the software. All users who access and administer the software now must be registered in the End User Table.

As initially installed, iFileAudit can only be used by the special user profile QSECOFR. To allow additional users to work with iFileAudit, they must be defined as an Administrator. For some customers, there may be a requirement to allow end users with lesser permission to have access to the reports and/or displays contained within iFileAudit. For these customers, there is a feature on the INSTALL menu that lets you define additional end user access permission. This can be started using option #8 on the INSTALL menu or by using the WRKIFAUSR command.

You must have SECOFR authority on your user profile to use this menu option.

When you select this, the following will be displayed:

When first installed, this display will show a blank list. To create a new entry, press the F6 function key.

When you select to add a new entry, the following display will show:
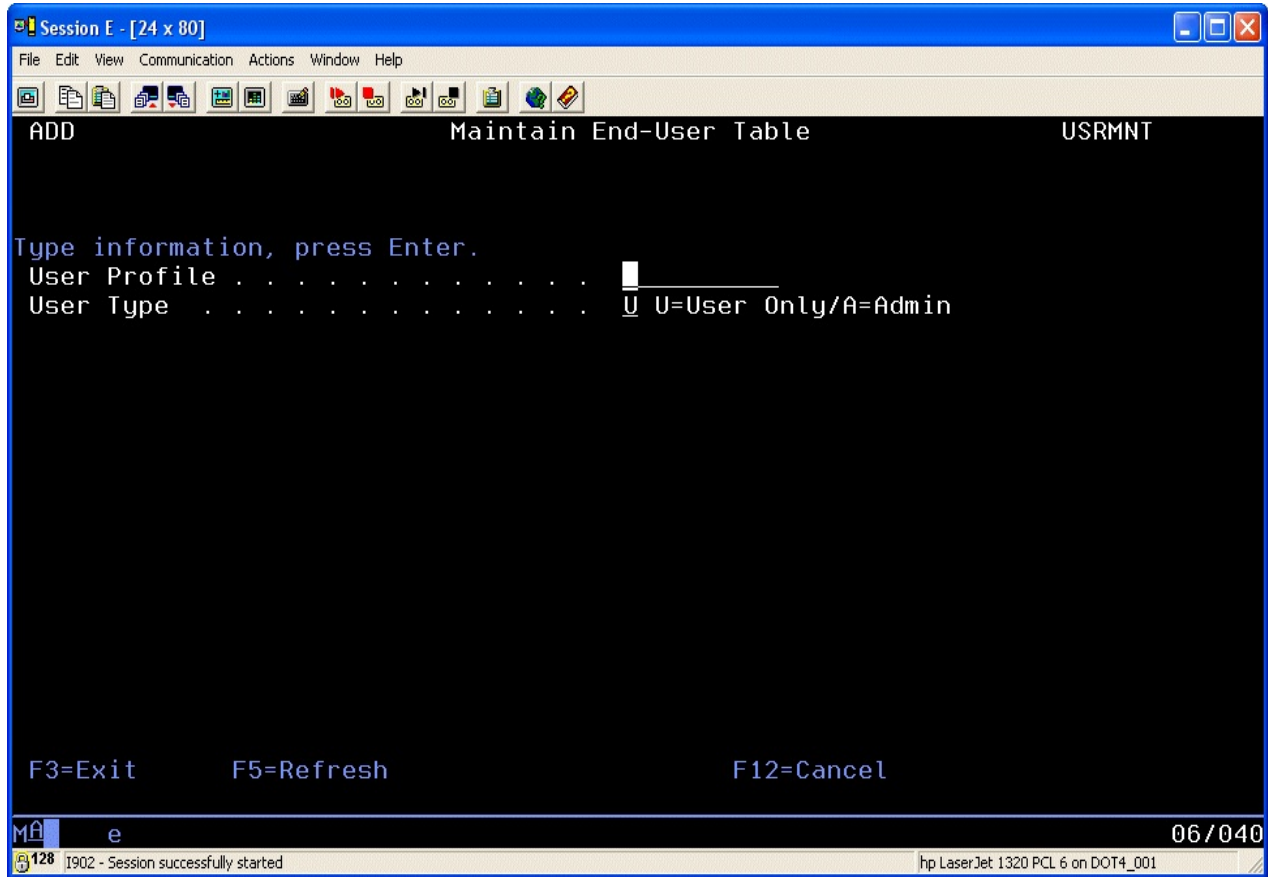
Just enter the user profile that you want to be authorized to the display and reporting functions in iFileAudit. For the User Type, choose one of the following values:

U   A user of the information only, no administrative access granted

A   An administrator user. This will let the user maintain settings in iFileAudit without having to have SECOFR authority granted to their user profile. The only process not allowed for an administrator set up this way is to run this process that grants access permission to other users.

Press ENTER and the user will now be authorized to the indicated access level in iFileAudit.

iFileAudit Global Settings

Choose menu option #9 from the INSTALL menu to set the global settings. The following prompt will be displayed:

```
Session F - [24 x 80]
File  Edit  View  Communication  Actions  Window  Help

                    Set iFileAudit Values (IFASET)

 Type choices, press Enter.

 Journal process scope  . . . . . > *CURCHAIN      *CURCHAIN, *CURRENT
 Member name prefix . . . . . . . > IF             2 letter code
 Record level changes only? . . . > *NO            *NO, *YES
 Default date & time stamp  . . . > *NONE          *NONE, *CURRENT
 File views disposition . . . . . > *KEEP          *KEEP, *DROP
 Default journal library  . . . . > FILAUDJRN      Library name
 DSPJRN *ALLFILE Scope? . . . . . > *NO            *NO, *YES
 Read trace user control  . . . . > *INCLUDE       *INCLUDE, *EXCLUDE
 Read trace jobname control . . . > *EXCLUDE       *INCLUDE, *EXCLUDE
 Exclude batch read tracing . . . > *YES           *YES, *NO
 Use QTEMP For Customer Data? . . > *NO            *NO, *YES




                                                                  Bottom
 F3=Exit    F4=Prompt    F5=Refresh    F12=Cancel   F13=How to use this display
 F24=More keys

MA      f                                                        05/037
 128  I902 - Session successfully started
```

Set these parameters as follows:

Journal process scope	Choose one of the following values:
	*CURCHAIN - recommended - when the iFileAudit analysis process runs, all journals on the system for a file will be searched for transaction activity.
	*CURRENT - only the current active journal will be searched.
Member name prefix	Only change this value at the direction of support staff from Kisco Systems.
Record level changes only?	Choose one of the following values as your system-wide default setting:
	*NO - recommended - all field level changes will be captured and reported by iFileAudit.

	*YES - not recommended - only record level information will be captured. No field level information will be reported. (Normally only used for customers who have existing journalling in place that does not report both the "before" and "after" record images.)
Default date & time stamp	This parameter controls how the initial file update analysis will be run by iFileAudit. Enter one of the following values:
*NONE	The last transaction date and time stamp will be set up as blank fields. When iFileAudit runs its initial analysis, it will search all available journal for activity going back as far as possible, assuming the first option here is *CURCHAIN. For some installations, this can be time consuming. (Recommended setting).
*CURRENT	The last transaction date and time stamp will be set to the current date and time when the file is registered. Then, the first analysis run will only start from this point in time.
File views disposition	This parameter lets you control whether or not the various logical views of the tracking history in iFileAudit will be maintained permanently or created as needed and then removed.
*KEEP	Setting this value to *KEEP will speed up display and reporting operations in iFileAudit but may result in additional overhead for processing during iFileAudit analysis. Keeping the views active may also use up additional disk space.
*DROP	Setting the LFOPR to *DROP will save disk space and improve analysis processing speed, but till cause iFileAudit to rebuild these views as needed for display and reporting purposes.
Default journal library	Enter the name of the library you want to use for default journals created by iFileAudit. This is shipped from Kisco with the library name FILAUDJRN which is created during install processing. You can change this to whatever name you want to use if you want to specify a different library.
DSPJRN *ALLFILE Scope?	Gives you control over the way iFileAudit extracts information from your journals for analysis processing. Kisco recommends that this be set to *NO unless you specifically want to track changes to source physical files.
*NO	This is the recommended setting. When set this way, journal extract processing will be just for the registered files from the iFileAudit registration.
*YES	When set to *YES, iFileAudit will always extract all activity from the journal. This can slow down journal analysis

processing, but in the rare case when you need all activity for source physical files, this is the only way to do so.

If you want to track file activity for source physical files, then you will have to change this value to *YES since not all journal activity codes will be retrieved otherwise. Keep in mind, however, that tracking changes in source physical files is problematic in iFileAudit due to the way their maintenance is normally implemented. For more information about this, please see the Frequently Asked Questions section of the iFileAudit Customer Support website at https://www.kisco.com/ifa/support/iffaq.html#faq007

Read trace user control	When using the option to trace file read activity, iFileAudit requires that you limit the access by user profile selection and jobname selection. If you choose to include activity for specific user, you must then exclude selection for jobname and vice versa.
*INCLUDE	Read trace activity will only be recorded in iFileAudit for users specifically set up for any file where read tracing has been activated.
*EXCLUDE	Read trace activity will only be recorded in iFileAudit for all users except those users specifically set up for any file where read tracing has been activated.
Read trace jobname control	When using the option to trace file read activity, iFileAudit can filter the activity based on the jobname. The setting here cannot match the setting for the immediately previous option.
*INCLUDE	Read trace activity will only be recorded in iFileAudit for jobnames specifically set up for any file where read tracing has been activated.
*EXCLUDE	Read trace activity will only be recorded in iFileAudit for all jobnames except those jobnames specifically set up for any file where read tracing has been activated.
Exclude batch read tracing	This global setting controls read tracing activity for jobs running in batch. Kisco recommends that you set this value to *YES and this is the default value as shipped. When set to *YES, no read tracing activity for batch jobs will be recorded in iFileAudit for files that are tracking read activity.

Use QTEMP For Customer Data?

Some customers specifically do not want any company data stored in the QTEMP library. This option allows them to make that change.

*YES   Customer data processed during iFileAudit processing may be stored temporarily in the system QTEMP library

(recommended setting).

*NO   Customer data will never be stored in the system QTEMP library during iFileAudit processing. Instead, customer data will be temporarily stored in a user library in the customer ASP.

Note: If you specify *NO for this setting, then the ASP number where your data will be processed must be entered in positions 185-191 of the CONTROL data area in library FILAUD. This value must be the same as the ASP value where your FILAUD library is stored. As an example, if you will be using ASP #2, you can update the data area using the following command:

```
CHGDTAARA DTAARA(FILAUD/CONTROL (185 7))
          VALUE('2       ')
```