

# Dumps

## Abend-AID / FX

# Dumps

## Chapter 2:

## Objectives

You will learn:

- How to perform a dump analysis.
- The fault summary.
- To use the abend-aid directory
- List entry information.

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## Abend-AID / FX

### Dump Analysis

- Analyze Abend-AID for CICS entries and to display basic information using:
  - Fault Summary
  - Abend-AID Directory
  - Entry Information for transaction or region entries
  - Duplicate History Log
  - Contact Information

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### Fault Summary

- The Fault Summary is the first screen displayed when accessing Abend-AID for CICS from VTAM or ISPF.
- The AADFS transaction command can also be used for displaying the Fault Summary from CICS.
  - The Fault Summary summarizes the type and number of transaction and region entries available for each CICS region or region group for which a name has been assigned.
- Region groups are created during Abend-AID for CICS customization as part of the CICS Region Configuration function.
  - This function allows CICS group regions to be grouped together by name in order that the Fault Summary reflects total counts for all regions in the group.
  - If region groups have not been created, individual CICS job names are used as region descriptions on the Fault Summary.
- In order to display the Fault Summary from any Abend-AID for CICS screen, enter **SUMMARY** as a fast-path command.
  - The Fault Summary is also available as a selection on the Primary Options menu.

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### Fault Summary

Abend-AID ----- Fault Summary ----- Row 000001 of 000068  
COMMAND ==> SCROLL ==> PAGE  
Shared Directory/Database... AC.SV.R0101.ALPHA.RPT.SHRDIR  
For a list of databases, select DBLIST

Job Name or	CICS	MVS	IMS/TM	CICS	Other	Total
Application Description	Trans	Batch	Trans	SVC	SVC	SVC
TOTAL ENTRIES	24	111	5	2	20	22
Ange's test cases	9	5	0	0	0	0
Barb's test cases	6	0	0	0	0	0
*MASTER*	0	0	0	0	1	1
AA100DKS	0	1	0	0	0	0
AA101BJS	0	2	0	0	0	0
AA101CAS	0	1	0	0	0	0
AA101IVP	0	1	0	0	0	0

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### Abend-AID Directory

- When a CICS region or region group from the Fault Summary has been selected, Abend-AID for CICS automatically displays the Abend-AID Directory.
- With CICS AADF access, the directory is the first screen displayed by default.

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### Abend-AID Directory

Abend-AID ----- Abend-AID Directory ----- Row 000001 of 000150  
COMMAND ==> SCROLL ==> DATA

Shared Directory/Database... CF.DEVL.TEST01.SDIR.CLUSTER  
For a list of databases, select DBLIST

M Menu L Lock H Dup History R Recall T Terminate Analysis  
S Diag U Unlock I Information E Migrate C Change Priority  
D Delete G Messages A Analyze P Print N Contact Information

Abend  
Entry Job Name Code JESID Tran Program Offset Dups Time Date  
\*\*\*\*\*

Type a line command and press Enter to process it

### Abend-AID Directory

Information listed on the Abend-AID Directory includes:

- Entry:
  - Abend-AID for CICS entry number.
  - This number is assigned when the entry is added to the shared directory.
- Job Name:
  - MVS job name.
  - For a transaction entry, this is the job name of the CICS region in which the transaction was running when the abend occurred.
  - For a region entry, this is the name of the job for which the region dump (SVC, console, SLIP, etc.) has been issued.
- Abend Code:
  - MVS or CICS abend code.
- JESID:
  - JESID or job number.
- Tran:
  - Transaction entries only.
  - Name of the controlling transaction that abended.

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### Abend-AID Directory

- Program:
  - Transaction and batch entries only.
  - Name of the abending program ; the online help provides additional detailed information.
- Offset:
  - Transaction and batch entries only.
  - The offset in the abending program.
- Dups:
  - Transaction and batch entries only.
  - Number of duplicate dump suppressions; the online help provides additional detailed information.
- Time:
  - Time of the transaction abend or SVC dump.
- Date:
  - Date of the transaction abend or SVC dump.
- Release/Type:
  - For WebSphere MQ region dumps and CICS transaction/region dumps.
  - This is the CICS release level and type of dump.
  - For other dumps, this is the type of dump such as BATCH, SVC, SLIP, or SYSDUMP.

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### Abend-AID Directory

- Status:
  - Processing status, such as RUNNING, COMPLETE, or INCOMPLETE; the online help provides a complete list of status types.
- Term:
  - Transaction entries only.
  - Four-character identification number for the terminal at which the abend occurred.
- Userid:
  - For transaction entries, this is the user ID of the user signed on at the time of the abend.
  - For region entries, this is the user ID of the last person to view the entry.
- LE Condition:
  - Batch entries only.
  - Language Environment condition code associated with the entry.
- Dataset Name:
  - For region entries, this field contains the name of the dataset containing the dump in SVC dump format.
  - For transaction and batch entries, this is the name of the database containing the report.

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### Abend-AID Directory

- Description:
  - Batch entries only.
  - Contains the programmer name field from the JOB JCL statement.
- Comments:
  - User comments or symptom string (default for region dumps).
  - Information in this field may be overtyped or added to (up to a maximum length of 44 bytes).

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### Abend-AID Directory Line Commands

- Use the Abend-AID Directory's line commands to view or perform maintenance functions on selected entries.
  - M
    - Selects the entry and displays the Primary Options menu.
    - A system message on the menu displays the dump's entry number and job name and indicates that the dump has been successfully selected.
  - S
    - Selects the entry and displays the entry's Diagnostic Summary, which is the logical starting point for debugging the majority of CICS dumps.
    - For this line command to function, the entry must have a COMPLETE status in its Status field.
  - D
    - Deletes the entry.
  - L
    - Locks a transaction entry, protecting it from automatic deletion.
  - U
    - Unlocks a locked transaction entry, freeing it for automatic deletion.

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### Abend-AID Directory

### Line Commands

- G
  - Displays the Dump Analysis Message Log, which lists in chronological order the Abend-AID for CICS programs that were executed to analyze the dump.
- H
  - Displays the Duplicate History Log for a transaction entry.
  - The Duplicate History Log is a record of the duplicate dump suppression activity for the entry
- I
  - Displays the Entry Information screen for any entry that is not an INFO (information-only) type.
  - The Entry Information screen lists the entry's type, address space identifier (ASID), status, date and time processed, dataset name, title, symptom string, date and time imported, and system messages.
- A
  - Schedules dump analysis on the region entry.
  - The current status of dump analysis is indicated in the entry's Status field.
- R
  - Recalls a region dump dataset that was migrated to archival storage via DFHSM or an equivalent product that uses the interface provided by the DFHSM ARCGIVER program

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### Abend-AID Directory

### Line Commands

- E
  - Migrates a region dump dataset to archival storage via DFHSM or an equivalent product that uses the interface provided by the DFHSM ARCGIVER program, and deletes the dump analysis records from the dump information file.
- P
  - Prints the associated report for the selected entry to a temporary dataset.
  - This dataset is printed in its entirety when issuing the GO primary command on the Print Options and Initiation screen or when exiting Abend-AID for CICS.
- T
  - Terminates the dump analysis that Abend-AID for CICS is running or is scheduled to run on the region entry.
- C
  - Changes the priority of the region entry to reschedule it as the next dump to have dump analysis.
- N
  - Displays the Contact Information screen for entries that match criteria specified in the action definitions created during installation customization.

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### Transaction Entry Information Screen

- The Transaction Entry Information screen, provides the following information about a dump:
  - Entry number and type
  - Abend code or reason for the dump
  - Transaction ID and task number
  - Transaction report
  - Date and time the entry was created and analyzed
  - Number of users who have currently selected the entry
  - User comments
  - Abend-AID for CICS service level.
- In order to display Entry Information from any Abend-AID for CICS screen, enter INFO as a fast-path command.
- The Entry Information screen is also available through the I (Information) line command on the Abend-AID Directory.

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### Entry Information

```
Abend-AID ----- Entry Information -----  
COMMAND ==>  
  
Entry Number..... 0000471  Entry Type.  TRAN      Entry Date.... 10JUN2004  
Code.....          DSNC      Status.....  COMPLETE  Entry Time.... 15:55:01  
Job Name.....      H01AC197  CICS APPLID H01AC197  Nbr Users..... 1  
  
Transaction ID....  SQLS      Terminal... B063      User ID.....    CICSUSER  
CICS Rel.....      6.4.0      Program.... DSCV04ES  Netname.....    TFHB063  
  
Dataset Name.....   CF.DEVL.DEFAULT.DB02  
Symptom String.... SYMPTOMS= AB/UDSNC PIDS/566540301 FLDS/DFHPCLI RIDS/DSCV04ES  
  
Comments.....  
  
AA/CICS Serv Level. 05.01.00-ABASE -01/25/04@20.17
```

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### Region Entry Information Screen

- The Region Entry Information screen, provides the following information about a dump:
  - Entry number and dump type.
  - Abend code or reason for the dump.
  - ASID: Address space identifier of the region from which the dump was taken.
  - Original and current dump dataset names.
  - Date and time the dump was created, imported, and analyzed.
  - Number of users who have currently selected the entry.
  - User comments and system messages.
- In order to display Region Entry Information from any Abend-AID for CICS screen, enter INFO as a fast-path command.
- The Region Entry Information screen is also available through the I (Information) line command on the Abend-AID Directory.

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### Entry Information

Abend-AID ----- Entry Information -----  
COMMAND ==>

```
Entry Number... 0000660  Dump Type.. SVC      Date Processed. 21MAY2004
Code..... SOC4      ASID..... 0149    Time Processed. 10:46:10
CICS Release... 6.4.0  Home ASID.. 0149    Last Viewed by. TSOUSER
Job Name..... PFHXT0S Status..... MIGRATED Nbr Users..... 001
```

```
Current Dump DSN.. SYS2.SAVEDUMP.DUMP00.G00924
Volume Serial.... MIGRAT
Original Dump DSN. SYS2.SAVEDUMP.DUMP00.G00924
Dump Title..... COMPWARE SERVER DUMP: SERVER=SERVER1 CODE=SOC4
Symptom String... SOC4
```

```
Dump Date..... 21MAY2003      Import Date..... 21MAY2003
Dump Time..... 10:40:57      Import Time..... 10:46:10
Addr Spaces in DS. 1          Date Added to IPCS.. NEVER ADDED
CPU Serial Number. 120270     Time Added to IPCS.. NEVER ADDED
Comment..... SOC4
System Messages... MFDPD1009E HSM migrated this dataset
```

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### Entry Users Screen

- The Entry Users screens displays a list of the users who currently have the transaction or region entry selected.
- This screen identifies the entry number and whether it is a transaction or region entry.
- Access this screen from the Entry Information screen.
  - Place the cursor on the Nbr Users field and press Enter.

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### Entry Users Screen

```
Abend-AID ----- Entry Users ----- Row 000001 of 000001  
COMMAND ==>                                SCROLL ==> PAGE
```

```
Entry Number..... 00000776   Dump Type..... TRAN
```

```
User ID  
*****  
TSOUSER
```

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## Duplicate History Log

- The Duplicate History Log provides a record of duplicate transaction dump suppression activity.
  - If duplicate suppression is enabled, for each dump, Abend-AID for CICS checks for an existing entry with the same transaction ID, abend code (and interrupt code for ASRA/ASRB abends), failing transaction and program name, and offset.
  - An APPLID and job name can also be included as criteria by setting the appropriate transaction dump global options.
  - If Abend-AID for CICS finds a match, and dump suppression has been turned on for the condition, Abend-AID for CICS suppresses the dump and updates the Duplicate History Log with an additional log entry.
  - Duplicate dump suppression is turned off by default.
  - Duplicate dump suppression can be turned on/off using the Supp(ress) Dups field on the Permanent Tran Dump Profile screen.

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## Duplicate History Log

Abend-AID ----- Duplicate History Log ----- Row 000001 of 000004  
COMMAND ==> SCROLL ==> PAGE

Original Dump Information for Dump 0000593:

Code.....	AEI0	APPLID....	H01AC148	SYSID...	CW01
Job Name.....	PFHAMJ41	Program...	AMJE0032	Date....	03JUN2004
Transaction...	AJ32	Offset....	000005A6	Time....	10:44:40
Terminal.....	B072	User Id...	CICSUSER		

Date	Time	Term	Job Name	APPLID	SYSID	User Id
*****	*****	****	*****	*****	*****	*****
03JUN2004	10:49:53	B072	PFHAMJ41	H01AC148	CW01	CICSUSER
03JUN2004	10:52:02	B072	PFHAMJ41	H01AC148	CW01	CICSUSER
03JUN2004	11:42:44	B072	PFHAMJ41	H01AC148	CW01	CFXSRE0
03JUN2004	11:46:54	B072	PFHAMJ41	H01AC148	CW01	CFXSRE0

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