

DBU Audit Journal Plug-in Documentation

DBU audit works by journaling **all adds, changes, deletes, reactivation of deleted records and viewing of sensitive data** made by users through DBU to a standalone IBM journal. DBU Audit goes beyond the base DBU change logs by storing the data in journals rather than spooled files. This simplifies the ability to track and report on changes to your database files for regulatory compliance management or internal control requirements.

The DBU Audit Journal Plug-in does use the mechanics of OS/400 journaling. Through our proprietary software, journal entries are written to a receiver for only the data manipulation made with DBU. This will not affect any current journaling of the files that may be in place using the OS/400 or i5/OS journaling procedures.

If your security strategy dictates the need you can use object level authorization to secure the command, menu and associated option commands. The associated option commands appear to the right of the menu option.

DBUAUDMN

To access the DBU Audit Journal Menu from a command line (with DBU70 in your library list) execute the command
DBUAUDMN

DBU Audit Journal Menu

Select one of the following:

1. Start DBU Audit	[DBUSTRAUD]	** Journal is NOT Active **
2. End DBU Audit	[DBUENDAUD]	
3. Display Audit data	[DBUAUD]	
4. Extract Audit files	[DBUEXTAUD]	
5. View Extracted files	[DBUAUDFIL]	
6. Work with Audit files	[DBUWRKAUD]	
7. Clear Audit library	[DBUCLRAUD]	
8. Set DATA VIEW Journal	[DBUSETJRN]	
9. Journal Receivers	[DBUAUDRCV]	
10. Print Audit Journal	[DBUPRTJRN]	
11. View Audit Activity	[DBUAUDACT]	

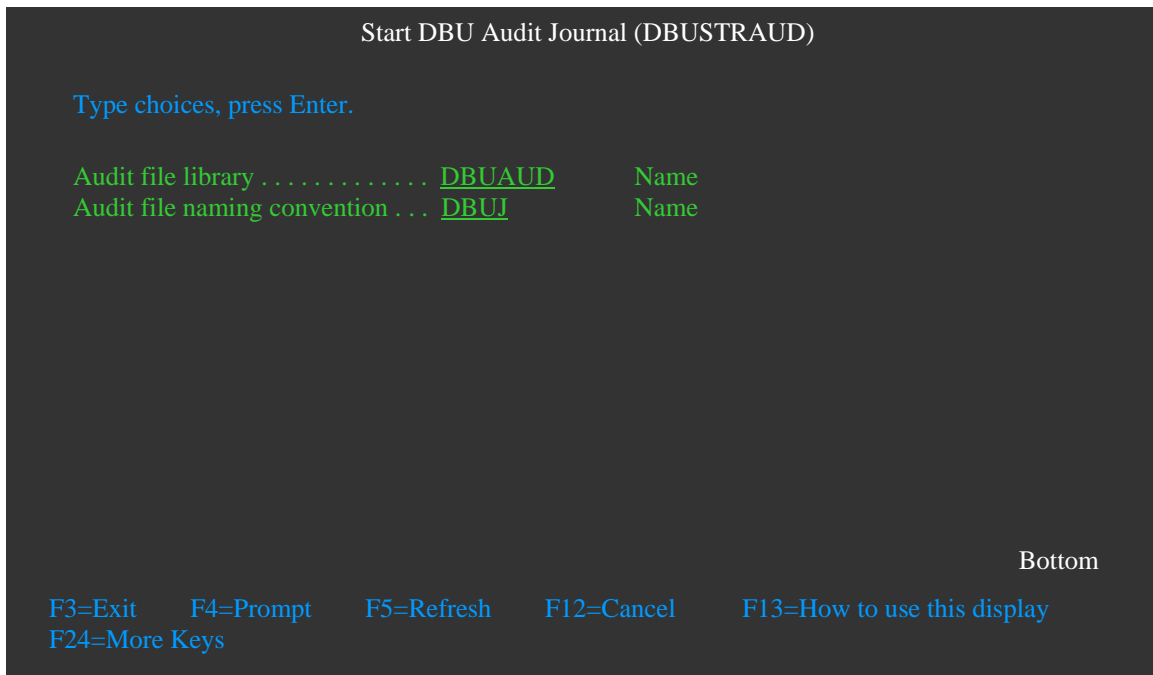
Selection or command
== => _____

F3= Exit F4=Prompt F9=Retrieve F12=Cancel
F13=Information Assistant F16=AS/400 main menu

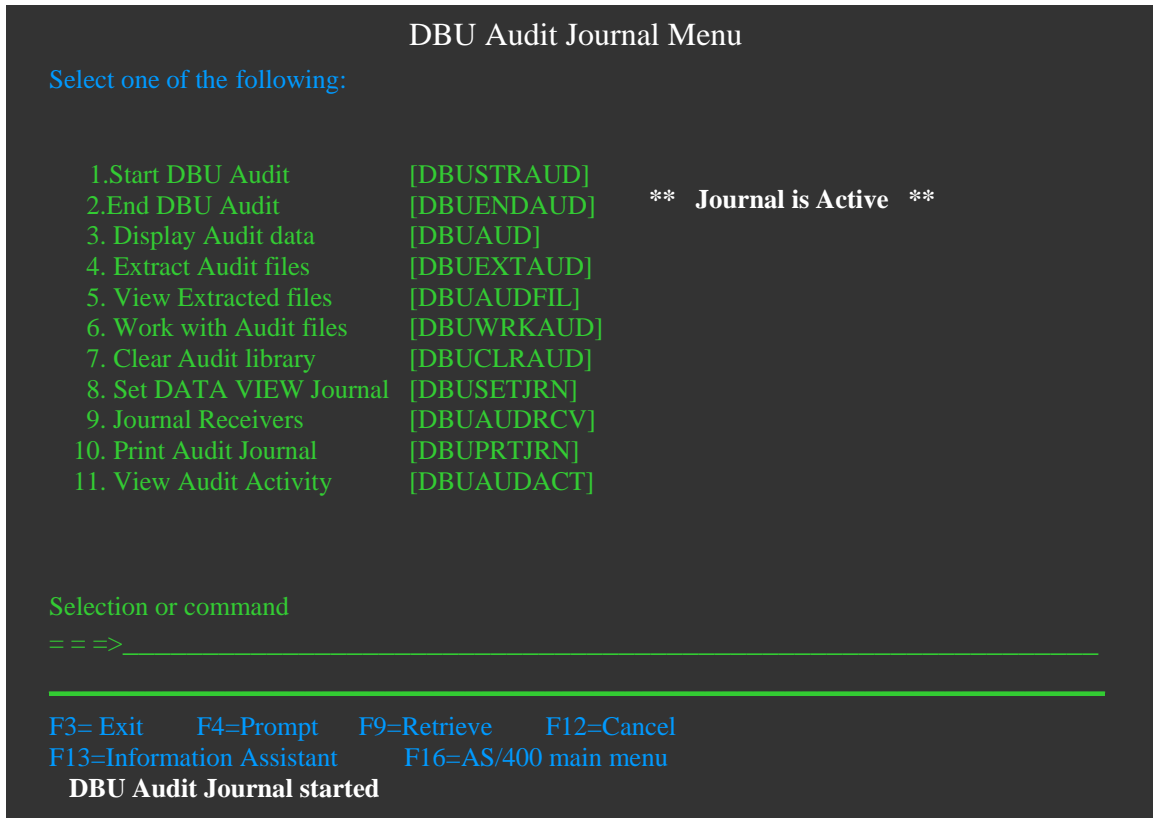
The above display is the DBU Audit Journal Menu

Option 1. DBUSTRAUD

This option starts the DBU Audit Journal (notice status line indicates it is not active, in the previous display screen).



The above screen is presented using option 1. The defaults are recommended however you can designate a different library and Audit Extract file naming convention here. Once you press <enter> here you are returned to the Audit Journal Menu display.



Notice that the status line indicates it is now active.

Option 2. DBUENDAUD

This option is used to end the DBU Audit Journal. There are no parameters for this option.

Option 3. DBUAUD

Once you have started the Audit Journal and made changes/deletes/adds using DBU to a file, this option will display the changes/deletes/adds/views (if designated in option 8).

After taking option 3 this will be the display screen presented. Just key in the file and library name that you have DBU'd.

```

DBU Audit Journal (DBUAUD)

Type choices, press Enter

File Name:
File..... dbpdemo      Name, *PRV
Library..... *LIBL      Name, *LIBL, *CURLIB
Member..... *FIRST      Name, *FIRST, *ALL

Output file options:
File to receive output..... DBUJRNPF  Name, DBUJRNPF
Library..... QTEMP      Name, *LIBL, *CURLIB

Output member options:
Member to receive output..... *FIRST  Name, *FIRST
Replace or add records..... REPLACE  *REPLACE, *ADD
Sort by journaled RRN & SEQ#... *YES  *YES, *NO
Submit DBUAUD job to batch... *NO   *YES, *NO
PeopleSoft installation..... *PRV    *NONE, WORLD, ONEWORLD, *PRV

Bottom

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

```

We have changed a record in the demonstration file that is shipped with DBU70 called DBPDemo. Once you enter the file name and press <enter> you will be presented with the following screen.

```

Display Journal (DSPJRN)

Type choices, press Enter.

Journal.....> DBUJRNL      Name, *INTSYSJRN
Library.....> DBUAUD      Name, *LIBL, *CURLIB
Journaled physical file:
File.....> DBPDemo      Name, *ALLFILE, *ALL
Library.....> *LIBL      Name, *LIBL, *CURLIB
Member.....> *FIRST      Name, *FIRST, *ALL

Range of journal receivers:
Starting journal receiver.... *CURRENT  Name, *CURRENT,
Library..... *CURCHAIN
Ending journal receiver.... _____  Name, *LIBL, *CURLIB
Library..... _____  Name, *CURRENT
Starting sequence number.... *FIRST    Name, *LIBL, *CURLIB

Starting date and time:
Starting date..... _____  Date
Starting time..... _____  Time
Ending sequence number:..... *LAST     Time

More...

F3=Exit   F4=Prompt   F5=Refresh   F10=Additional parameters   F12=Cancel
F13=How to use this display   F24=More Keys

```

On this screen you should be able to take the defaults however the F1 key is available for the standard IBM help definitions for each parameter. Option 9 from the Audit Journal Menu will display the Audit Journal receivers available by name.

Once you press <enter> you will be taken into the DBU Display of the entries in the Audit Journal for the file you designated. This is the standard DBU display, you may use the F4 key to obtain the field listing and you may select the fields to display. Notice that if there was a change made you will see a before (Entry Type field) and after (designated by UB and UP respectively) you will also see the changed field highlighted. Other Entry Types are added (PT), deleted (DL), retrieved (RD) and viewed if designated using option 8 (VW).

Option 4. DBUEXTAUD

Option 4 is used to create extract files from the journal receiver specified. After taking option 4 you are presented with the following display, you may enter a specific file name or you can use *ALL to extract all journal entries made by DBU on all files.

```

Extract DBU Audit Journal (DBUEXTAUD)

Type choices, press Enter.

Journalled physical file:
  File. .... *ALL _____ Name, *ALL
  Library. .... *ALL _____ Name, *ALL
  Member. .... *ALL _____ Name, *ALL
Range of journal receivers:
  Starting journal receiver. . . *CURRENT _____ Name, *CURRENT, *CURCHAIN
  Library. .... _____ Name, *LIBL, *CURLIB
  Ending journal receiver. .... _____ Name, *CURRENT
  Library. .... _____ Name, *LIBL, *CURLIB
Starting date and time:
  Starting date. .... _____ Date
  Starting time. .... _____ Time
Ending date and time:
  Ending date. .... _____ Date
  Ending time .... _____ Time

More . . .

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

After processing you will be returned to the Audit Journal Menu. Extracted files will be available for viewing or producing printed reports.

Option 5. DBUAUDFIL

You can use option 5 to view the extracted files. There are no parameters for this option, once you have taken option 5 you will be presented with the following display.

```
DBU Object List

Type options, press Enter.
1=Select

Select  Object      Type  Library  Text
___    DBUJ000003  PF    DBUAUD   PRODATA7 DBU60/DBPDEMO  09 /16 /2005

F1=Help      F3=Exit      F12=Cancel

Bottom
```

This will be a listing of the extract files available. Notice the Text column tells you system name, library and object name of the object that DBU was used on. Use a 1 to select the desired extract file and you will again be presented with the standard DBU screen with all DBU functionality. F3 from this display will return you to the Audit Journal Menu.

Option 6. DBUWRKAUD

Option 6 allows you to work with the extracted audit files. There are no parameters for this option. After taking this option you will be presented with the following display.

```

Work with Objects

Type options, press Enter.
 2=Edit authority      3=Copy      4=Delete      5=Display authority      7=Rename
 8=Display description 13=Change description

Opt  Object      Type      Library      Attribute      Text
__  DBUJ000003    *FILE     DBUAUD      PF             PRODATA7 DBU60/DBPDEMO

Bottom

Parameters for options 5, 7 and 13 or command
==>
F3=Exit   F4=Prompt   F5=Refresh   F9=Retrieve   F11=Display names and types
F12=Cancel F16=Repeat position to F17=Position to

```

You may use this option to maintain the extracted audit files. You will need to delete files as necessary from this display. Any extract files can be reproduced providing the journal receivers that the extract came from are still on the system.

Option 7. DBUCLRAUD

Option 7 allows you to clear all extracted files from the Audit library. Once you have taken this option you are presented with a confirmation screen for the clear Audit library function. Using this option will not clear the journal receivers from the Audit library.

Option 8. DBUSETJRN

Option 8 allows you to specify files that you would like journal entries made for objects that have been viewed. This function was created for sensitive data that you not only need to track changes/adds/deletes but also any views to the data through the use of DBU. Taking this option you will be presented with the following display.

Print Audit Journal Reports (DBUPRTJRN)

Type options, press Enter.

Journal Output File:	<u>*ALL</u>	Name, generic*, *ALL
Output Queue.	<u>*JOB</u>	Name, *JOB
	<u>*LIBL</u>	Name, *LIBL

Bottom

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

You may take the *ALL default to produce reports for all extracted files however you may also designate by name which extracted files to produce the report from. If you are uncertain which extract files you would like to produce reports from you can type the first letter of the extract file naming convention (DBUJ is the default) followed by an asterisk (*) and press <enter> and you will be presented with a listing of all of the extract files. You may then individually select which file to produce the report from (only one selection at a time is allowed). You may also designate an output queue and library for the spooled file to be sent to. If you do not designate an output queue the default output queue for the current job is used.

Option 11. DBUAUDACT

Option 11 is used to identify when and who starts and stops the DBU Audit Journal. Taking this option will present the following display.

Display Journal (DSPJRN)

Type choices, press Enter.

Journal.>	DBUJRNL	Name, *INTSYSJRN
Library.>	DBUAUD	Name, *LIBL, *CURLIB
Journaled physical file:		
File.>	DBPDEMO	Name, *ALLFILE, *ALL
Library.>	DBU60	Name, *LIBL, *CURLIB
Member.>	*ALL	Name, *FIRST, *ALL
Range of journal receivers:		
Starting journal receiver. . . .	<u>*CURRENT</u>	Name, *CURRENT, *CURCHAIN
Library.	_____	Name, *LIBL, *CURLIB
Ending journal receiver. . . .	_____	Name, *CURRENT
Library.	_____	Name, *LIBL, *CURLIB
Starting sequence number. . . .	<u>*FIRST</u>	
Starting date and time:		
Starting date.	_____	Date
Starting time.	_____	Time
Ending sequence number.	<u>*LAST</u>	

More . . .

You may use the defaults or specify the journal receiver to look in, once you press <enter> you will be presented with the standard DBU display. Entry Types marked JF are the start of the Audit Journal and EF is the ending of the Audit Journal. This gives you the ability to identify who has started and stopped the Audit Journal.